# **Critical Release Notice**

#### Publication number: 297-8021-840 Publication release: Standard 20.02

# The content of this customer NTP supports the SN09 (DMS) software release.

Bookmarks used in this NTP highlight the changes between the NA015 baseline and the current release. The bookmarks provided are color-coded to identify release-specific content changes. NTP volumes that do not contain bookmarks indicate that the NA015 baseline remains unchanged and is valid for the current release.

#### **Bookmark Color Legend**

- Black: Applies to content for the NA015 baseline that is valid through the current release.
- **Red:** Applies to new or modified content for NA017 that is valid through the current release.
- Blue: Applies to new or modified content for NA018 (SN05 DMS) that is valid through the current release.
- Green: Applies to new or modified content for SN06 (DMS) that is valid through the current release.
- Purple: Applies to new or modified content for SN07 (DMS) that is valid through the current release.
- **Pink:** Applies to new or modified content for SN08 (DMS) that is valid through the current release.

Orange: Applies to new or modified content for SN09 (DMS) that is valid through the current release.

#### Attention!

Adobe Acrobat Reader 5.0 or higher is required to view bookmarks in color.

# **Publication History**

*Note: Refer to the NA015 baseline document for Publication History prior to the NA017 software release.* 

#### January 2006

Standard release 20.02 for software release SN09 (DMS). For the Standard SN09 (DMS) release the following changes were made

Volume 1 Chapter 1, Understanding log reports - modified (Q00835014)

Volume 2 CCA314 - new (Q01063621) CCA614 - new (Q01063621)

Volume 3 DIRP101- modified (Q01052488)

Volume 4 GAME101 - new (A00002013, SN07 feature) GAME102 - new (A00002013, SN07 feature)

Volume 5 MS306 - modified (Q01195862)

Volume 6 PM250 - new (Q01052633) PM251 - new (Q01052633)

#### September 2005

Standard release 20.01 for software release SN09 (DMS). For the Preliminary SN09 (DMS) release the following changes were made.

Volume 6 OAIN301 - modified (A00009012) OAIN306 - new (A00009012) Volume 7 TEOL100 - modified (A00009012)

Volume 8 TOPS104 - modified (A00009013) TOPS113 - modified (A00009013)

#### June 2005

Standard release 19.02 for software release SN08 (DMS). For the Standard SN08 (DMS) release the following changes were made.

Volume 2 Log AUD433 modified (Q00873806)

Volume 7

Log SOS100 modified (Q00873806)

#### March 2005

Preliminary release 19.01 for software release SN08 (DMS). For the Preliminary SN08 (DMS) release the following changes were made.

| Volume 1               | New log – E911222     | Volume 7          |
|------------------------|-----------------------|-------------------|
| No changes             | (Q009966824)          | New log – SOS910  |
|                        | Deleted log – E911223 | (A00007487)       |
| Volume 2               | (Q009966824)          | New log – SOS911  |
| No changes             | New log – E911243     | (A00007487)       |
|                        | (Q009966824)          | New log – SOS912  |
| Volume 3               |                       | (A00007487)       |
| Modified log – DFIL110 | Volume 4              | New log – SOS913  |
| (Q00950330)            | No changes            | (A00007487)       |
| Deleted log – E911207  | -                     |                   |
| (Q009966824)           | Volume 5              | <u>Volume 8</u>   |
| Deleted log – E911208  | No changes            | New log – TOPS615 |
| (Q009966824)           | -                     | (A00007713)       |
| New log – E911221      | Volume 6              |                   |
| (Q009966824)           | No changes            |                   |

#### December 2004

Standard release 18.03 for software release SN07 (DMS). For the Standard SN07 (DMS) release the following changes were made:

Volume 5 New log for CR Q00819810 – MOD159

#### Volume 6 Modified log for CR Q00785051 – PRSM470

Standard release 18.02 for software release SN07 (DMS). For the Standard SN07 (DMS) release the following changes were made:

<u>Volume 1</u> No changes

Volume 2 No changes

<u>Volume 3</u> Modified log - E911212 (A00004391) Modified log - E911213 (A00004391) Modified log - E911214 (A00004391) <u>Volume 4</u> No changes

Volume 5 No changes

Volume 6 Modified log - OAIN606 (A00005160) Modified log - OAIN607 (A00005160) <u>Volume 7</u> No changes

<u>Volume 8</u> New log - TRK119 (Q00927608)

#### September 2004

Preliminary release 18.01 for software release SN07 (DMS). For the Preliminary SN07 (DMS) release the following changes were made:

Volume 1 No changes

Volume 2 No changes

<u>Volume 3</u> Modified log - DIRP101 Volume 4 No changes

Volume 5 No changes

<u>Volume 6</u> Modified log - PM181 Volume 7 No changes

<u>Volume 8</u> Modified log - TOPS131 New log - VOW501 New log - VOW502 New log - VOW601 New log - VOW602

#### March 2004

Standard release 17.03 for software release SN06 (DMS). For the Standard SN06 (DMS) release the following changes were added:

<u>Volume 1</u> No changes

Volume 2 New log CCS610 <u>Volume 3</u> Obsoleted logs: DCA301 to DCA 303

<u>Volume 4</u> No changes <u>Volume 5</u> Modified logs LOST101 to LOST117

<u>Volume 6</u> New log NODE500

#### September 2003

Standard release 17.02 for software release SN06 (DMS). For the Standard SN06 (DMS) release the following changes were added:

Volume 1 Modified - Understanding log reports New log - ATM300 New log - ATM301 New log - ATM500 New log - ATM501 New log - ATM600 New log - ATM601 New log - ATM604 New log - ATM605 New log - ATM606 Volume 2 New log – AUD690 Modified log - CARR300 Modified log - CARR310 Modified log - CARR330 Modified log - CARR331 Modified log - CARR340 Modified log - CARR341 Modified log - CARR500 Modified log - CARR501 Modified log - CARR510 Modified log - CARR511 Modified log - CARR512 Modified log - CARR800 Modified log - CARR801 Modified log - CARR810 Modified log - CARR811 Modified log - CCMT301 Modified log - CCMT501 Modified log - CCMT502 Modified log - CCMT601

<u>Volume 3</u> Modified log - DFIL116 Modified log - DPTM500 Modified log - DPTM501 Modified log - DPTM502 Modified log - DPTM503 Modified log - DPTM504 Modified log - DPTM700 Modified log - DPTM701

Volume 4

New log - GAME100 New log - IWBM500 New log - IWBM501 New log - IWBM600 New log - IWBM601 New log - IWBM900 New log - LCD100 New log - LCD200

Volume 5

New log – MPC101

Volume 6 No changes

<u>Volume 7</u> Modified log - SPM300 Modified log - SPM301 Modified log - SPM310 Modified log - SPM311 Modified log - SPM312 Modified log - SPM313 New log - SPM330 Modified log - SPM331 Modified log - SPM332 Modified log - SPM335 Modified log - SPM340 Modified log - SPM350 Modified log - SPM500 Modified log - SPM501 Modified log - SPM502 Modified log - SPM503 Modified log - SPM504 Modified log - SPM600 Modified log - SPM630 Modified log - SPM650 Modified log - SPM651 Modified log - SPM660 Modified log - SPM661 Modified log - SPM680 Modified log - SPM700 Modified log - SPM701 Modified log - SPM702 Modified log - SPM703 Modified log - SPM704 Modified log - SPM705 Modified log - SPM706 Modified log - SPM707 Modified log - SPM708 Modified log - SPM709 Modified log - SPM710

<u>Volume 8</u> Modified log – TOPS113 New log - TOPS131

#### June 2003

Preliminary release 17.01 for software release SN06 (DMS). For the Preliminary SN06 (DMS) release the following changes were added:

<u>Volume 1</u> Modified - Understanding log reports

<u>Volume 3</u> New log – DPTM500 New log – DPTM501 New log – DPTM550 New log – DPTM500 New log – DPTM560

<u>Volume 4</u> Modified log – LINE138

<u>Volume 5</u> New log – LOST117 <u>Volume 7</u> New log – SDM626 Modified log – SPM313 Modified log – SPM332 New log – SPM333 New log – SPM619 New log – SPM632 New log – SPM633 New log – SPM690

# 297-8021-840

# DMS-100 Family **North American DMS-100** Log Report Reference Manual Volume 6 of 8 Log Reports NMS100-RSDT100

LET0015 and up Standard 14.02 May 2001



# DMS-100 Family North American DMS-100

Log Report Reference Manual Volume 6 of 8 Log Reports NMS100-RSDT100

Publication number: 297-8021-840 Product release: LET0015 and up Document release: Standard 14.02 Date: May 2001

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# 1 Log reports

#### Introduction

This volume contains log report descriptions. Each log report description contains the following sections:

- Explanation
- Format
- Example
- Field descriptions
- Action
- Associated OM registers
- Additional information

#### Explanation

This section identifies the affected subsystem and indicates the reason the system generates the log report.

#### Format

This section shows the format of the log report. If the log report has more than one format, this section displays each format.

#### Example

This section contains an example of a log report. If the log report has more than one format, this section can contain a minimum of two examples.

#### **Field descriptions**

This section describes each field in the log report.

#### Action

This section describes the user action required when the system generates the log report.

#### Associated OM registers

This section lists associated OM registers for the log report.

#### Additional information

This section provides additional information about the log report.

#### **Explanation**

The system generates log report NMS100 at the host when a message service generates an address that is not valid. The system generates the log if the network message service (NMS) subsystem is present. This log provides information only.

#### Format

The format for log report NMS100 follows.

NMS100 mmmdd hh:mm:ss ssdd INFO INVALID ADDRESS FROM NMS INVALID ADDR $=<\!\!DN\!\!>$ 

#### Example

An example of log report NMS100 follows.

NMS100 JUN09 08:12:57 1234 INFO INVALID ADDRESS FROM NMS INVALID ADDR = 9999999999

## **Field descriptions**

The following table explains the fields in the log report:

| Field                            | Value       | Description  |
|----------------------------------|-------------|--|
| INFO INVALID ADDRESS<br>FROM NMS | Constant    | This field indicates the address is not valid.   |
| INVALID ADDR                     | Symbol text | This field identifies the subscriber directory number (DN). This field supports variable length DN format up to 10 digits. |

## Action

This log requires no immediate action.

#### **Related OM registers**

This log relates to OM register NMSINVAD of OM group NMS.

#### **Additional information**

#### NMS101

#### Explanation

The system generates log NMS101 at the server node. The log appears when there is a message wait indicator change request for a vacant subscriber directory number (DN). The system generates this log if the network message service (NMS) subsystem is present. This log provides information only.

#### Format

The format for log report NMS101 follows.

NMS101 mmmdd hh:mm:ss ssdd INFO VACANT NMS SUBSCRIBER DN INVALID ADDR =  $\langle DN \rangle$ 

#### Example

An example of log report NMS101 follows.

NMS101 JUN09 09:12:57 1235 INFO VACANT NMS SUBSCRIBER DN INVALID ADDR = 8153692666

#### **Field descriptions**

The following table explains the fields in the log report:

| Field                            | Value       | Description   |
|----------------------------------|-------------|---|
| INFO VACANT NMS<br>SUBSCRIBER DN | Constant    | This field identifies a message wait indicator change request for a vacant subscriber DN.               |
| INVALID ADDR                     | Symbol text | This field identifies the subscriber DN. This field supports variable length DN format up to 10 digits. |

#### Action

This log requires no immediate action.

## **Related OM registers**

This log relates to OM register NMSVACT of OM group NMS.

## **Additional information**

#### Explanation

The system generates log NMS102 at the server node when there is no notification to the subscriber directory number (DN) for a short term reason. An example of a short term reason is that the line is temporarily out of service.

#### Format

The format for log report NMS102 follows.

NMS102 mmmdd hh:mm:ss ssdd INFO NOTIFICATION UNAVAILABLE SUBSCRIBER DN = <DN>

#### Example

An example of log report NMS102 follows.

NMS102 AUG05 12:12:12 1235 INFO NOTIFICATION UNAVAILABLE SUBSCRIBER DN = 6135551111

#### **Field descriptions**

The following table explains the fields in the log report:

| Field                            | Value       | Description   |
|----------------------------------|-------------|---|
| INFO NOTIFICATION<br>UNAVAILABLE | Constant    | This field indicates that a subscriber number is temporarily out of service.  |
| SUBSCRIBER DN                    | Symbol text | This field identifies the subscriber directory number. This field supports variable length DN format up to 10 digits. |

## Action

This log detects problems causing a network message service sending incorrect DNs. Refer to the DNINV table for correct datafill. The network message services are:

- empty subscriber DNs
- global title translation not functioning correctly
- message service generating invalid DNs

NMS102 (end)

# **Related OM registers**

There are no related OM registers.

# **Additional information**

#### Explanation

The NMS103 log report appears at the server node when a transaction capabilities application part (TCAP) response receives a component return error.

*Note:* The system will not generate NMS103 after BCS36.

#### Format

The format for log report NMS103 follows.

NMS103 mmmdd hh:mm:ss ssdd INFO NOTIFICATION UNAVAILABLE TO DESTINATION DN SUBSCRIBER DN = nnnnnnnnn

#### Example

An example of log report NMS103 follows.

NMS103 AUG05 12:12:12 1235 INFO NOTIFICATION UNAVAILABLE TO DESTINATION DN SUBSCRIBER DN = 6135551111

#### Field descriptions

The following table explains the fields in the log report:

| Field   | Value       | Description   |
|---|-------------|---|
| INFO NOTIFICATION<br>UNAVAILABLE TO<br>DESTINATION DN | Constant    | This field indicates the destination directory number (DN) of the subscriber. |
| SUBSCRIBER DN   | Symbol text | This field identifies the subscriber directory number.                        |

#### NMS103 (end)

#### Action

The log report detects problems resulting in a network message service that sends incorrect DNs. See the DN table for correct entry. Services for network messages are:

- vacant subscriber DNs
- global title translation not functioning properly
- message service that generates incorrect DNs

#### **Related OM registers**

This log corresponds to NMS group OM registers: NMSVACT and NMSINVAD. Refer to OM registers for more information.

## **Additional information**

#### **Explanation**

The NMS104 log generates when the transaction identifier (TRID) cannot release by the identifier pool (IDPL) functionality after sending a transaction capabilities application part (TCAP) message. This log generates when the network message service (NMS)subsystem is part of the DMS-100 switch. The IDPL functionality dynamically creates the TRID.

## Format

The format for log report NMS104 follows.

NMS104 mmmdd hh:mm:ss ssdd INFO TRID\_UNRELEASE\_REPORT TRANSACTION ID cannot release.

# Example

An example of log report NMS104 follows.

NMS104 SEP05 18:14:33 4827 INFO TRID UNRELEASE\_REPORT TRANACTION ID cannot release.

#### **Field descriptions**

The following table explains each of the fields in the log report:

| Field  | Value    | Description  |
|--|----------|--|
| INFO<br>TRID_UNRELEASE_REPORT<br>TRANSACTION ID cannot<br>release. | Constant | The report indicates the TRID cannot release after sending a TCAP message. |

# Action

The NMS104 log does not require immediate action.

#### **Related OM registers**

The NMS104 log has no related OM registers.

## **Additional information**

The NMS104 log does not require additional information.

#### NO6100

#### Explanation

The Number 6 Signaling (NO6) link management process generates NO6100 when the NO6 mailbox a message that contains invalid data.

#### Format

The log report format for NO6100 is as follows:

#### Example

An example of log report NO6100 follows:

# **Field descriptions**

The following table describes each field in the log report:

| Field                       | Value            | Description  |
|-----------------------------|------------------|--|
| INFO NO6 INVALID<br>MESSAGE | Constant         | Indicates mailbox received message that contains data that is not correct. |
| hhhh                        | 0000-FFFF        | Provides data contained in message.  |
| N6SLMP                      | Character string | Provides additional information from NO6 link management process.          |

#### Action

There is no action required.

#### **Associated OM registers**

There are no associated OM registers.

# NO6100 (end)

# Additional information

#### NO6101

#### **Explanation**

The number 6 signaling (NO6) link management process generates NO6101 when the signaling terminal (ST) sends a signaling link failure message. The signaling link is automatically configured and synchronized.

#### Format

The log report format for NO6101 is as follows:

NO6101 mmmdd hh:mm:ss ssdd FLT NO6 LINK FAILURE LINKSET=linkid , TRANSMISSION LINK= tlinkid LINK STATE= txt , FAILURE REASON= reastxt

#### Example

An example of log report NO6101 follows:

NO6101 APR01 12:00:00 2112 FLT NO6 LINK FAILURE LINKSET=LSBTOA1 0, TRANSMISSION LINK= R1LOOPA 20 LINK STATE= PRVD, FAILURE REASON= CONTINUOUS SU ERR

#### **Field descriptions**

The following table describes each field in the log report:

| Field                   | Value            | Description   |
|-------------------------|------------------|---|
| FLT NO6 LINK<br>FAILURE | Constant         | Signaling link failure message received from signaling terminal.                        |
| LINKSET                 | Character string | Provides LINKSET identification.  |
| TRANSMISSION<br>LINK    | Character string | Provides transmission link<br>identification. Refer to customer data<br>table NO6LKSET. |
| LINK STATE              | Character string | Provides link state.  |
| FAILURE<br>REASON       | Character string | Provides failure reason.  |

#### Action

Enter link set and monitor the synchronization progress of the signaling link.

# NO6101 (end)

# **Associated OM registers**

### NO6103

#### Explanation

The number 6 signaling (NO6) link management process generates NO6103 when a signaling link failure lasts longer than 5 min. The signaling terminal (ST) and modem are automatically diagnosed.

#### Format

The log report format for NO6103 is as follows:

\*NO6103 mmmdd hh:mm:ss ssdd FLT NO6 LINK OVERALL SYNC TIMEOUT 5 MI LINKSET=linkid

### Example

An example of log report NO6103 follows:

\*NO6102 APR01 12:00:00 2112 FLT NO6 LINK OVERALL SYNC TIMEOUT 5 MI LINKSET=LSBTOA1 0

### **Field descriptions**

The following table describes each field in the log report:

| Field  | Value            | Description  |
|--|------------------|--|
| FLT NO6 LINK<br>OVERALL SYNC<br>TIMEOUT 5 MI | Constant         | Indicates signaling link failure lasted longer than 5 min.               |
| LINKSET                                      | Character string | Provides link set identification. Refer to customer data table NO6LKSET. |

#### Action

Enter the peripheral module (PM) level and observe the diagnostic results of the ST to determine if any manual interruption is required.

### **Associated OM registers**

The number six signaling (NO6) link management process generates this report when a manually initiated action deactivates the signaling link. The NO6 signaling link management process also generates this report when the system detects a hard failure.

### Format

The log report format for NO6104 is as follows:

\*\*NO6104 mmmdd hh:mm:ss ssdd INFO NO6 LINK DEACTIVATED LINKSET=linkid REASON= reastxt

## **Example**

An example of log report NO6104 follows:

\*\*NO6104 APR01 12:00:00 2112 INFO NO6 LINK DEACTIVATED LINKSET=LSBTOA1 0 REASON= SYNC TIMEOUT

## **Field descriptions**

The following table describes each field in the log report:

| Field                        | Value            | Description   |
|------------------------------|------------------|---|
| INFO NO6 LINK<br>DEACTIVATED | Constant         | Indicates signaling link deactivated.                               |
| LINKSET                      | Character string | Provides link set identification. See customer data table NO6LKSET. |
| REASON                       | Descriptive text | Provides reason for deactivation.                                   |

## Action

Enter the signaling terminal controller (STC) level and return the signaling terminal (ST) to service if the deactivation reason is ST or MODEM failure.

## **Associated OM registers**

## NO6120

### Explanation

The number 6 signaling (NO6) subsystem generates NO6120 when the traffic state on a link changes.

### Format

The log report format for NO6120 is as follows:

NO6120 mmmdd hh:mm:ss ssdd INFO NO6 LINK TRAFFIC STATE Link = linkid Traffic State = statxt

## Example

An example of log report NO6120 follows:

NO6120 MAY31 14:21:21 2112 INFO NO6 LINK TRAFFIC STATE Link = AAAPRM1CAN 0 Traffic State = In service

## **Field descriptions**

The following table describes each field in the log report:

| Field                          | Value  | Description  |
|--------------------------------|--|--|
| INFO NO6 LINK<br>TRAFFIC STATE | Constant   | Indicates a change of link traffic state.  |
| Link                           | Symbolic text  | Identifies the affected NO6 link. Refer to Table NO6LINKS in <i>Toll Customer Data Schema</i> , 297-2201-451 for values. |
| Traffic State                  | System Busy, Man<br>Busy, Seized, Off Line,<br>Remote Man Busy, Idle -<br>not in service, In<br>service, Standby<br>Ready, Emer Avail,<br>Unequipped | Indicates the new traffic state of the link.   |

## Action

There is no action required.

## **Associated OM registers**

# NO6120 (end)

## Additional information

There is no additional information.

## NO6121

#### Explanation

The Number 6 Signaling (NO6) subsystem generates NO6121 when the system aborts the manual changeover of the specified link.

### Format

The log report format for NO6121 is as follows:

NO6121 mmmdd hh:mm:ss ssdd INFO NO6 LINK MANUAL CHANGEOVER ABORTED Link = linkid

## Example

An example of log report NO6121 follows:

NO6121 MAY31 14:21:21 2112 INFO NO6 LINK MANUAL CHANGEOVER ABORTED Link = AAAPRM1CAN 0

## **Field descriptions**

The following table describes each field in the log report:

| Field  | Value         | Description   |
|--|---------------|---|
| INFO NO6 LINK<br>MANUAL<br>CHANGEOVER<br>ABORTED | Constant      | Indicates the system aborted the manual changeover of the specified link.                     |
| LINK   | Symbolic text | Identifies the affected NO6 link. Refer to table NO6LINKS in customer data schema for values. |

## Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

There is no additional information.

The Number 6 Signaling (NO6) link management process generates log report NO6200. This report appears when a blocking signal is not acknowledged in the first 10 to 15 s period. The blocking signal is not acknowledged after an additional minute of repeating the signal. It is not known if the far end has received the blocking signals.

## Format

The log report format for NO6200 is as follows:

NO6200 mmmdd hh:mm:ss ssdd INFO BLOCKING\_ACK\_TIMEOUT CKT clli ROUTESET: routeid BAND: nnn CKT: nn

## Example

An example of log report NO6200 follows:

NO6200 APR01 12:00:00 2112 INFO BLOCKING\_ACK\_TIMEOUT CKT TRAFNO62W1 0 ROUTESET:PRM1BBBAUS BAND: 25 CKT: 0

## **Field descriptions**

The following table describes each field in the log report:

| Field                             | Value         | Description   |
|-----------------------------------|---------------|---|
| INFO<br>BLOCKING_<br>ACK_TIME OUT | Constant      | Indicates the blocking signal was not acknowledged.                                     |
| СКТ                               | Symbolic text | Provides equipment identification for suspect trunk. Refer to customer data table CLLI. |
| ROUTESET                          | Symbolic text | Provides route set identification.<br>Refer to customer data table<br>NO6RTSET.         |
| BAND                              | Integers      | Provides band number. Refer to customer data table NO6BDXLA.                            |
| СКТ                               | 0-15          | Provides circuit number.  |

## NO6200 (end)

## Action

Manually restore the trunk to a compatible state between the two ends.

# **Associated OM registers**

The Number 6 Signaling (NO6) link management process generates log report NO6201. This report appears when an unblocking signal is not acknowledged in the first 10 to 15 s period. The unblocking signal is not acknowledged after an additional minute of repeating the signal. It is not known if the far end has received the unblocking signals.

## Format

The log report format for NO6201 is as follows:

NO6201 mmmdd hh:mm:ss ssdd INFO UNBLOCKING\_ACK\_TIMEOUT CKT clli ROUTESET: routeid BAND: nnn CKT: nn

## Example

An example of log report NO6201 follows:

NO6201 APR01 12:00:00 2112 INFO UNBLOCKING\_ACK\_TIMEOUT CKT NO6741AB 0 ROUTESET:PRM1AAACAN BAND: 0 CKT: 0

## **Field descriptions**

The following table describes each field in the log report:

| (Sheet ' | 1 of | 2) |
|----------|------|----|
|----------|------|----|

| Field                              | Value         | Description   |
|------------------------------------|---------------|---|
| INFO<br>UNBLOCKING_<br>ACK_TIMEOUT | Constant      | Indicates the blocking signal was not acknowledged.   |
| СКТ                                | Symbolic text | Provides equipment identification for<br>suspect trunk. Refer to customer data<br>table CLLI. |
| ROUTESET                           | Symbolic text | Provides route set identification.<br>Refer to customer data table<br>NO6RTSET.               |

## NO6201 (end)

#### (Sheet 2 of 2)

| Field | Value    | Description  |
|-------|----------|--|
| BAND  | Integers | Provides band number. Refer to customer data table NO6BDXLA. |
| СКТ   | 0-15     | Provides route number.                                       |

## Action

Manually restore the trunk to a compatible state between the two ends.

# **Associated OM registers**

The Number 6 Signaling (NO6) subsystem generates log report NO6202 when a trunk blocks for longer than 5 min.

## Format

The log report format for NO6202 is as follows:

NO6202 mmmdd hh:mm:ss ssdd INFO TRUNK\_IN\_BLOCKED\_STATE\_OVER\_FIVE\_ MINS ROUTESET: routeid BAND: bandid CKT: cktid

## Example

An example of log report NO6202 follows:

```
NO6202 NOV22 08:24:59 2112 INFO
TRUNK_IN_BLOCKED_STATE_OVER_FIVE_
MINS
ROUTESET: RS01TLK BAND: 6 CKT: 13
```

## **Field descriptions**

The following table describes each field in the log report:

| Field  | Value         | Description  |
|--|---------------|--|
| INFO TRUNK_IN_<br>BLOCKED_STATE_<br>OVER_FIVE_MINS | Constant      | Indicates a trunk blocks for more than 5 min.  |
| ROUTESET   | Symbolic text | Identifies the affected NO6 routeset by CLLI identifier. Refer to Table NO6RTSET in customer data schema for values. |
| BAND   | 0-127         | Identifies the affected band.  |
| СКТ  | 0-15          | Identifies the affected particular circuit in the specified band.  |

## Action

There is no action required.

1-24 Log reports

NO6202 (end)

# **Associated OM registers**

There are no associated OM registers.

## **Additional information**

There is no additional information.

The Number 6 Signaling (NO6) link management process generates log report NO6303. This report appears when the system correctly receives the reset band reply. The system corrects the trunk as part of initialization after a cold restart. Log report NO6303 reflects any change in the trunk state. The trunks marked CPB in the reset band reply are made RMB.

## Format

The log report format for NO6303 is as follows:

NO6303 mmmdd hh:mm:ss ssdd INFO STATE\_CHANGED\_BY\_RESET\_BAND CKT clli FROM STATE: txt TO STATE: txt

# Example

There is no example.

## **Field descriptions**

The following table describes each field in the log report:

| Field                                    | Value            | Description   |
|--|------------------|---|
| INFO STATE_<br>CHANGED_BY_<br>RESET_BAND | Constant         | Indicates the reset reply band changed the trunk state.                                 |
| СКТ                                      | Symbolic text    | Provides equipment identification for suspect trunk. Refer to customer data Table CLLI. |
| FROM STATE                               | Character string | Provides old state of trunk.  |
| TO STATE                                 | Character string | Provides new state of trunk.  |

## Action

There is no action required.

## **Associated OM registers**

1-26 Log reports

NO6303 (end)

## Additional information

There is no additional information.

### NODE300

### Explanation

The integrated node maintenance (INM) generates log report NODE300 when a trouble condition is present with the node. The INM supports node state management for different node designs. Examples of node designs are the application processor and the network interface unit (NIU). Report NODE300 indicates INM recovery actions when the node state is system busy.

The resource maintenance manager (RMM) reports faults to the INM when the system executes the QueryPM faults command at the MAP.

### Format

The log report format for NODE300 is as follows:

NODE300 mmmdd hh:mm:ss ssdd INFO TBL Warning Location= <node> Status= <trouble\_status> Trouble= <trouble\_code> Action= <user\_action> Integrated Node Maintenance Detailed Information Trouble Reason= <INM trouble condition reason>

## Example

An example of log report NODE300 follows:

NODE300 FEB18 14:22:46 2511 INFO TBL Warning Location= FP 1 Status= Alarm raised Trouble= Data not synchronized Action= Check datafill and correct if necessary Integrated Node Maintenance Detailed Information Trouble Reason= "Datafill Loadname does not match Loadname in PM" NODE300 (end)

## **Field descriptions**

The following table describes each field in the log report:

| Field                        | Value                                    | Description  |
|------------------------------|--|--|
| INFO TBL Warning             | Constant                                 | Indicates the trouble condition with the node.                                   |
|                              | Alphanumeric                             | Indicates the location of the peripheral module (PM) to which the event applies. |
| trouble_code                 | Cannot run test                          | Identifies the reason for the problem.   |
| user_action                  | Run the test indicated below             | Indicates the action to take.  |
| INM trouble condition reason | Scheduled PM<br>REX test not<br>executed | Provides a reason for the trouble condition.                                     |

## Action

Check the trouble field. Take action as indicated in the user action field.

## **Associated OM registers**

The integrated node maintenance (INM) system generates NODE323 when a REx request does not execute.

### Format

The log report format for NODE323 is as follows:

\*\* NODE323 mmmdd hh:mm:ss ssdd TBL REx Fault
Location: <location>
Status: <location>
Trouble: <location>
Action: <location>
REX did not run
Units: <location>
Reason: </location>

## Example

An example of log report NODE323 follows:

NODE323 (end)

## **Field descriptions**

The following table describes each field in the log report:

| Field           | Value            | Description  |
|-----------------|------------------|--|
| location        | Character string | Indicates the location of the PM to which the event applies.   |
| alarm_status    | Alarm raised     | Indicates an alarmed log. An alarmed log<br>means that double stars at the beginning of<br>the format highlight the log report. An<br>alarmed log does not mean a MAP alarm is<br>present. |
| trouble         | Character string | Indicates the problem of the REx not run.  |
| action          | Character string | Indicates the trouble log is for information only.   |
| units_not_RExed | 0, 1, 0 and 1    | Indicates the units which did not run the REx.   |
| reason          | Character string | Indicates the reason the REx does not run.   |

## Action

Clear the reason that did not allow the REx to run. This reason can require a manual maintenance action or a waiting period for a system operation to clear a trouble condition. Refer NODE323 to the next level of support.

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

There is no additional information.

#### NODE326

#### **Explanation**

The log report NODE326 is generated when a hardware fault occurs.

#### Format

The format for log report NODE326 follows.

NODE326 <mmmdd hh:mm:ss ssdd> TBL Hardware Fault Location: <node> <unit number> Status: <Alarm status> Trouble: <trouble\_code> Action: <user\_action> Activity: <activity status A or I> Integrated Node Maintenance Detailed Information Trouble Reason: <INM trouble condition reason> Trouble Detail: <trouble detail>

### **Examples**

An example of log report NODE326 follows.

```
RSN07AOINDY1 ** NODE326 OCT02 14:55:30 3300 TBL HARDWARE FAULT
Location: SPM 3 Unit 0
Status: Alarm raised
Trouble: Card fault
Action: Restore communication with the Resource Processor
Activity: I
Integrated Node Maintenance Detailed Information
Trouble Reason: Link isolation condition
Trouble Detail: Link/Messaging hardware
```

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field    | Value | Description  |
|----------|-------|--|
| Activity | A, I  | This indicates activity status of the unit.<br>A- Active<br>I - Inactive |

## Action

Not applicable.

### **Related OM registers**

None

1-2 Log reports

NODE326 (end)

## Additional information

None

# Log history

## SN08 (DMS)

Introduced Log NODE326 under CR Q00999638 and added Activity field under feature A00003971.

The integrated node maintenance (INM) generates log report NODE450. This report summarizes a series of event reports under one log header during a routine exercise (REX) test. The NODE450 log is never in alarm mode. The NODE450 log is an abbreviated summary of the routine series of operations that compose an REX test.

The system reports all trouble events (faults) as separate logs to make them more accessible to mechanized downstream analysis. High priority events are logged as the events reach the central log system. Other events are logged following the generation of NODE450. Events of the INITIATE class appear only in NODE450, and never as separate logs.

### Format

The log report formats for NODE450 are as follows:

#### Format 1

NODE450 mmmdd hh:mm:ss ssdd SUMM REX TEST SUMMARY Location: entity name Summary: REX Test Sequence Successful

#### Format 2

NODE450 mmmdd hh:mm:ss ssdd SUMM REX TEST SUMMARY Location: entity name Summary: REX Test Sequence Failed TIME EVENT hh:mm:ss detailed event type hh:mm:ss detailed event type

## Example

Examples of log report NODE450 follow:

Example 1

NODE450 OCT17 12:05:01 9200 SUMM REX TEST SUMMARY Location: NIU 7 Summary: REX Test Sequence Successful

Example 2

## NODE450 (end)

```
NODE450 OCT17 12:05:01 9200 SUMM REX TEST SUMMARY
Location: NIU 7
Summary: REX Test Sequence Failed
TIME EVENT
16:48:43 Initiate REX
16:50:13 Initiate CPU Test
16:51:06 REX Fault
```

## **Field descriptions**

The following table describes each field in the log report:

| Field                    | Value   | Description   |
|--------------------------|---|---|
| SUMM REX TEST<br>SUMMARY | Constant  | Indicates information about the success or failure of an REX test.            |
| Location                 | Symbolic text   | Indicates the name of the hardware or software component or service involved. |
| Summary                  | REX Test Sequence<br>Successful REX Test<br>Sequence Failed | Indicates if the REX test was successful or failed.                           |
| TIME                     | Integers  | If REX test failed, indicates the time (hh:mm:ss).                            |
| EVENT                    | Symbolic text   | If REX test failed, indicates the event.                                      |

## Action

The NODE450 log report helps log analysis. The NODE450 log report brings together related events in one report, in the correct time sequence. The action required, if any, depends on the nature of the repeated events.

## **Associated OM registers**

### NODE451

### Explanation

The integrated node maintenance (INM) system generates log report NODE451 when more information is available than will fit in log NODE450. The NODE451 log report continues the summary started in NODE450. The system will generate the necessary number of NODE451 logs to present a complete event failure summary. Note that the system generates NODE451 logs only if the failure event sequence will not fit in one NODE450 failure report.

### Format

The log report format for NODE451 is as follows:

NODE451 mmmdd hh:mm:ss ssdd SUMM REX TEST SUMMARY (contd)

| Location: entity name |                                 |  |
|-----------------------|---------------------------------|--|
| Summary:              | <b>REX Test Sequence Failed</b> |  |
| TIME                  | EVENT                           |  |
| hh:mm:ss              | detailed event type             |  |
| hh:mm:ss              | detailed event type             |  |

## Example

An example of log report NODE451 follows:

```
NODE450 OCT17 12:05:01 9200 SUMM REX TEST SUMMARY (contd)
Location: NIU 7
Summary: REX Test Sequence Failed
TIME EVENT
16:48:43 Initiate REX
16:50:13 Initiate CPU Test
16:51:06 REX Fault
```

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                    | Value         | Description   |
|--------------------------|---------------|---|
| SUMM REX TEST<br>SUMMARY | Constant      | Indicates information about the completion or failure of a REX test.          |
| Location                 | Symbolic text | Indicates the name of the hardware or software component or service involved. |

## NODE451 (end)

(Sheet 2 of 2)

| Field                                 | Value         | Description                    |
|---------------------------------------|---------------|--------------------------------|
| Summary : REX Test<br>Sequence Failed | Constant      | Indicates the REX test failed. |
| TIME                                  | Integers      | Indicates the time (hh:mm:ss). |
| EVENT                                 | Symbolic text | Indicates the event.           |

## Action

The NODE451 report helps log analysis. The NODE451 report brings together related events in one report, in the correct time sequence. The action required, if any, depends upon the nature of reported events.

## **Associated OM registers**

## NODE500

#### **Explanation**

The NODE500 log report for the DMS-Spectrum Peripheral Module (SPM) generates when a CEM or SPM changes state, such as from inactive to active.

#### Format

The format for log report NODE500 follows:

\* NODE500 Feb07 10:22:11 4700 INFO Device State Change Location:<pm type><node number><circuit pack><circuit packno From: INSV To: INTB Location: SPM <spm number> Type: <DMSCP,IW,SMG4,DPT> Fabric: <IP,ATM,N/A>

## Example

An example of log report NODE500 follows:

```
** NODE500 Feb07 10:22:11 4700 INFO Device State Change
Location: SPM 01 DLC 01
From: State
To: State
Location: SPM 14 Type: DMSCP Fabric: N/A
```

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field               | Value   | Description   |
|---------------------|---------|---|
| pm type             | SPM     | PM type   |
| pm number           | 0 to 85 | PM number   |
| Circuit Pack Type   | CEM     | Circuit pack types  |
|                     |         |   |
|                     |         |   |
|                     |         |   |
|                     |         | <i>Note:</i> The voice signal processor (VSP) may not apply to all markets. |
| Circuit Pack Number | 0 to 27 | Circuit pack number   |

#### 1-2 Log reports

## NODE500 (continued)

| Г          |       |  |
|------------|-------|--|
| Field      | Value | Description  |
| state      | Uneq  | Describes if the device is the active  |
|            | sysb  | device or inactive device  |
|            | manb  |  |
|            | offl  |  |
|            | cbsy  |  |
|            | istb  |  |
|            | insv  |  |
| class_type | DMSCP | Legacy SPM   |
|            |       | Used when the node class is datafilled as DMSCP in table MNNODE.   |
|            |       | Fabric is not applicable when type = DMSCP.  |
|            | SMG4  | MG4000   |
|            |       | Used when the node class is datafilled as SMG4 in table MNNODE.  |
|            | IW    | Interworking SPM   |
|            |       | Used when the node class is<br>datafilled as IW and DPT_INFO is<br>datafilled as BRIDGE_ONLY in<br>table MNNODE. |
|            | DPT   | Dynamic Packet Trunk (DPT) SPM   |
|            |       | Used when the node class is datafilled as IW and DPT_INFO is datafilled as DPT_ONLY in table MNNODE.             |

## Action

No action is required.

# Associated OM registers

Not applicable

# NODE500 (end)

# Additional information

Not applicable

## Log history CR Q00651407

Documentation for log NODE500 introduced.

### NODE600

### **Explanation**

The integrated node maintenance (INM) generates log report NODE600 when a trouble condition with the node is present. The INM supports node state management for different node designs. Examples of node designs are the application processor and the network interface unit (NIU). The NODE600 log indicates INM recovery actions when the node state is system busy.

When a user executes the QueryPM faults command at the MAP, the resource maintenance manager (RMM) reports faults to the INM.

### Format

The log report format for NODE600 is as follows:

NODE600 mmmdd hh:mm:ss ssdd INFO TBL Warning Location= <node> Trouble= <trouble\_code> Action= <user\_action> Integrated Node Maintenance Detailed Information Trouble Reason= <INM trouble condition reason>

## **Example**

An example of log report NODE600 follows:

NODE600 FEB18 14:22:46 2511 INFO TBL Warning Location= FP 1 Trouble= Cannot run test Action= Run the test indicated below Integrated Node Maintenance Detailed Information Trouble Reason= "Scheduled PM REX test not executed"

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field            | Value        | Description  |
|------------------|--------------|--|
| INFO TBL Warning | Constant     | Indicates the trouble condition related to the node.                             |
|                  | Alphanumeric | Indicates the location of the peripheral module (PM) to which the event applies. |

## NODE600 (end)

(Sheet 2 of 2)

| Field                        | Value                                    | Description                                  |
|------------------------------|--|--|
| trouble_code                 | Cannot run test                          | Identifies the reason for the problem.       |
| user_action                  | Run the test indicated below             | Indicates the action you must take.          |
| INM trouble condition reason | Scheduled PM<br>REX test not<br>executed | Provides a reason for the trouble condition. |

## Action

Check the trouble field. Take action as indicated in the user action field.

# **Associated OM registers**

The Network Operations Protocol (NOP) subsystem generates log report NOP100 when an invalid argument (ARG) error is present. An ARG error means the remote operation parameters are not formatted correctly. Remote operation (RO) is the level of NOP that defines the actions between the DMS and the Network Operations System (NOS).

### Format

The log report format for NOP100 is as follows:

\*NOP100 mmmdd hh:mm:ss ssdd INFO ARG errtxt

### Example

An example of log report NOP100 follows:

\*NOP100 JAN22 09:13:53 4566 INFO ARG 1 Wrong Userid Password

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field    | Value    | Description                              |
|----------|----------|--|
| INFO ARG | Constant | Indicates an invalid argument error.     |
| errtxt   |          | Identifies one of the following reasons: |
|          | 0        | Default Reason.                          |
|          | 1        | Userid Password Wrong.                   |
|          | 2        | Parameter Missing.                       |
|          | 3        | Value Range Error.                       |
|          | 4        | Block Id Out of Range.                   |
|          | 5        | Null Block Id Expected.                  |
|          | 6        | Wrong Parameter Count.                   |
|          | 7        | Type Range Error.                        |
|          | 8        | Null Range Error.                        |

# NOP100 (continued)

## (Sheet 2 of 2)

| Field | Value | Description                      |
|-------|-------|----------------------------------|
|       | 9     | File Spec Error.                 |
|       | 10    | Time Range Error.                |
|       | 11    | Unknown Application Identifier.  |
|       | 12    | PTDA Link Already Assigned.      |
|       | 13    | PTDA Invalid Device Name.        |
|       | 14    | PTDA Directory Problem.          |
|       | 15    | ACD Poolid Password Wrong.       |
|       | 16    | ACD Poolname Invalid.            |
|       | 17    | ACD Subpool Invalid.             |
|       | 18    | ACD Subpool Password Wrong.      |
|       | 19    | ACD Octet String Invalid.        |
|       | 20    | PADN Invalid Device.             |
|       | 21    | PADN File Not Found.             |
|       | 22    | PADN Wrong Processor.            |
|       | 23    | ACD Invalid Pool Protocol.       |
|       | 24    | FTRAN Invalid Device.            |
|       | 25    | FTRAN No Append Possible.        |
|       | 26    | FTRAN File Already Exists.       |
|       | 27    | FTRAN Not Enough Free Store.     |
|       | 28    | Unused.                          |
|       | 29    | FTRAN Invalid File Name.         |
|       | 30    | FTRAN No File To Move.           |
|       | 31    | FTRAN Invalid RECFM.             |
|       | 32    | ACD Incomplete Range Processing. |

## Action

Save the NOP100 report and contact the next level of maintenance.

# **Associated OM registers**

### NOP101

### Explanation

The Network Operations Protocol (NOP) subsystem generates this report when an operation sequence (SEQ) error occurs. An SEQ error indicates that remote operations (RO) are received in a not correct order.

The Network Operations Protocol (NOP) subsystem also generates this report when an invalid argument (ARG) error occurs. The ARG error means the remote operation parameters are not formatted correctly. Remote operation (RO) is the level of NOP that defines the actions between the DMS switch and the Network Operations System (NOS).

### Format

The format for log report NOP101 follows:

\*NOP101 mmmdd hh:mm:ss ssdd INFO SEQ errtxt

\*NOP101 mmmdd hh:mm:ss ssdd INFO ARG errtxt

### Example

An example of log report NOP101 follows:

```
*NOP101 JAN22 09:13:53 4566 INFO ARG 1 Wrong Userid Password
```

### Field descriptions

The following table explains each of the fields in the log report:

#### (Sheet 1 of 4)

| Field    | Value    | Description  |
|----------|----------|--|
| INFO SEQ | Constant | Indicates that there is an operations sequence error |
| errtxt   |          | Identifies one of the following as the error reason: |
|          | 0        | Default reason                                       |
|          | 1        | Nos logon not completed                              |
|          | 2        | Duplicate logon                                      |
|          | 3        | Logout without logon                                 |

# NOP101 (continued)

| Field    | Value    | Description                                       |
|----------|----------|---|
|          | 4        | Data transfer started before                      |
|          | 5        | Requested data is being transferred               |
|          | 6        | Data transfer not started                         |
|          | 7        | Nos list files in progress                        |
|          | 8        | PTDA map already invoked                          |
|          | 9        | PTDA scroll already invoked                       |
|          | 10       | PTDA scroll input not pending                     |
|          | 11       | Nos invalid state                                 |
|          | 12       | Wrong ACD mis state                               |
|          | 13       | ACD pool associated before                        |
|          | 14       | PADN patch applied but not needed                 |
|          | 15       | PADN patch process in use                         |
|          | 16       | PADN no file send received                        |
|          | 17       | PADN no inform received                           |
|          | 18       | PADN file already exists                          |
|          | 19       | FTRAN invalid in this state                       |
|          | 20       | FTRAN transmit data again requested               |
| INFO ARG | Constant | Indicates that there is an invalid argument error |
| errtxt   |          | Identifies one of the following reasons:          |
|          | 0        | Default Reason                                    |
|          | 1        | Userid Password Wrong                             |
|          | 2        | Parameter Missing                                 |
|          | 3        | Value Range Error                                 |

# NOP101 (continued)

### (Sheet 3 of 4)

| Field | Value | Description                      |
|-------|-------|----------------------------------|
|       | 4     | Block Id Out of Range            |
|       | 5     | Null Block Id Expected           |
|       | 6     | Wrong Parameter Count            |
|       | 7     | Type Range Error                 |
|       | 8     | Null Range Error                 |
|       | 9     | File Spec Error                  |
|       | 10    | Time Range Error                 |
|       | 11    | Not known Application Identifier |
|       | 12    | PTDA Link Already Assigned       |
|       | 13    | PTDA Invalid Device Name         |
|       | 14    | PTDA Directory Problem           |
|       | 15    | ACD POOLID Password Wrong        |
|       | 16    | ACD Poolname Invalid             |
|       | 17    | ACD Subpool Invalid              |
|       | 18    | ACD Subpool Password Wrong       |
|       | 19    | ACD Octet String Invalid         |
|       | 20    | PADN Invalid Device              |
|       | 21    | PADN File Not Found              |
|       | 22    | PADN Wrong Processor             |
|       | 23    | ACD Invalid Pool Protocol        |
|       | 24    | FTRAN Invalid Device             |
|       | 25    | FTRAN No Append Possible         |
|       | 26    | FTRAN File Already Exists        |
|       | 27    | FTRAN Not Enough Free Store      |

## NOP101 (end)

#### (Sheet 4 of 4)

| Field | Value | Description                       |
|-------|-------|-----------------------------------|
|       | 28    | Not used                          |
|       | 29    | FTRAN Invalid File Name           |
|       | 30    | FTRAN No File To Move             |
|       | 31    | FTRAN Invalid RECFM               |
|       | 32    | ACD Not complete Range Processing |

## Action

Save this report and contact the next level of maintenance.

## **Associated OM registers**

None

### NOP102

### **Explanation**

The Network Operations Protocol (NOP) subsystem generates this report when a resource (RES) problem occurs. A RES problem means there are not enough resources available for NOP on the DMS switch.

The NOP maintenance and administration position (MAP) level is accessed through the IOD MAP level and allows communication.

### Format

The format for log report NOP102 follows:

\*NOP102 mmmdd hh:mm:ss ssdd INFO RESn errtxt

### Example

An example of log report NOP102 follows:

\*NOP102 JAN22 09:13:53 4566 INFO RESO Default Reason

### **Field descriptions**

The following table explains each of the fields in the log report:

| Field    | Value | Description  |
|----------|-------|--|
| INFO RES | 0-6   | Identifies one of the following as the error reason: |
| errtxt   |       |  |
|          | 0     | Default reason                                       |
|          | 1     | Traffic load   |
|          | 2     | Maximum logon exceeded                               |
|          | 3     | Too many ROS outstanding                             |
|          | 4     | Too many files demanded                              |
|          | 5     | Application initialization failed                    |
|          | 6     | Application termination failed                       |

## Action

Save this report and contact the next level of maintenance.

# **Associated OM registers**

None

## NOP103

## Explanation

The Network Operations Protocol (NOP) subsystem generates this report when a system (SYS) problem occurs. The SYS problem is a hardware, software, or communication problem during data transmission.

#### Format

The format for log report NOP103 follows:

\*\*NOP103 JAN22 mmmdd hh:mm:ss ssdd INFO SYS errtxt

## **Example**

An example of log report NOP103 follows:

\*\*NOP103 JAN22 09:13:53 4566 INFO SYS 11 TRANSIENT ERROR

### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field    | Value    | Description  |
|----------|----------|--|
| INFO SYS | Constant | Indicates a system problem.                          |
| errtxt   |          | Identifies one of the following as the error reason: |
|          | 10       | Default Reason                                       |
|          | 11       | Transient Error                                      |
|          | 12       | Internal Buffer Not Allocated                        |
|          | 13       | Ft Not initialized                                   |
|          | 14       |  |
|          | 15       | File Not Accessible                                  |
|          | 16       | File System Failure                                  |
|          | 17       | Dirp Subsystem Not Available                         |
|          | 18       | Bad File Internal State                              |
|          | 19       | File Not in Primary Dir                              |

## NOP103 (continued)

| Field | Value | Description                   |
|-------|-------|-------------------------------|
|       | 20    | File Not in Secondary Dir     |
|       | 21    | Bad Internal Subsystem Id     |
|       | 22    | Bad Internal Dirphold Id      |
|       | 23    | File Name Mismatch            |
|       | 24    | Bad File External State       |
|       | 25    | Active File Problem           |
|       | 26    | Active File Vaporized         |
|       | 27    | No Info For Active File       |
|       | 28    | File Naming Failure           |
|       | 29    | File In Wrong State           |
|       | 30    | File Not Found                |
|       | 31    | Active File Open Failure      |
|       | 32    | Unprocessed File Open Failure |
|       | 33    | Processed File Open Failure   |
|       | 34    | Exception File Open Failure   |
|       | 35    | Primary Info Modified         |
|       | 36    | Device Not Supported          |
|       | 37    | Change State Not Supported    |
|       | 38    | System Mailbox Failure        |
|       | 39    | Exception File Access Failure |
|       | 40    | Too Many Bad Blocks           |
|       | 41    | Ft Not Engineered             |

#### (Sheet 2 of 2)

## Action

Save this report and contact the next level of maintenance.

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NOP103 (end)

# **Associated OM registers**

There are no associated OM registers

### **Explanation**

The Network Operations Protocol (NOP) subsystem generates this report when the passthru maintenance and administration position (MAP) application entity (PTAE) finds a session with not compatible data. The NOP subsystem generates this report when the session does not respond to a message within two minutes.

The log indicates that a centralized MAP (CMAP) user experiences problems.

### Format

The format for log report NOP110 follows:

NOP 110 mmmdd hh:mm:ss ssdd INFO PTAE AUDIT PTAE Session n in a bad state No action taken

## Example

An example of log report NOP110 follows:

NOP 110 SEP26 15:11:34 INFO PTAE AUDIT PTAE Session 2 in a bad state NO action taken

## **Field descriptions**

The following table describes each field in the log report:

| Field           | Value    | Description                                |
|-----------------|----------|--|
| INFO PTAE AUDIT | Constant | Indicates the PTAE audit has occurred      |
| PTAE Session    | 0-9      | Indicates the involved session             |
| in a bad state  | Constant | Indicates the session was in a bad state   |
| No action taken | Constant | Indicates that system action was not taken |

## Action

There is no action required. If the audit finds the same session in the same bad state twice in a row, it will terminate the session. The audit generates a NOP111 log report. If this log occurs more than one time a day, refer to the next level of maintenance.

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NOP110 (end)

# Associated OM registers

There are no associated OM registers

### Explanation

The Network Operations Protocol (NOP) subsystem generates this report when the passthru maintenance and application administration position (MAP) application entity (PTAE) finds one of two faults for the second time in a row.

The fault is either a session with not compatible data or a session that will not respond to a message. The session must respond to the message within two minutes. In either event, the PTAE audit stops and attempts to clean up the faulty session. This log can indicate if the system disconnects a centralized MAP (CMAP) user.

## Format

The format for log report NOP111 follows:

\*NOP111 mmmdd hh:mm:ss ssdd INFO PTAE AUDIT PTAE session n in a bad state Session KILLED

## Example

An example of log report NOP111 follows:

\*NOP111 SEP26 15:11:34 INFO PTAE AUDIT PTAE Session 2 in a bad state Session KILLED

## **Field descriptions**

The following table describes each field in the log report:

| Field           | Value    | Description  |
|-----------------|----------|--|
| INFO PTAE AUDIT | Constant | Indicates that a PTAE audit takes place            |
| PTAE Session    | 0-9      | Indicates the number of the session concerned      |
| in a bad state  | Constant | Indicates the session was in a bad state           |
| Session KILLED  | Constant | Indicates the PTAE audit stops the damaged session |

## NOP111 (end)

## Action

There is no required action. The audit found the same session in the same bad state twice in a row and stops the session. If the log occurs more than one time a day, refer to the next level of maintenance.

## **Associated OM registers**

There are no associated OM registers

## **Additional information**

There is no additional information

### **Explanation**

The Network Operations Protocol (NOP) subsystem generates this report when the system creates a session on a DNC terminal. The system creates a session on a DNC terminal when a centralized MAP (CMAP) user logs in and can access the DMS MAP.

### Format

The format for log report NOP112 follows:

NOP112 mmmdd hh:mm:ss ssdd INFO PTAE (CMAP) PTAE session n, has been created

## Example

An example of log report NOP112 follows:

NOP112 SEP26 15:11:34 INFO PTAE (CMAP) PTAE Session 2, has been created

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field                          | Value    | Description   |
|--------------------------------|----------|---|
| INFO PTAE (CMAP)               | Constant | Indicates the creation of a CMAP session.               |
| PTAE Session, has been created | 0-9      | Indicates the number of the session the system creates. |

## Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

There is no additional information.

### NPAC128

### Explanation

The Robust Application and Session Layer (RASL) interface generates log report NPAC128 to indicate that a system error involves a 6X91BA circuit card.

An Bad RTS Msg Parms error causes the system to display the NPAC128 log. This error occurs when the system performs Return To Service (RTS) on a 6X91BA circuit card. This error occurs when a message passed to the circuit card is bad. An error reason of L2 Config. Error causes the system to display this log. The system displays this log when the near-end 6X91BA circuit card determines that a protocol is not compatible. Compatability is between near-end and far-end 6X91BA circuit cards. The protocol can be Data Terminal Equipment (DTE) or Data Communication Equipment (DCE). This error implies that one end contains entries that are not correct.

### Format

The format for log report NPAC128 follows:

NPAC128 mmmdd hh:mm:ss ssdd TBL 6X91BA SYSTEM ERROR Error Reason = txt

| LINK = nn    |    |           |
|--------------|----|-----------|
| Application  | =  | NX25SLP   |
| Admin. Info. | =  | CARD7_SLP |
| PC Reg. $=$  | nn |           |
| DE Reg. $=$  | nn |           |
| BC Reg. $=$  | nn |           |
| HL Reg. $=$  | nn |           |
| PSW Reg.     | =  | nn        |
| A Reg. =     | nn |           |

## **Example**

An example of log report NPAC128 follows:

```
1.NPAC128 MAR31 12:11:00 2356 TBL 6X91BA SYSTEM ERROR
Error Reason = Software Trap
LINK = 7
Application = NX25SLP
Admin. Info. = CARD7_SLP
PC Reg. = 021212
DE Reg. = 021212
BC Reg. = 021212
HL Reg. = 021212
PSW Reg. = 021212
A Reg. = 021212
```

## **Field descriptions**

The following table describes each field in the log report:

| Field                       | Value        | Description  |
|-----------------------------|--------------|--|
| INFO 6X91BA<br>SYSTEM ERROR | Constant     | Indicates that a system error involves a 6X91BA circuit card |
| Error Reason                | Alphanumeric | This field displays the error reason text.                   |
| Link                        | 0-255        | This field specifies the link number.                        |
| nbr                         | Numeric      | This field provides the individual statistics.               |

## Action

If the error text specifies Bad RTS Msg Parms, check that Table NX25 datafill matches the configuration of the NT6X91BA card. Correct the entries if they are wrong. Perform RTS again. If the second RTS fails, contact the field support group.

The error reason text can specify L2 Config Error. If this event occurs enter either the near-end or far-end NT6X91BA card as DCE in Table NX25. Enter the other card as DTE. Take the card in error off-line. Correct the entries.

## **Associated OM registers**

There are no associated OM registers

## NPAC210

### Explanation

The Northern X.25 (NPAC) subsystem generates NPAC210 when the system detects a minor incoming message overload (ICMO) condition on a link.

### Format

The log report format for NPAC210 is as follows:

\*NPAC210 mmmdd hh:mm:ss ssdd FLT Link: n Incoming Message Overload

### Example

An example of log report NPAC210 follows:

\*NPAC210 MAR16 15:04:20 2112 FLT Link: 0 Incoming Message Overload

## **Field descriptions**

The following table describes each field in the log report:

| Field                        | Value    | Description                            |
|------------------------------|----------|--|
| FLT                          | Constant | Indicates a defective link             |
| Link                         | Integer  | Identifies the link affected           |
| Incoming Message<br>Overload | Constant | Indicates an ICMO condition is present |

## Action

If the ICMO condition continues, remove the specified X.25 unit from service.

## **Associated OM registers**

There are no associated OM registers.

## **Explanation**

The Northern X.25 (NPAC) subsystem generates this report when a minor incoming message overload (ICMO) condition no longer affects a link.

### Format

The log report format for NPAC211 is as follows:

\*NPAC211 mmmdd hh:mm:ss ssdd Fault Cleared link: n ICMO Cleared

### Example

An example of log report NPAC211 follows:

\*NPAC211 MAR06 15:04:20 2112 Fault Cleared link: 0 ICMO Cleared

## **Field descriptions**

The following table describes each of the fields in the log report:

| Field         | Value    | Description                               |
|---------------|----------|---|
| Fault Cleared | Constant | Indicates clearance of a fault.           |
| link          | Integer  | Identifies the link affected.             |
| ICMO Cleared  | Constant | Indicates clearance of an ICMO condition. |

## Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

## Additional information

There is no additional information.

## NPAC212

### Explanation

The Northern X.25 (NPAC) subsystem generates NPAC212 when a major incoming message overload (ICMO) condition is present on a link. The ICMO condition makes the link system busy (SysB).

### Format

The log report format for NPAC212 is as follows:

\*\*NPAC212 mmmdd hh:mm:ss ssdd SYSB Link: n; Incoming Message Overload

### Example

An example of log report NPAC212 follows:

\*\*NPAC212 JUN15 11:08:12 9036 SYSB Link: 0; Incoming Message Overload

### **Field descriptions**

The following table describes each field in the log report:

| Field                        | Value    | Description                           |
|------------------------------|----------|---------------------------------------|
| SYSB                         | Constant | Indicates the link is system busy     |
| Link                         | Integer  | Identifies the link affected          |
| Incoming Message<br>Overload | Constant | Indicates the reason the link is SysB |

## Action

Monitor activities on this link from the MAP terminal. Automatic return to service of the link does not follow this log. Manual maintenance action must occur.

## **Associated OM registers**

There are no associated OM registers.

### **Explanation**

Network Services Software (NSS) generates log report NSS100. This report provides information when incoming NSS feature group D (FGD) calls fail information digit or automatic number identification (ANI) screening.

### Format

The log report format for NSS100 is as follows:

NSS100 mmmdd hh:mm:ss ssdd INFO DATA BASE TRBL CKT CKTID PROBLEM CODE = reason DIGITS RECEIVED = hnnnnnnnh CALLID = callid

## Example

An example of log report NSS100 follows:

```
NSS100 JAN01 15:49:59 8234 INFO DATA BASE TRBL

CKT FGDIC 2

PROBLEM CODE = ANI_NOT_FOUND_IN_ANIDATA

DIGITS RECEIVED = D5198204880F

CALLID = 426196
```

## **Field descriptions**

The following table describes each field in the log report:

| (Sheet | 1 | of | 3) |  |
|--------|---|----|----|--|
|--------|---|----|----|--|

| Field               | Value                       | Description  |
|---------------------|-----------------------------|--|
| INFO DATA BASE TRBL | Constant                    | Indicates a problem in an NSS<br>FGD call  |
| СКТ                 | Representative text         | Identifies the trunk circuit of the calling party  |
| PROBLEM CODE        | ANI_NOT_FOUND_IN<br>ANIDATA | Indicates the three- or 10-digit<br>automatic number identification<br>(ANI) was received. This ANI did<br>not have associated datafill in<br>Table ANIDATA. This trunk must<br>receive verify ANI. Make sure<br>entry in Table ANIDATA is<br>correct. |

# NSS100 (continued)

### (Sheet 2 of 3)

| Field | Value                            | Description   |
|-------|----------------------------------|---|
|       | INFO_DIGIT_TRANSLATION_<br>ERROR | Indicates the two ANI information<br>digits were received. It is<br>possible that these digits do not<br>appear for the pretranslator name<br>in field IDPRTRAN for Table<br>TRKGRP. The digits can appear<br>with a selector other than ID in<br>field PRERTSEL for Table<br>STDPRTCT. Verify datafill in<br>Table STDPRTCT for<br>pretranslator name. The<br>pretranslator name appears in<br>field IDPRTRAN in Table<br>TRKGRP for this trunk. |
|       | INTDD_TRANSLATION_<br>ERROR      | Indicates system detected<br>pretranslation of an INTDD. The<br>digit stream does not fit the 1NX<br>format for international dialing.<br>Verify data entry in Table<br>STDPRTCT for pretranslator<br>name. The pretranslator name<br>appears in field IDPRTAN in<br>Table TRKGRP for this trunk.   |
|       | INVALID_ANI_LENGTH               | Indicates received ANI digits are<br>not three or ten digits in length.<br>This length value excludes KP,<br>ST, and information digits.<br>Check the ANI digit stream that<br>this trunk receives.   |
|       | TEST_CALL_TRANSLATION_<br>ERROR  | Indicates system detected<br>pretranslation of a TEST result.<br>The digit stream received does<br>not fit the 10X format or the<br>95XXXXX format. Verify datafill<br>in Table STDPRTCT for<br>pretranslator name. The<br>pretranslator name appears in<br>field IDPRTRAN in Table<br>TRKGRP for this trunk.   |

## NSS100 (end)

#### (Sheet 3 of 3)

| Field           | Value              | Description   |
|-----------------|--------------------|---|
| DIGITS RECEIVED | 0-9, B, C, D, E, F | Indicates that the system must screen received digits. The digits include KP and ST digits. |
| CALLID          | Integer            | Identifies the call by a different call identification number                               |

## Action

The description section of the preceding table indicates instructions to follow for each problem code.

## **Associated OM registers**

There are no associated OM registers.

### NSS101

### **Explanation**

Network Services Software (NSS) generates log report NSS101. The NSS generates NSS101 when an incoming NSS Feature Group D (FGD) call does not receive automatic number identification (ANI) digits when field ANIDIGS is set to Y. Field ANIDIGS appears in Table TRKGRP.

### Format

The log report format for NSS101 is as follows:

NSS101 mmmdd hh:mm:ss ssdd INFO DATA BASE TRBL CKT cktid PROBLEM CODE = reason DIGITS RECEIVED = hnnnnnnnnh CALLID = callid

### Example

An example of log report NSS101 follows:

```
NSS101 JAN01 15:49:59 8234 INFO DATA BASE TRBL

CKT FGDIC 2

PROBLEM CODE = ANI_EXPECTED_NOT_RECEIVED

DIGITS RECEIVED = D5198204880F

CALLID = 426196
```

### Field descriptions

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                  | Value                         | Description   |
|------------------------|-------------------------------|---|
| INFO DATA BASE<br>TRBL | Constant                      | Indicates a problem in an NSS FGD call  |
| СКТ                    | Symbolic text                 | Identifies the trunk circuit of the calling party   |
| PROBLEM CODE           | ANI_EXPECTED_NOT_<br>RECEIVED | Indicates that system received no ANI digits<br>and field ANIDIGS is set to Y for this trunk.<br>Field ANIDIGS appears in Table TRKGRP. |

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## NSS101 (end)

#### (Sheet 2 of 2)

| Field           | Value              | Description   |
|-----------------|--------------------|---|
| DIGITS RECEIVED | 0-9, B, C, D, E, F | Indicates that received digits are for screening purposes. These digits include KP and ST digits. |
| CALLID          | Integers           | Identifies the call by a specified call identification number                                     |

## Action

Verify that the system must send ANI on this trunk. If the system must not send ANIDIGS, set field ANIDIGS to N. If the system must send ANIDIGS, take appropriate action to resume transmission of ANI digits.

## **Associated OM registers**

There are no associated OM registers.

### NSS104

### Explanation

The Network Services Software (NSS) subsystem generates log report NSS104. The NSS generates on either the service switching point (SSP) or on DBCP nodes. This action occurs when Table MSGRTE is not entered correctly.

An entry with PUBLIC netname and called address must appear in Table MSGRTE to send messages from the originating switch. This entry must be present to tandem messages. This entry must appear in table MSGRTE with Signaling System #7 (SS#7) or global title translation (GTT) selector. The LOCAL selector in Table MSGRTE indicates message processing must occur at the local node. The NSS generates this log in two cases. The NSS generates NSS104 when a tuple with PUBLIC netname and the called address does not appear in Table MSGRTE. The NSS generates the report when a tuple with PUBLIC netname and the called address does not appear in Table MSGRTE. The NSS generates the report when a tuple with PUBLIC netname and the called address appears in the table incorrectly. An example of an incorrect entry is a tuple marked SS#7 selector or LOCAL when the system must send the message out of the network.

### Format

The log report format for NSS104 is as follows:

NSS104 mmmdd hh:mm:ss ssdd INFO NSS XLA PROBLEM APPLICATION = application CALLED ADDRESS = nnnnnnnnn REASON = reason

## Example

An example of log report NSS104 follows:

NSS104 JAN01 15:43:45 1234 INFO NSS XLA PROBLEM APPLICATION = NSS\_TCN CALLED ADDRESS = 6137224500 REASON = INVALID\_MSGRTE

## **Field descriptions**

The following table describes each field in the log report:

| Field                   | Value            | Description   |
|-------------------------|------------------|---|
| INFO NSS XLA<br>PROBLEM | Constant         | Indicates Table MSGRTE not entered correctly                                    |
| APPLICATION             | Character string | Identifies the application that contained the problem                           |
| CALLED ADDRESS          | Integers         | Identifies the wrong entry in Table MSGRTE                                      |
| REASON                  | Text             | Indicates if the tuple is not present in the table or contains an invalid route |

## Action

Check data entry for Table MSGRTE.

## **Associated OM registers**

There are no associated OM registers.

### NSS107

### Explanation

The Network Services Software (NSS) subsystem generates log report NSS107 at the NSS service switching point (SSP). The NSS generates NSS107 when the SSP receives a return error response from the NSS database control point (DBCP). The return error response indicates Table REPLDATA does not contain the dialed digits.

The NSS replace-dialed digits (RDD) feature allows the system to route a call to a number other than the number dialed. This feature replaces the originating call dialed digits and network class of service (NCOS) with new digits and a new NCOS. The feature uses the RDD database stored in Table REPLDATA to replace the dialed digits.

### Format

The log report format for NSS107 is as follows:

| NSS107 mmmdd hh | :mm:ss ssdd INFO NSS REPLDIGS INFO |
|-----------------|------------------------------------|
| CALLED ADD      | RESS = nnnnnnnnn                   |
| DIGITS          | = nnnnnnnnn                        |
| REASON          | = DIALED_DIGITS_NOT_FOUND          |

### Example

An example of log report NSS107 follows:

| NSS107 JAN01 15 | 50:49 8123  | INFO NSS   | REPLDIGS | INFO |
|-----------------|-------------|------------|----------|------|
| CALLED ADDRE    | ss = 613722 | 5000       |          |      |
| DIGITS          | = 800888    | 1234       |          |      |
| REASON          | = DIALED    | _DIGITS_NO | DT_FOUND |      |

## **Field descriptions**

The following table describes each field in the log report:

| Field                              | Value    | Description   |
|------------------------------------|----------|---|
| INFO NSS REPLDIGS INFO             | Constant | Indicates this log contains NSS replacing digits information  |
| CALLED ADDRESS                     | Integers | Specifies the DBCP node where the RDD database resides. Table REPLDATA contains this database. This TCAP destination address appears in table MSGRTE. |
| DIGITS                             | Integers | Displays the dialed digits used to index in table REPLDATA  |
| REASON=DIALED_DIGITS<br>_NOT_FOUND | Constant | Indicates table REPLDATA does not contain the dialed digits.  |

## Action

Confirm that the dialed digits are not correct for a replace-dialed digits call.

## **Associated OM registers**

There are no associated OM registers.

#### **NWM100**

### **Explanation**

The Network Management (NWM) subsystem generates log report NWM100. The subsystem generates NWM100 when the directional reservation equipment (DRE) is set to an on or off state for a specified trunk group. The common language location identifier (CLLI) specifies the trunk group. The DRE control applies to a two-way trunk group to give priority to traffic that completes. The DRE reserves a number of idle trunks in the group for trunks that complete. The DRE affects direct and alternate routed traffic.

### Format

The log report format for NWM100 is as follows:

NWM100 mmmdd hh:mm:ss ssdd INFO dretxt clli LEVEL=n cntltxt OFRD=nnn OVFL=nnn DEFLD=nnn

## Example

An example of log report NWM100 follows:

NWM100 APR01 12:00:00 2112 INFO DRE\_ON PRS02F LEVEL=2 MANUAL OFRD=100 OVFL=7 DEFLD=2

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field   | Value         | Description   |
|---------|---------------|---|
| INFO    | Constant      | Indicates activity through the NWM subsystem  |
| dretxt  | DRE_OFF       | Indicates DRE set to off  |
|         | DRE_ON        | Indicates DRE set to on   |
| clli    | Symbolic text | Identifies trunk group affected. Refer to Table I. List CLLI from CI MAP level for office CLLI. |
| LEVEL   | 0-7           | Provides number of idle trunks reserved for each subgroup of two-way trunks                     |
| cntltxt | AUTO          | Indicates dynamic overload control (DOC) signal automatically applies control                   |
|         | MANUAL        | Indicates control applied manually at the MAP   |

## NWM100 (end)

#### (Sheet 2 of 2)

| Field | Value | Description   |
|-------|-------|---|
| OFRD  | 0-999 | Provides peg count of number of calls offered to trunk group since last OM dump to holding register |
| OVFL  | 0-999 | Provides peg count of number of calls that overflow from trunk group                                |
| DEFLD | 0-999 | Provides peg count of number of calls that NWM deflected from trunk group                           |

## Action

There is no action required. If the control activated automatically and is not required, use the REMOVE command to deactivate the control.

## **Associated OM registers**

There are no associated OM registers.

#### NWM101

### **Explanation**

The Network Management (NWM) subsystem generates the NWM101 report. The subsystem generates NWM101 when the productional reservation equipment (PRE) feature is set to an on or off state. The PRE feature applies to a specified trunk group. The common language location identifier (CLLI) specifies the trunk group. The PRE affects only alternate route traffic on two-way trunk groups.

### Format

The log report format for NWM101 is as follows:

NWM101 mmmdd hh:mm:ss ssdd INFO pretxt clli LEVEL=n cntltxt OFRD=nnn OVFL=nnn DEFLD=nnn

## Example

An example of log report NWM101 follows:

NWM101 APR01 12:00:00 2112 INFO PRE\_ON PRS02F LEVEL=2 MANUAL OFRD=122 OVFL=16 DEFLD=2

### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field   | Value         | Description   |
|---------|---------------|---|
| INFO    | Constant      | Indicates activity through the NWM subsystem.   |
| pretxt  | PRE_OFF       | Indicates PRE set to off.   |
|         | PRE_ON        | Indicates PRE set to on.  |
| clli    | Symbolic text | Identifies trunk group affected. Refer to<br>customer data Table CLLI for correct<br>entries. List CLLI from CI MAP level for<br>office CLLI. |
| LEVEL   | 0-7           | Provides number of idle trunks reserved for each group of two-way trunks.   |
| cntltxt | AUTO          | Indicates dynamic overload control (DOC) signal automatically applied control.  |

## NWM101 (end)

| (Sheet  | 12 | of  | 2)         |
|---------|----|-----|------------|
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| Value  | Description   |
|--------|---|
| MANUAL | Indicates manual application of control through MAP.  |
| 0-999  | Provides peg count of number of calls routed to trunk group since the last OM dump to holding register. |
| 0-999  | Provides peg count of number of calls that overflow from trunk group.                                   |
| 0-999  | Provides peg count of number of calls that NWM deflected from trunk group.                              |
|        | MANUAL<br>0-999<br>0-999  |

## Action

There is no action required. If automatic activation of the control is not required, use the REMOVE command to deactivate this process. For information on the REMOVE command, refer to the Network Management System Reference Manual.

### **NWM102**

#### Explanation

The Network Management (NWM) subsystem generates log report NWM102 after the application or removal of a cancel-to (CANT) NWM control on a trunk group. The CANT control limits traffic on one-way out-going and two-way trunk groups. This control will cancel the specified percentage of direct and alternate route traffic (including HTR and ETR calls) to the trunk group, and it routes the call to the specified treatment.

A code is tagged Hard To Reach (HTR) when the probability of call completion is extermely low. If the probability of the call completion is nearly 100%, a code is tagged Easy To Reach (ETR). The threshold percentage for HTR traffic applies to a call whose destination code is tagged as HTR. The threshold percentage for ETR traffic applies to a call that terminates on a ETR code. Affected percentages of traffic, range from 0-100% in one percent increments.

Software optionality control (SOC) OAM00012 controls the availability of NWM102 HTR and ETR information. ETR\_DR, ETR\_AR, HTR\_DR, and HTR\_AR information is only provided when the SOC state is set to ON.

### Format

The log report format for NWM102 is as follows:

NWM102 mmmdd hh:mm:ss ssdd INFO canttxt groupelli ETR\_DR=nnn% ETR\_AR=nnn% HTR\_DR=nnn% HTR\_AR=nnn% annm ctrlsc OFRD=nnn OVFL=nnn DEFLD=nnn

## Example

An example of log report NWM102 follows:

NWM102 OCT10 08:05:35 7611 INFO CANT\_ON PRS02F ETR\_DR=0% ETR\_AR=50% HTR\_DR=31% HTR\_AR=41% EA2 MANUAL OFRD=20 OVFL=0 DEFLD=0 NWM102 (continued)

## **Field descriptions**

The following table describes each field in the log report:

| Field   | Value         | Description   |
|---------|---------------|---|
| INFO    | Constant      | Indicates activity through the NWM subsystem.   |
| canttxt | CANT_OFF      | Indicates CANT control deactivated.   |
|         | CANT_ON       | Indicates CANT control activated.   |
| clli    | Symbolic text | Identifies trunk group affected. Refer to<br>customer data Table CLLI for correct<br>entries. List CLLI from CI MAP level for<br>office clli. |
| ETR_DR  | 0-100         | Provides percentage of Easy To Reach direct-routed traffic that control cancels.  |
| ETR_AR  | 0-100         | Provides percentage of Easy To Reach alternate-routed traffic that control cancels.   |
| HTR_DR  | 0-100         | Provides percentage of Hard To Reach direct-routed traffic that control cancels   |
| HTR_AR  | 0-100         | Provides percentage of Hard To Reach alternate-routed traffic that control cancels  |
| annm    | EA1           | Indicates emergency announcement one receives traffic that control cancels.   |
|         | EA2           | Indicates emergency announcement two receives traffic that control cancels.   |
|         | NCA           | Indicates direction of traffic that control cancels to No circuit announcement.   |
| cntltxt | AUTO          | Indicates the dynamic overload control<br>(DOC) signal automatically applied or<br>removed the CANT control.                                  |
|         | MANUAL        | Indicates manual application or removal of the CANT control at the MAP.   |
|         | EADAS         | Indicates the EADAS/NM system applied or removed the CANT control.  |

## NWM102 (end)

| Field | Value   | Description  |
|-------|---------|--|
| OFRD  | 0-65535 | Provides peg count of calls directed to trunk group since the last TRK dump to holding register.   |
| OVFL  | 0-65535 | Provides peg count of call overflow from trunk group since the last TRK dump to holding register.  |
| DEFLD | 0-65535 | Provides peg count of calls that the CANT control deflected from the trunk group. The calls were deflected since the last TRK dump to holding registers. |

## Action

There is no action required.

## **Associated OM registers**

None.

## **Additional Information**

The static log format has been discontinued and replaced by the dynamic format for this log.

# **Release history**

## NA017

The static log format has been done away with and dynamic log format is used instead, (59028697).

### **NWM103**

#### Explanation

The Network Management (NWM) subsystem generates log report NWM103 after the application or removal of a cancel-from (CANF) NWM control on a trunk group. The CANF control limits traffic on one-way out-going and two-way trunk groups. This control will cancel the specified percentage of direct and alternate route traffic (including HTR and ETR calls) from the trunk group, and it routes the call to the specified treatment.

A code is tagged Hard To Reach (HTR) when the probability of call completion is extermely low. If the probability of the call completion is nearly 100%, a code is tagged Easy To Reach (ETR). The threshold percentage for HTR traffic applies to a call whose destination code is tagged as HTR. The threshold percentage for ETR traffic applies to a call that terminates on a ETR code. Affected percentages of traffic, range from 0-100% in one percent increments.

Software optionality control (SOC) OAM00012 controls the availability of NWM103 HTR and ETR information. ETR\_DR, ETR\_AR, HTR\_DR, and HTR\_AR information is only provided when the SOC state is set to ON.

### Format

The log report format for NWM103 is as follows:

NWM103 mmmdd hh:mm:ss ssdd INFO canftxt groupclli ETR\_DR=nnn% ETR\_AR=nnn% HTR\_DR=nnn% HTR\_AR=nnn% annm ctrlsc OFRD=nnn OVFL=nnn DEFLD=nnn

## Example

An example of log report NWM103 follows:

NWM103 OCT10 08:05:35 7611 INFO CANF\_ON PRS02F ETR\_DR=0% ETR\_AR=50% HTR\_DR=31% HTR\_AR=41% EA2 MANUAL OFRD=20 OVFL=0 DEFLD=0

# **Field descriptions**

The following table describes each field in the log report:

| Field   | Value         | Description  |
|---------|---------------|--|
| INFO    | Constant      | Indicates activity through the NWM subsystem.  |
| canftxt | CANF_OFF      | Indicates CANF control deactivated.  |
|         | CANF_ON       | Indicates CANF control activated.  |
| clli    | Symbolic text | Identifies trunk group affected. Refer to<br>customer data Table CLLI for valid entries.<br>List CLLI from CI MAP level for office CLLI. |
| ETR_DR  | 0 through 100 | Provides percentage of Easy To Reach direct-routed traffic that control cancels.   |
| ETR_AR  | 0 through 100 | Provides percentage of Easy To Reach alternate-routed traffic that control cancels.  |
| HTR_DR  | 0-100         | Provides percentage of direct-routed traffic cancelled for Hard To Reach calls.  |
| HTR_AR  | 0-100         | Provides percentage of alternate-routed traffic cancelled for Hard To Reach calls.   |
| annm    | EA1           | Indicates control cancels traffic that routes to emergency announcement 1.   |
|         | EA2           | Indicates control cancels traffic that routes to emergency announcement 2.   |
|         | NCA           | Indicates control cancels traffic that does not route to a circuit announcement.   |
| cntltxt | AUTO          | Indicates dynamic overload control (DOC) signal automatically applied or removed the CANF control.                                       |
|         | MANUAL        | Indicates manual application or removal of the CANF control at the MAP.  |
|         | EADAS         | Indicates the EADAS/NM system applied or<br>removed the CANF control.  |

## NWM103 (end)

| Field                  | Value   | Description   |
|------------------------|---------|---|
| OFRD                   | 0-65535 | Provides peg count of number of calls directed to trunk group since the last TRK dump to holding register.  |
| OVFL                   | 0-65535 | Provides peg count of overflow of calls from trunk group since the last TRK dump to holding register.   |
| DEFLD                  | 0-65535 | Provides peg count of number of calls<br>deflected from the trunk group by CANF<br>control. Call deflection occurred since the<br>last TRK dump to holding registers. |
| <i>Note:</i> U.S. only |         |   |

## Action

There is no action required.

## **Associated OM registers**

None.

## **Additional Information**

The static log format has been discontinued and replaced by the dynamic format for this log.

# **Release history**

## NA017

The static log format has been done away with and dynamic log format is used instead, (59028697).

### **NWM104**

### **Explanation**

The Network Management (NWM) subsystem generates log report NWM104 after the application or removal of a SKIP NWM control on a trunk group. The SKIP control affects traffic on one-way out-going and two-way trunk groups. The system can deny access to any percentage of direct or alternate route traffic (including Hard To Reach and Easy To Reach calls) to the trunk group. The system redirects that traffic percentage to the next in-chain route that has been datafilled.

A code is tagged Hard To Reach (HTR) when the probability of call completion is extermely low. If the probability of the call completion is nearly 100%, a code is tagged Easy To Reach (ETR). The threshold percentage for HTR traffic applies to a call whose destination code is tagged as HTR. The threshold percentage for ETR traffic applies to a call that terminates on a ETR code. Affected percentages of traffic, range from 0-100% in one percent increments.

Software optionality control (SOC) OAM00012 controls the availability of NWM104 HTR and ETR information. ETR\_DR, ETR\_AR, HTR\_DR, and HTR\_AR information is only provided when the SOC state is set to ON.

### Format

The log report format for NWM104 is as follows:

NWM104 mmmdd hh:mm:ss ssdd INFO skiptxt groupclli ETR\_DR=nnn% ETR\_AR=nnn% HTR\_DR=nnn% HTR\_AR=nnn% annm ctrlsc OFRD=nnn OVFL=nnn DEFLD=nnn

## Example

An example of log report NWM104 follows:

NWM104 OCT10 08:05:35 7611 INFO SKIP\_ON ISUPT2 ETR\_DR=23% ETR\_AR=34% HTR\_DR=45% HTR\_AR=22% EA2 MANUAL OFRD=0 OVFL=0 DEFLD=0 NWM104 (continued)

# **Field descriptions**

The following table describes each field in the log report:

| Field                  | Value         | Description  |
|------------------------|---------------|--|
| INFO                   | Constant      | Indicates activity through the NWM subsystem.  |
| skiptxt                | SKIP OFF      | Indicates SKIP control deactivated.  |
|                        | SKIP ON       | Indicates SKIP control activated.  |
| clli                   | Symbolic text | Identifies trunk group affected. Refer to customer data Table CLLI for correct entries. List CLLI from CI MAP level for office CLLI. |
| ETR_DR                 | 0-100         | Provides percentage of Easy To Reach direct-routed traffic that control redirects.   |
| ETR_AR                 | 0-100         | Provides percentage of Easy To Reach alternate-routed traffic that control redirects.  |
| HTR_DR                 | 0-100         | Provides percentage of Hard To Reach direct-routed traffic that control redirects.   |
| HTR_AR                 | 0-100         | Provides percentage of Hard To Reach alternate-routed traffic that control redirects.  |
| annm                   | EA1           | Indicates emergency announcement one receives traffic that the control cancels.  |
|                        | EA2           | Indicates emergency announcement two receives traffic the control cancels.   |
|                        | NCA           | Indicates system redirects traffic that the control cancels to no circuit announcement.  |
| cntltxt                | AUTO          | Indicates dynamic overload control (DOC) signal automatically applies or removes the SKIP control.                                   |
|                        | MANUAL        | Indicates manual application or removal of the SKIP control through MAP.   |
| <i>Note:</i> U.S. only |               |  |

## NWM104 (end)

| Field                  | Value   | Description  |
|------------------------|---------|--|
|                        | EADAS   | Indicates the EADAS/NM system applies or removes the SKIP control.   |
| OFRD                   | 0-65535 | Provides peg count of number of calls directed to trunk group since the last TRK dump to holding register. |
| OVFL                   | 0-65535 | Provides peg count of number of overflow calls from trunk group the last TRK dump to holding register.     |
| DEFLD                  | 0-65535 | Provides peg count of calls SKIP control deflected from trunk group last TRK dump to holding registers.    |
|                        |         |  |
| <i>Note:</i> U.S. only |         |  |

## Action

There is no action required.

## **Associated OM registers**

None.

## **Additional Information**

The static log format has been discontinued and replaced by the dynamic log format for this log.

# **Release history**

### NA017

The static log format has been done away with and dynamic log format is used instead, (59028697).

### **Explanation**

The Network Management (NWM) subsystem log report NWM105. The subsystem generates NWM105 on activation or deactivation of the incoming trunk busy (ITB) feature. This feature applies to the incoming trunk group that the CLLI specifies. The ITB feature removes from service a specified percentage (nnn%) of incoming trunks that have remote make busy (RMB) capability.

## Format

The log report format for NWM105 is as follows:

NWM105 mmmdd hh:mm:ss ssdd INFO itbtxt clli nnn% cntltxt

## Example

An example of log report NWM105 follows:

NWM105 APR01 12:00: 00 2112 INFO ITB\_ON PRS02F 4% MANUAL

## **Field descriptions**

The following table describes each field in the log report:

| Field   | Value         | Description   |
|---------|---------------|---|
| INFO    | Constant      | Indicates activity through the NWM subsystem                                  |
| itbtxt  | ITB_OFF       | Indicates ITB feature deactivated   |
|         | ITB_ON        | Indicates ITB feature activated   |
| clli    | Symbolic text | Identifies trunk group affected. List CLLI from CI MAP level for office CLLI. |
| nnn%    | 0-100         | Indicates percentage of incoming trunks in group removed from service         |
| cntltxt | AUTO          | Indicates dynamic overload control (DOC) signal automatally applied control   |
|         | MANUAL        | Indicates control applied manually at the MAP                                 |

# NWM105 (end)

# Action

There is no action required.

### **Explanation**

The Network Management (NWM) system generates log report NWM106. The common language location identifier (CLLI) specifies a trunk group. The subsystem generates NWM106 when the system activates or deactivates the selective trunk reservation (STR) feature on the specified trunk group. The CLLI specifies the trunk group. The system blocks a percentage of traffic marked hard to reach (HTR) when the number of idle trunks falls to specified levels.

### Format

The log report format for NWM106 is as follows:

<officeid> NWM106 <mmmdd> <hh:mm:ss> <ssdd> INFO <strtxt> <clli> LEV1=<n> LEV2=<n> PCT=<nnn> <cnltxt> OFRD=<nnn> OVFL=<nnn> DEFLD=<nnn>

## Example

An example of log report NWM106 follows:

ECOME010BT NWM106 APR01 12:00:00 2112 INFO STR\_ON PRS02F LEV1=3 LEV2=2 PCT=24 MANUAL OFRD=68 OVFL=8 DEFLD=1

## **Field descriptions**

The following table describes each field in the log report:

| Field  | Value         | Description   |
|--------|---------------|---|
| INFO   | Constant      | Indicates activity through the NWM subsystem  |
| strtxt | STR_OFF       | Indicates STR feature deactivated   |
|        | STR_ON        | Indicates STR feature activated   |
| CLLI   | Symbolic text | Identifies trunk group affected. Lists CLLI from<br>the CI MAP (maintenance and administration<br>position) level for the office CLLI |

## NWM106 (end)

| Field   | Value  | Description   |
|---------|--------|---|
| LEV1    | 0-63   | Provides number of idle trunks for the Level 1<br>threshold. Above this number, the system<br>allows hard-to-reach traffic to pass through.<br>When the traffic reaches the threshold, the<br>system blocks a percentage of hard-to-reach<br>traffic. |
| LEV2    | 0-62   | Provides number of idle trunks at which the system blocks 100% percent of alternate route traffic, 75% of HTR direct route traffic, and percentage of normal direct route traffic.  |
| PCT     | 0-100  | Provides percentage of HTR traffic blocked<br>when number of idle trunks falls between levels<br>one and two (LEV1 and LEV2). Provides<br>percentage of normal direct route traffic<br>blocked when number of idle trunks reaches<br>level two.       |
| cntltxt | AUTO   | Indicates dynamic overload control (DOC) signal automatically applies control.  |
|         | MANUAL | Indicates control applied manually at the MAP   |
| OFRD    | 0-999  | Provides peg count of number of calls directed to trunk group since last OM dump to holding register.   |
| OVFL    | 0-999  | Provides peg count of number of calls involved in call overflow from trunk group.   |
| DEFLD   | 0-999  | Provides peg count of number of calls that NWM deflected from trunk group.  |

#### (Sheet 2 of 2)

## Action

There is no action required. If the system activates the control automatically and is not required, use the REMOVE command to deactivate the control.

## **Associated OM registers**

There are no associated OM registers.

### **Explanation**

The Network Management (NWM) subsystem log report NWM107 after the application or removal of a Flexible Reroute (FRR) control on a two-way or outgoing trunk group at the Group Control (GRPCTRL) level of the MAP. This control can cancel any percentage of direct or alternate route traffic (including Hard To Reach and Easy To Reach calls) on the trunk group.

A code is tagged Hard To Reach (HTR) if the probability of call completion is extremely low. If the probability of call completion is near 100%, a code is tagged Easy To Reach (ETR). The threshold percentage for HTR traffic applies to a call whose destination code is tagged as HTR. The threshold percentage for ETR traffic applies to a call that terminates on a ETR code. Affected percentages of traffic, range from 0-100% in one percent increments. The Carrier Information Code (CIC) information is provided when the call is an Equal Access call. The examples are shown in Format 1 and Format 2.

Software optionality control (SOC) OAM00012 controls the availability of NWM107 HTR and ETR information. ETR\_DR, ETR\_AR, HTR\_DR, and HTR\_AR information is provided only when the SOC state is set to ON. If the SOC state is IDLE, only basic DR, AR, and HTR information is displayed.

## Format

The log report formats for NWM107 are as follows:

Format 1

NWM107 mmmdd hh: ssdd INFO FRR statxt cllitxt ETR\_DR=nnn% ETR\_AR=nnn% HTR\_DR=nnn% HTR\_AR=nnn% ctrltxt opttxt opttxt VIA: viarte via1 via2 via3 via4 via5 via6 via7 VIA: viaofc ofcrte ofrt ofr2 ofr3 ofr4 cntltype OFRD=count ATTEMPTS=count FAILURES=count

Format 2

#### NWM107 (continued)

NWM107 mmmdd hh: ssdd INFO FRR statxt cllitxt ETR\_DR=nnn% ETR\_AR=nnn% HTR\_DR=nnn% HTR\_AR=nnn% ctrltxt opttxt opttxt VIA: viarte via1 via2 via3 via4 via5 via6 via7 VIA: viaofc ofcrte ofrt ofr2 ofr3 ofr4 CIC PREFIX DESTN\_CODE cictxt prefixtxt codetxt cntltype OFRD=count ATTEMPTS=count FAILURES=count

## Example

An example of log report NWM107 follows:

Format 1

NWM107 APR25 21:58:09 8200 INFO FRR\_OFF IBNT2MF ETR\_DR=2% ETR\_AR=3% HTR\_DR=4% HTR\_AR=5% IRR HTR EA CICR VIA=ISUPT2 ISUPITOG VIAOFC= MANUAL OFRD=0 ATTEMPTS=0 FAILURES=0

#### Format 2

NWM107 MAY25 17:33:23 3100 INFO FRR\_ON ISUPT2 ETR\_DR=10% ETR\_AR=10% HTR\_DR=10% HTR\_AR=11% IRR VIA=IBNT2MF VIAOFC= CIC PREFIX DESTN CODE NC 4342342342 111 INC 453 454 NC NC 452 INC 56 232 INC 4598 233 INC 433 23 INC INC 33 111 NC 888 INC 99 INC 44 INC 34 MANUAL OFRD=0 ATTEMPTS=0 FAILURES=0

## NWM107 (continued)

# **Field descriptions**

The following table describes each field in the log report:

| Field       | Value   | Description   |
|-------------|---|---|
| INFO        | Constant  | Indicates activity through the NWM subsystem.   |
| FRR statxt  | ON  | Indicates system applied Flexible Reroute (FRR) to the specified trunk group.         |
|             | OFF   | Indicates system did not apply FRR.   |
| cllitxt     | Short or Long CLLI<br>name (from Table<br>CLLIMTCE) | Specifies the trunk group on which the system activates or deactivates a FRR control. |
| DR, ETR_DR  | 0-100   | Specifies the percentage of direct-routed traffic rerouted for Easy To Reach calls.   |
| AR, ETR_AR  | 0-100   | Specifies the percentage of alternate-route traffic rerouted for Easy To Reach calls. |
| HTR, HTR_DR | 0-100   | Specifies the percentage of direct-routed traffic rerouted for Hard To Reach calls.   |
| HTR, HTR_AR | 0-100   | Specifies the percentage of alternate-route traffic rerouted for Easy To Reach calls. |
| ctrltxt     | IRR   | Specifies that the Immediate Reroute (IRR option applies to the FRR control.          |
|             | RRR   | Specifies that the Regular Reroute (RRR) option applies to the FRR control.           |
|             | TRR   | What's TRR?   |
| opttxt      | HTR   | Specifies that the FRR control only affects Hard-to-Reach (HTR) calls.                |
|             | EA  | Specifies that the FRR control only affects Equal Access (EA) calls.                  |
|             | NEA   | Specifies the the FRR control only affects Non-Equal Access (NEA) calls.              |
|             | CICR  | Specifies calls that have FRR controls.   |

I

# NWM107 (continued)

| Field          | Value             | Description   |
|----------------|-------------------|---|
| cntltype       | AUTO              | Indicates the system applied or removed the FRR control automatically. The application and removal of the FRR control is based on datafill in Table PREPLANS.       |
|                | MANUAL            | Indicates the user applied or removed the FRR control at the GRPCTRL level of the MAP.  |
|                | EADAS             | Indicates the EADAS/NM system applied or removed the FRR control.   |
| VIA            | via1 through via7 | Specifies the VIA routes (trunk groups) to which the system routes calls with the FRR control.  |
| CIC            | Integer           | Specifies Carrier Identification Code.  |
| PREFIX         |                   | Specifies the type of call:   |
|                | NC                | NC - National call type   |
|                | INC               | INC - International call type   |
| DESTN_CODE     | Integer           | Destination Code on which call must terminate.  |
| OFRD=count     | 0 - 63535         | Indicates the number of calls offered to a trunk group with an FRR control. This field reflects the register NATTMPT in the TRK OM group.                           |
| ATTEMPTS=count | 0 - 63535         | Indicates the number of calls offered to the VIA route list. This field reflects the register FRRTGATT in the NWMFRRTG OM group.                                    |
| FAILURES=count | 0-63535           | Indicates the number of rerouted calls that failed to find an idle route in the VIA route list. This field reflects the register FRRTGFL in the NWM FFRTS OM group. |

# Action

No action is required.

# Associated OM registers

None.

## NWM107 (end)

## **Additional Information**

The static log format has been discontinued and replaced by the dynamic log format for this log.

## **Release history**

#### NA017

The static log format has been done away with and dynamic log format is used instead (59028697).

## Explanation

The NWM subsystem log report NWM108. The subsystem generates NWM108 after the application or removal of the NWM International trunk override control on a trunk group. This log is for DMS300 when the subsystem ITOSUB is present.

## Format

The log report format for NWM108 is as follows:

BTI\_MADL NWM108 MMDD HH:MM:SS NUMB INFO ITO\_ON/OFF CLLI MANUAL IC\_TOTAL= 0 OG\_SUCC= 0

# Example

An example of log report NWM108 follows:

BTI\_MADL NWM108 DEC06 11:45:12 2600 INFO ITO\_ON IC101DMS300 MANUAL IC\_TOTAL= 0 OG\_SUCC= 0

## Field descriptions

The following table describes each field in the log report:

| Field    | Value         | Description  |
|----------|---------------|--|
| INFO     | Constant      | Indicates activity in the NWM subsystem.   |
| ITOtxt   | ITO_ON        | Indicates if application of ITO occurred.  |
|          | ITO_OFF       |  |
| CLLI     | Symbolic text | Identifies affected trunk group. Refer to customer data Table CLLI for correct entries. List CLLI from CI MAP level for office CLLI. |
| IC_TOTAL | nnn           | Indicates number of incoming calls received on the selected trunk.   |
| OG_SUCC  | nnn           | Indicates the number of calls that originate<br>on the given trunk and indicates if the trunk<br>correctly transited.                |

## NWM108 (end)

### Action

Check if the ITO (International trunk override) turns on or off on a specified trunk group. The state of the ITO affects NWM controls. The effect of the ITO state on the NWM controls depends on where application or removal of the ITO occurs.

## **Associated OM registers**

Register TRK\_INCATOT (incoming call attempts)

Register TRK\_INOUT (tandem call attempts)

### **Explanation**

The Network Management (NWM) subsystem log report NWM109. The subsystem generates NWM109 after activation or deactivation of the Bi-directional Trunk Group Reservation Controls. The activation or deactivation of controls occurs on the trunk group that cllinm specifies.

## Format

The log report format for NWM109 is as follows:

NWM109 mmmdd hh:mm:ss ssdd INFO BRC\_txt cllinm cntltxt Pct\_Inc=nn% Num\_Inc=nn Pct\_Og=nn% Num\_Og=nnn Num\_Pr=nnnnn Tot\_Trks=nnn

## Example

An example of log report NWM109 follows:

```
NWM109 NOV22 17:33:43 2112 INFO BRC_ON JPNISUP1 MANUAL
    PCT_Inc=40% Num_Inc=80 Pct_Og=30% Num_Og=60 Num_Pr=10
    Tot_Trks=210
```

## **Field descriptions**

The following table describes each field in the log report:

| Field    | Value                       | Description  |
|----------|-----------------------------|--|
| mmdd     | JAN01 to DEC31              | Indicates the month and day the subsystem generated the report.                    |
| hh:mm:ss | 00 to 23:                   | Indicates the hour, minute and second at which the subsystem generated the report. |
|          | 00 to 59                    |  |
|          | 00 to 59                    |  |
| ssdd     | 0000 to 9999                | Indicates the sequence number  |
| BRC_txt  | BRC_OFF                     | Indicates BRC deactivated.   |
|          | BRC_ON                      | Indicates BRC activated.   |
| cllinm   | Customer Data<br>Table CLLI | Identifies the trunk group affected.   |

## NWM109 (end)

### (Sheet 2 of 2)

| Field          | Value      | Description  |
|----------------|------------|--|
| Tot_Trks=nnnnn | 0 to 10000 | Indicates the total number of trunks in the trunk group that cllinm identified.                              |
| Pct_Inc=nnn    | 0 to 100   | Provides the percentage of trunks reserved for incoming calls.   |
| Num_Inc=nnnnn  | 0 to 10000 | Provides the number of trunks reserved for incoming calls.   |
| Num_Og=nnnnn   | 0 to 10000 | Provides the number of trunks reserved for outgoing calls.   |
| Num_Pr=nnnnn   | 0 to 10000 | Provides the number of trunks reserved for priority calls.   |
| Pct_Og=nnn     | 0 to 100   | Provides the percentage of trunks reserved for outgoing calls.   |
| cntltxt        | MANUAL     | Indicates manual application of the control applied through MAP. The field can only take this value for BRC. |

## Action

There is no action required.

## Explanation

The Network Management (NWM) subsystem generates NWM110 when the system applies or removes Time Assignment Speed Interpolation (TASI) from a trunk group.

### Format

The log report format for NWM110 is as follows:

NWM110 mmmdd hh:mm:ss ssdd INFO tasitxt clli cntltxt OFRD=nnn OVFL=nnn DEFLD=nnn

## Example

NWM110 APR01 12:00:00 2112 INFO TASI\_ON ITMF1 MANUAL OFRD=68 OVFL=8 DEFLD=1

## **Field descriptions**

The following table describes each field in the log report:

| Field    | Value   | Description   |
|----------|---|---|
| tasitxt  | TASI_OFF  | Indicates the system added TASI to trunk group.   |
|          | TASI_ON   | Indicates the system removed TASI from the trunk group.   |
| clli     | Refer to Customer<br>Data Table CLLI<br>for values. | Identifies the trunk group affected. Refer to Table I. List CLLI from CI MAP level for office clli. |
| cntltxt  | AUTO  | Indicates Dynamic Overload Control (DOC) signal automatically applied control.                      |
|          | MANUAL  |   |
| OFRD=nnn | 0 to 999  | Provides peg count of number of calls offered to trunk group since OM dump to holding register.     |

## NWM110 (end)

### (Sheet 2 of 2)

| Field     | Value    | Description   |
|-----------|----------|---|
| OVFL=nnn  | 0 to 999 | Provides peg count of overflow of calls from trunk group.             |
| DEFLD=nnn | 0 to 999 | Provides peg count of number of calls NWM deflected from trunk group. |

## Action

There is no action required.

## **Explanation**

The Network Management (NWM) subsystem generates NWM111. The subsystem generates NWM111 when the NWM Bearer Service Skip group control is applied or removed from a trunk group.

### Format

The log report format for NWM111 is as follows:

NWM111 INFO BSSKIP ON or OFF and trunk group name Bearer Service not available and the Source of control Some Trunk OM counts for the trunk group

## Example

An example of log report NWM111 follows:

NWM111 JUN26 614:23:41 5882 INFO BSSKIP\_ON DCMEISUP2 UNRESDIG DCME OFRD = 4 OVFL = 2 DEFLD = 1

## **Field descriptions**

The following table describes each field in the log report:

| Field                        | Value      | Description  |
|------------------------------|------------|--|
| bsskiptxt                    | BSSKIP ON  | Indicates if the control has been applied or removed.  |
|                              | BSSKIP OFF |  |
| trunk group name             | Variable   | Indicates the Common Language Location Identifier (CLLI) for the trunk group.  |
| Bearer Service not available | Speech     | Indicates the reason the bearer service is<br>not available. NOTE: No SPEECH means<br>no UNRESDIG and no AU3K1HZ. No<br>AU3K1HZ means no UNRESDIG. |
|                              | UNRESDIG   |  |
|                              | AU3K1HZ    |  |
|                              | AU7KHZ     |  |

## NWM111 (end)

(Sheet 2 of 2)

| Field  | Value | Description  |
|--------|-------|--|
| Source | DCME  | Indicates that the source is Digital Circuit Multiplication Equipment (DCME).  |
| OFRD   | nnn   | Indicates the number of attempts on this trunk group (allowed to search for an idle trunk).  |
| OVFL   | nnn   | Indicates the number of times trunk has been accessed but an idle trunk is not available.  |
| DEFLD  | nnn   | Indicates the number of calls deflected from<br>the trunk group. The NWM Directional<br>Reservation Equipment (DRE) and<br>Protection Reservation Equipment (PRE)<br>and DCME deflect the calls. |

# Action

There is no action required.

## **Associated OM registers**

Some TRK OM counts related with the trunk group appear in this log. This log does not associate with an OM.

## Explanation

The Network Management (NWM) subsystem generates log report NWM200 when code blocking (CBK) controls are activated or deactivated.

### Format

The log report format for NWM200 is as follows:

NWM200 mmmdd hh:mm:ss ssdd INFO cbktxt codetxt dn nnn% annm SNPA=npx PEG=nnn ALLOW=nnn

## Example

An example of log report NWM200 follows:

| NWM200 APR01 | 12:00:00 | 1900 INFO CBX_ON |   |         |
|--------------|----------|------------------|---|---------|
| AC 613621    | 100% NCA | SNPA=613 PEG=    | 0 | ALLOW=0 |

## **Field descriptions**

The following table describes each field in the log report:

| Field   | Value    | Description  |
|---------|----------|--|
| INFO    | Constant | Indicates activity through the NWM subsystem.  |
| cbktxt  | CBK_OFF  | Indicates CBK controls deactivated.  |
|         | CBK_ON   | Indicates CBK controls activated.  |
| codetxt | AC       | Indicates code control enabled for area code directory number.   |
|         | CC       | Indicates code control enabled for country code directory number.  |
|         | NAC      | Indicates code control enabled for non-area code directory number.   |
|         | PFX      | Indicates code control enabled for prefix<br>code directory number. These prefix digits<br>are digits used to access a network other<br>than the primary access carrier. |

## NWM200 (end)

(Sheet 2 of 2)

| Field | Value   | Description   |
|-------|---------|---|
| dn    | Integer | Identifies digit code for which a request for code block occurs. Up to 18 digits can be specified.  |
| nnn%  | 0-100   | Indicates the percentage of traffic to block.   |
| annm  | EA1     | Indicates blocked traffic directed to<br>emergency announcement 1.  |
|       | EA2     | Indicates blocked traffic directed to emergency announcement 2.   |
|       | NCA     | Indicates blocked traffic directed to no circuit announcement.  |
| SNPA  | 0-999   | The serving number plan area/serving translation scheme (SNPA/STS) code of digit code is blocked. If the digit code pegged controls all NPAs that the office controls, the system prints ALL. |
| PEG   | 0-63535 | Provides peg counts of blocked calls.   |
| ALLOW | 0-63535 | Peg count of calls that the control passes.   |

# Action

There is no action required.

## Explanation

The Network Management (NWM) subsystem generates log report NWM201 when the preroute peg (PRP) count request is activated or deactivated at the MAP.

### Format

The log report format for NWM201 is as follows:

NWM201 mmmdd hh:mm:ss ssdd INFO prptxt codetxt {dn} SNPA=nnn PEG=nnn

## Example

An example of log report NWM201 follows:

| NWM201 | APR01 | 12:00:00 | 2112   | INFO   | PRP_ON |       |
|--------|-------|----------|--------|--------|--------|-------|
| NAC    |       | 6        | 513621 | L SNPA | A=613  | PEG=O |

## **Field descriptions**

The following table describes each field in the log report:

| Field   | Value    | Description   |
|---------|----------|---|
| INFO    | Constant | Indicates activity through the NWM subsystem.   |
| prptxt  | PRP_OFF  | Indicates deactivation PRP count request.   |
|         | PRP_ON   | Indicates activation PRP count request.   |
| codetxt | AC       | Indicates PRP count enabled for area code directory number (DN).  |
|         | СС       | Indicates PRP count enabled for country code DN.  |
|         | NAC      | Indicates PRP count enabled for non-area code DN.   |
|         | PFX      | Indicates PRP count enabled for prefix code<br>DN. These prefix digits are digits used to<br>access a network other than the primary<br>access carrier. |

## NWM201 (end)

(Sheet 2 of 2)

| Field | Value   | Description   |
|-------|---------|---|
| dn    | Integer | Identifies digit code for which a request for preroute peg count occurs. Up to 18 digits can be specified.  |
| SNPA  | 0-999   | Serving numbering plan area/serving<br>translation scheme (SNPA/STS) code of<br>digit code pegged. If the digit code pegged<br>controls all NPAs that the office serves, the<br>system prints ALL. This field is valid only for<br>NAC and AC code types. |

# Action

There is no action required.

## Explanation

The Network Management (NWM) subsystem generates log report NWM202 when the hard-to reach flag (HTRF) request is activated or deactivated at the MAP or from the offline processor (EADAS or Netminder).

### Format

The log report format for NWM202 is as follows:

NWM202 mmmdd hh:mm:ss ssdd INFO htrftxt codetxt {dn} SNPA=nnn SOURCE=srctxt

## Example

An example of log report NWM202 follows:

NWM202 JUN03 02:23:10 1700 INFO HTRF\_ON AC 4731001 SNPA=613 SOURCE=MANUAL

# **Field descriptions**

The following table describes each field in the log report:

| Field   | Value    | Description  |
|---------|----------|--|
| INFO    | Constant | Indicates activity through the NWM subsystem.  |
| htrftxt | HTRF_OFF | Indicates deactivation HTRF request.   |
|         | HTRF_ON  | Indicates activation HTRF request.   |
| codetxt | AC       | Indicates HTRF enabled for area code directory number (DN).  |
|         | CC       | Indicates HTRF enabled for country code DN.  |
|         | NAC      | Indicates HTRF enabled for non-area code DN.   |
|         | PFX      | Indicates HTRF enabled for prefix code DN.<br>These prefix digits are digits used to access<br>a network other than the primary access<br>carrier. |

## NWM202 (end)

| Field  | Value   | Description   |
|--------|---------|---|
| dn     | Integer | Identifies digit code for which a request occurs for preroute peg count. Up to 18 digits can be specified.  |
| SNPA   | 0-999   | Serving-numbering plan area/serving<br>translation scheme (SNPA/STS) code of<br>digit code pegged. If the digit code pegged<br>controls all NPAs that the office serves, the<br>system prints ALL. This field is valid only for<br>NAC and AC code types. |
| srctxt | MANUAL  | Indicates manual activation or deactivation of the HTRF request at the MAP.   |
|        | EADAS   | Indicates that the EADAS/NM system applied or removed the HTRF request.   |

## Action

No action is required.

# **Associated OM registers**

This log is associated with the following OM registers:

- call attempts on Hard to Reach Codes (CAONHTRC)
- call completions on Hard to Reach Codes (CCONHTRC)

## Additional information

There is no additional information.

## **Release history**

### NA017

The static log format has been done away with and dynamic log format is used instead, (59028697).

## Explanation

The Network Management (NWM) subsystem generates this report when code gap controls activate or deactivate.

### Format

The log report format for NWM203 is as follows:

NWM203 mmmdd hh:mm:ss ssdd INFO CGAP {ON, OFF} codetxt dn nnn% annnm SNPA=nnn PEG=nnn ALLOW=nnn GAP=nnn

## Example

An example of log report NWM203 follows:

NWM203 APR01 12:00:00 1900 INFO CGAP\_ON CC 613621 100% EA1 SNPA=613 PEG= 0 ALLOW= 0

## **Field descriptions**

The following table describes each field in the log report:

| Field   | Value   | Description  |
|---------|---------|--|
| CGAP    | ON, OFF |  |
| codetxt | СС      | Indicates the code block control enables for country code directory number.  |
|         | AC      | Indicates the code block control enables for area code directory number.   |
|         | NAC     | Indicates the code block control enables for non-area code directory number.   |
|         | PFX     | Indicates the code block control enables for<br>prefix code directory number. Prefix code<br>means digits are used to access a network<br>other than the primary access carrier. |
| dn      | Integer | Identifies digit code for which the preroute peg count is requested. This field can specify a maximum of 18 digits.  |
| nnn%    | 0-100   | Indicates percentage of gap controls.  |

## NWM203 (end)

(Sheet 2 of 2)

| Field | Value                          | Description  |
|-------|--------------------------------|--|
| annnm | NCA (no circuit announcement), | Indicates announcement to which system routes blocked call.  |
|       | EA1 (emergency announcement 1) |  |
|       | EA2 (emergency announcement 2) |  |
| SNPA  | 0-999                          | Serving numbering plan area/serving<br>translation scheme (SNPA/STS) code of<br>digit code blocked. Field ALL prints if the<br>pegged digit code controls all NPAs that an<br>office serves. This field is valid for NAC and<br>AC code types. |
| PEG   | 0-63535                        | Provides peg counts of calls. Peg counts specify the digit code before the system blocks the calls.  |
| ALLOW | 0-63535                        | Provides peg count of calls that pass. Calls that pass are calls the system does not block.  |
| GAP   | 0.0-600.0                      | Indicates the gap internal in tenths of seconds.   |

## Action

There is no action required.

### **Explanation**

The Network Management (NWM) subsystem generates NWN300 when a reroute (RRTE) control is activated or deactivated. The system can route a percentage of traffic from one trunk group to another in the routing chain.

### Format

The log report format for NWM300 is as follows:

NWM300mmmdd hh:mm:ss ssdd INFO RRTE\_txt RRTNO=nnn RRTSUB=nn nnn% cntltxt PEG=nnnn

## Example

An example of log report NWM300 follows:

NWM300 APR01 12:00:00 2112 INFO RRTE\_OFF RRTNO=3 RRTSUB=0 30% MANUAL PEG=0

## **Field descriptions**

The following table describes each field in the log report:

| Field    | Value    | Description  |
|----------|----------|--|
| INFO     | Constant | Indicates activity through the NWM subsystem.                              |
| RRTE_txt | RRTE_OFF | Indicates RRTE control deactivated.  |
|          | RRTE_ON  | Indicates RRTE control activated.  |
| RRTNO    | 0-255    | Identifies activated or deactivated reroute number.                        |
| RRTSUB   | 0-5      | Provides reroute subindex for reroute number.                              |
| nnn%     | 0-100    | Provides percentage of traffic the system rerouted.                        |
| cntltxt  | AUTO     | Indicates dynamic overload control (DOC) signal applied automatic control. |

## NWM300 (end)

#### (Sheet 2 of 2)

| Field | Value  | Description                                       |
|-------|--------|---|
|       | MANUAL | Indicates manual control applied through the MAP. |
| PEG   | 0-9999 | Provides peg count of rerouted calls.             |

## Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

There is no additional information.

## Explanation

The Network Management (NWM) subsystem generates NWN400 when the system executes an automatic control command (acttxt).

### Format

The log report format for NWM400 is as follows:

NWM400 mmmdd hh:mm:ss ssdd INFO ctlnm acttxt restxt INDEX=nnn SOURCE=srcetxt

## Example

An example of log report NWM400 follows:

| NWM400 APR01 | 12:00:00 2112 | INFO    |               |
|--------------|---------------|---------|---------------|
| AOCR APPLY   | SUCCESS       | INDEX=1 | SOURCE=MANUAL |

## **Field descriptions**

The following table describes each field in the log report:

| Field  | Value    | Description   |
|--------|----------|---|
| INFO   | Constant | Indicates activity through the NWM subsystem.                 |
| ctinm  | AOCR     | Indicates automatic out-of-chain reroute (AOCR) affected.     |
|        | IDOC     | Indicates internal dynamic overload control (IDOC) affected.  |
|        | PPLN     | Indicates preplan number control (PPLN) affected.             |
|        | SDOC     | Indicates selective dynamic overload control (SDOC) affected. |
| acttxt | APPLY    | Indicates automatic control applied.                          |
|        | DISABLE  | Indicates automatic control disabled.                         |
|        | ENABLE   | Indicates automatic control enabled.                          |
|        | REMOVE   | Indicates automatic control removed.                          |

## NWM400 (end)

(Sheet 2 of 2)

| Field  | Value   | Description  |
|--------|---------|--|
| restxt | FAILURE | Indicates failed action described in acttxt.   |
|        | SUCCESS | Indicates the success of the action described in acttxt.   |
| INDEX  | 0-63    | Indicates a type of AOCR automatic control based on the percentage overflow (when ctInm=AOCR).         |
|        | 0-255   | Indicates a type of PPLN automatic control for incoming signals from other switches (when ctInm=PPLN). |
|        | 1-3     | Indicates a type of IDOC automatic control (when ctInm=IDOC).  |
| SOURCE | AUTO    | Indicates application of automatic control.  |
|        | CCIS    | Indicates control applied for CCIS6 trunks of CCISTNWM.  |
|        | MANUAL  | Indicates manual control applied through the MAP.  |

# Action

There is no action required.

### **Explanation**

The Network Management (NWM) subsystem generates NWM500. The subsystem generates NWM500 to indicate that a NWM IntCCtrl Code Blocking command is applied or removed. This log helps to determine the current state of the switch with the network.

### Format

The log report format for NWM500 is as follows:

NWM500 mmmdd hh:mm:ss ssdd INFO CBK\_txt codenm direction userclass country\_code national code nnn% annm PEG=nnn

NWM500 mmmdd hh:mm:ss ssdd INFO CBK\_txt codenm direction userclass country\_code national\_code level annn no\_blocked\_calls no\_passed\_calls

### Example

An example of log report NWM500 follows:

NWM500 JAN01 10:00:00 1000 INFO CBK ON CCODE OUT SUBS '32' \$ BLOCK= 0 PASS= 0 EA1 NWM500 JAN01 10:00:00 1000 INFO CBK\_OFF NATL IN SUBS '44' '999' 20 EA2 NWM500 JAN01 10:00:00 1000 INFO CBK\_OFF NATL OUT OPER '321' '12345678' 100 NCA BLOCK= 10 PASS= 0 NWM500 APR10 10:22:34 5260 INFO CBK)ON CC OUT OPER 497 \$ HULL 100% EA1 BLOCK= 0 PASS= 0 NWM500 APR10 10:24:44 5299 INFO CBK ON NATL TRAN OPER 49 4 MCL 100.0S EA1 BLOCK= 0 PASS= 0

## NWM500 (continued)

## **Field descriptions**

The following table describes each field in the log report:

| Field             | Value    | Description  |
|-------------------|----------|--|
| INFO              | Constant | Indicates activity through the NWM subsystem.  |
| CBK_txt           | CBK_OFF  | Indicates CBK control deactivated.   |
|                   | CBK_ON   | Indicates CBK controls activated.  |
| codenm            | CC       | Indicates country code (CC) block.   |
|                   | NATL     | Indicates national code (NATL) block.  |
| call direction    | IN       | Indicates the direction in which the calls the system increased, proceed.  |
|                   | OUT      |  |
|                   | TRANS    |  |
|                   | ALL      |  |
| call userclass    | SUBS     | Indicates the calling party type of calls the system increased.  |
|                   | OPER     |  |
|                   | ALL      |  |
| call country code | nnn      | Indicates the country code digits of calls the system increased. The national country code appears if the control only applies to a national number. |
| national code     | nnn      | Indicates the national code digits of calls the system increased. A \$ appears if the control is only applied to a country code.                     |
| PEG               | nnn      | Indicates the percentage of calls that the system can block.   |
| annm              | EA1      | Indicates blocked traffic directed to emergency announcement 1.  |
|                   | EA2      | Indicates blocked traffic directed to emergency announcement 2.  |

## NWM500 (end)

#### (Sheet 2 of 2)

| Field | Value | Description   |
|-------|-------|---|
|       | NCA   | Indicates blocked traffic not directed to a circuit announcement. |
| BLOCK | nnn   | Indicates the number of calls blocked.                            |
| PASS  | nnn   | Indicates the number of calls not blocked.                        |

## Action

There is no action required.

## Associated OM registers

The register international code blocking (ICBK) is an associated OM register.

### Explanation

The Network Management (NWM) subsystem generates NWM501 when an international preroute peg (PRP) command is applied or removed. This log report helps to determine the current state of the switch with the network.

### Format

The log report format for NWM501 is as follows:

NWM501 mmmdd hh:mm:ss ssdd INFO PRP\_txt codenm call direction userclass country\_code national\_code PEG=nnn

## **Example**

An example of log report NWM501 follows:

NWM501 JAN01 10:00:00 1000 INFO PRP\_ON CCODE OUT SUBS '32' \$ PEG=0 NWM501 JAN01 100:00:00 1000 INFO PRP\_OFF NATL IN SUBS '44' '999' PEG=5 NWM501 JAN01 10:00:00 1000 INFO PRP\_OFF NATL OUT OPER '321' '12345678' PEG=5

## **Field descriptions**

The following table describes each field in the log report:

| (Sheet | 1 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field          | Value    | Description   |
|----------------|----------|---|
| INFO           | Constant | Indicates activity through the NWM subsystem.   |
| PRP_txt        | PRP_OFF  | Indicates PRP count request deactivated.  |
|                | PRP_ON   | Indicates PRP count request activated.  |
| codenm         | СС       | Indicates country code (CC) peg count request.  |
|                | NATL     | Indicates national code (NATL) peg count request.   |
| call direction | IN       | Indicates the direction that calls are to proceed. The system did not increase these calls yet. |

## NWM501 (end)

| Field          | Value | Description  |
|----------------|-------|--|
| call direction | OUT   | Indicates the direction that calls are to proceed. The system did not increase these calls yet.  |
|                | TRANS |  |
|                | ALL   |  |
| call userclass | SUBS  | Indicates the calling party type of calls the system counted.  |
|                | OPER  |  |
|                | ALL   |  |
| country code   | nnn   | Indicates the country code digits of calls the system counted. The national country code digits appears if the control applies to a national number. |
| national code  | nnn   | Indicates the national code digits of calls the system counted. A \$ appears if the control applies to a country code.                               |
| PEG            | nnn   | Indicates the number of calls that matched all the control standards.  |

#### (Sheet 2 of 2)

## Action

There is no action required.

## **Associated OM registers**

The register international preroute peg (IPRP) is an associated register.

#### NWM502

#### **Explanation**

The Network Management (NWM) subsystem generates NWM502 when an international hard-to-reach peg (HTRP) command is applied or removed. This log report helps to determine the current state of the switch in the network.

#### Format

The log report format for NWM502 is as follows:

NWM502 mmmdd hh:mm:ss ssdd INFO HTRP\_txt codenm direction userclass cc ATTEMPT=n1OUTP=n2 ANS=n3

### Example

An example of log report NWM502 follows:

```
NWM502 JAN01 10:00:00 1000 INFO HTRP_ON

CCODE OUT SUBS '32' $

ATTMP= 0 OUTP= 0 ANS=0

NWM502 JAN01 10:00:00 1000 INFO HTRP_OFF

NATL IN SUBS '44' '999'

ATTMP= 5 OUTP= 5 ANS= 5

NWM502 JAN01 10:00:00 1000 INFO HTRP_OFF

NATL OUT OPER '321' '12345678'

ATTMP= 3 OUTP= 3 ANS= 3
```

### **Field descriptions**

The following table describes each field in the log report:

| (Sheet | 1 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field    | Value    | Description   |
|----------|----------|---|
| INFO     | Constant | Indicates activity through the NWM subsystem.   |
| HTRP_txt | HTRP_OFF | Indicates if the subsystem generates this log when the control is applied or removed. |
|          | HTRP_ON  |   |
| codenm   | CCODE    | Indicates the specified discrimination level at which the code flags, CCODE or NATL.  |
|          | NATL     |   |

# NWM502 (end)

| Field          | Value | Description  |
|----------------|-------|--|
| call direction | IN    | Indicates which direction the calls that are not flagged proceed.  |
|                | OUT   |  |
|                | TRANS |  |
|                | ALL   |  |
| call userclass | SUBS  | Indicates the calling party type of calls the system did not flag.   |
|                | OPER  |  |
|                | ALL   |  |
| country code   | nnn   | Indicates the country code digits of calls the system increases. The national country code appears if the control only applies to national number. |
| national code  | nnn   | Indicates the national code digits of calls the system counted. A \$ appears if the system applied the control to country code.                    |
| ATTMP          | nnn   | Indicates the number of call attempts that match the control criteria.   |
| OUTP           | nnn   | Indicates the number of calls outpulsed that match the control criteria.   |
| ANS            | nnn   | Indicates the number of calls answered that match the control criteria.  |

#### (Sheet 2 of 2)

# Action

There is no action required.

# Associated OM registers

The register international hard to reach peg (IHTRF) is an associated OM register.

#### **NWM503**

#### **Explanation**

The Network Management (NWM) subsystem generates NWM503. The subsystem generates NWM503 to indicate that a NWM IntCCtrl Hard to Reach Flag command is applied or removed. This log report helps to determine the current state of the switch in the network.

### Format

The log report format for NWM503 is as follows:

NWM503mmmdd hh:mm:ss ssdd: INFO HTRF\_txt codenm direction userclass country\_code national\_code nnn

# Example

An example of log report NWM503 follows:

NWM503 JAN01 10:00:00 1000 INFO HTRF\_ON CCODE OUT SUBS '32' \$ NWM503 JAN01 10:00:00 1000 INFO HTRF\_OFF NATL IN SUBS '44' '999' NWM503 JAN01 10:00:00 1000 INFO HTRF\_OFF NATL OUT OPER '321' '12345678'

### **Field descriptions**

The following table describes each field in the log report:

| Field          | Value    | Description  |
|----------------|----------|--|
| INFO           | Constant | Indicates the activity through the NWM subsystem.                                    |
| HTRP txt       | HTRP_ON  | Indicates if the system generated this log when the control is applied or removed.   |
|                | HTRP_OFF |  |
| codenm         | CCODE    | Indicates the specified discrimination level at which the code flags, CCODE, or NATL |
|                | NATL     |  |
| call direction | IN       | Indicates the direction in which calls the system flagged proceed.                   |

# NWM503 (end)

| Field             | Value | Description   |
|-------------------|-------|---|
|                   | OUT   |   |
|                   | TRANS |   |
|                   | ALL   |   |
| call userclass    | SUBS  | Indicates the calling party type of calls the system did not flag.  |
|                   | OPER  |   |
|                   | ALL   |   |
| call country code | nnn   | Indicates the country code digits of calls the system did not flag. The national country code appears if the control only applies to national number. |
| national code     | nnn   | Indicates the national code digits of calls the system did not flag. A \$ appears if the control is applied only to country code.                     |

#### (Sheet 2 of 2)

# Action

There is no action required.

# **Associated OM registers**

There are no associated OM registers.

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when an attempt is made to find the disposition for an Operator Services Systems Advanced Intelligent Network (OSSAIN) call, and there is no entry for the current function name in table OAFNDISP. The craftsperson should datafill the function in table OAFNDISP.

#### Format

The format for log report OAIN200 follows:

OAIN200 JAN24 07:46:17 8701 INFO BAD OAFNDISP DATAFILL DATAFILL TABLE OAFNDISP WITH <function name>

### Example

In the following example, a disposition was requested for a call that was attempting to connect to the BRANDING function. No entry was found in table OAFNDISP for that function.

OAIN200 JAN24 07:46:17 8701 INFO BAD OAFNDISP DATAFILL DATAFILL TABLE OAFNDISP WITH BRANDING

#### **Field descriptions**

The following table explains each of the fields in the log report:

| Field  | Value                                      | Description  |
|--|--|--|
| DATAFILL TABLE OAFNDISP<br>WITH: <function name=""></function> | Defined in Table<br>OAFUNDEF<br>(FUNCNAME) | Description of corrective action for this log<br>Function name |

### Action

The craftsperson should datafill table OAFNDISP with the function name indicated in the log.

### **Associated OM registers**

### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when a service node requests a connection to a logical voice channel that is not datafilled in table OAVLMAP. The failure will be reported to the service node at which time the node may choose to select another logical voice channel for the voice connection.

### Format

The format for log report OAIN201 follows:

OAIN201 JAN24 07:46:17 8701 INFO BAD OAVLMAP DATAFILL DATAFILL TABLE OAVLMAP WITH <node name> <logical channel number>

### **Example**

In the following log report, service node NODE\_1 requested a voice connection to logical voice channel 10, and the datafill for that logical channel was not found in table OAVLMAP.

OAIN201 JAN24 07:46:17 8701 INFO BAD OAVLMAP DATAFILL DATAFILL TABLE OAVLMAP WITH SN: NODE\_1 LOGCH: 10

### **Field descriptions**

The following table explains each of the fields in the log report:

| Field                                    | Value                                      | Description                                   |
|--|--|---|
| DATAFILL TABLE OAVLMAP<br>WITH           | N/A  | Description of corrective action for this log |
| SN:                                      | N/A  | Description of corrective action for this log |
| LOGCH:                                   | N/A  | Description of corrective action for this log |
| <node name=""></node>                    | Defined in Table<br>OANODINV<br>(NODENAME) | Node name                                     |
| <logical channel="" number=""></logical> | 0 to 8191                                  | Logical voice channel number                  |

# OAIN201 (end)

### Action

The craftsperson should datafill table OAVLMAP with the node name and logical channel number indicated in the log.

# **Associated OM registers**

### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when an attempt is made to transfer to a Traffic Operator Position System (TOPS) operator for an Operator Services Systems Advanced Intelligent Network (OSSAIN) call and the position selected is a TOPS IV or TOPS MP. The craftsperson should correct the service profile datafilled against the chosen position (for example, TOPS IV and TOPS MP positions should not have service profiles which include OSSAIN calls).

### Format

The format for log report OAIN202 follows:

OAIN202 JAN24 07:46:17 8701 INFO Bad OACTLDEF Datafill POSITION: cposition number> DATAFILL TABLE TOPSPOS WITH DIFFERENT SERVICE PROFILE

### Example

In the following example, a transfer to operator (via control list) was requested. The operator position chosen was a TOPS IV or MP.

OAIN202 JAN24 07:46:17 8701 INFO Bad Service Profile POSITION: 565 DATAFILL TABLE TOPSPOS WITH DIFFERENT SERVICE PROFILE.

### **Field descriptions**

The following table explains each of the fields in the log report:

| Field   | Value                                  | Description                                   |
|---|--|---|
| POSITION: <position number=""></position>                   | Defined in Table<br>TOPSPOS<br>(POSNO) | TOPS Position Number                          |
| DATAFILL TABLE TOPSPOS<br>WITH DIFFERENT SERVICE<br>PROFILE | N/A                                    | Description of corrective action for this log |

# Action

The craftsperson should change the datafill for the position number (table TOPSPOS) specified in the log table. A different service profile which does not include any OSSAIN service should be chosen from table TQSVPROF.

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# OAIN202 (end)

# Associated OM registers

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when an attempt is made to transfer to a control list for an Operator Services Systems Advanced Intelligent Network (OSSAIN) call, and there is no entry for the requested control list in table OACTLDEF. The craftsperson should datafill the function in table OACTLDEF.

### Format

The format for log report OAIN203 follows:

OAIN203 JAN24 07:46:17 8701 INFO Bad OACTLDEF Datafill DATAFILL TABLE OACTLDEF WITH INDEX <control list index>

### Example

In the following example, a transfer to control list was requested for control list CTLLIST3 (index 7). No entry was found in table OACTLDEF for that function.

OAIN203 JAN24 07:46:17 8701 INFO Bad OACTLDEF Datafill DATAFILL TABLE OACTLDEF WITH INDEX 7

### **Field descriptions**

The following table explains each of the fields in the log report:

| Field   | Value                           | Description  |
|---|---------------------------------|--|
| DATAFILL TABLE OACTLDEF<br>WITH: <control index="" list=""></control> | Tables are given in description | Description of corrective action for this log  |
|   |                                 | Control List Index. Specified in field<br>CTRLLIST of Table OACNNPRF,<br>OADSCPRF, OATLKPRF, OACAUPRF, or<br>OADTFPRF and is not datafilled in Table<br>OACTLDEF |

# Action

The craftsperson should datafill table OACTLDEF with the control list index indicated in the log.

OAIN203 (end)

# **Associated OM registers**

This log is associated with OM group OAPCALP3, register XFRCTRE.

### **Explanation**

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when an attempt is made to select a Trigger profile with no corresponding entry in Table OATPRFIX. The Trigger profile index sent by a node needs to be coordinated with the Trigger profile data in the DMS switch.

### Format

The format for log report OAIN204 follows:

OAIN204 FEB28 07:46:17 8701 INFO OATPRFIX NONEXISTENT TRIG IDX CALLID: <callid> PROFIDX: <Profile number> CT4Q: <ct4q name>

# Example

In the following example, the OSSAIN Service Node or operator has sent the DMS switch a message to select a profile not datafilled in Table OATPRFIX. Any attempts to select a profile not known to the DMS results in the generation of this log.

```
OAIN204 FEB28 07:46:17 8701 INFO OATPRFIX NONEXISTENT TRIG IDX
CALLID: 0302 0011
PROFIDX: 15
CT4Q: 1_PLUS
```

### **Field descriptions**

The following table explains each of the fields in the log report:

| Field                                  | Value                         | Description   |
|--|-------------------------------|---|
| CALLID: <callid></callid>              | 0000 0000 to FFFF<br>FFFF     | DMS Call Identifier   |
| PROFIDX: <profile number=""></profile> | 0 - 2047                      | Indicates which Profile Index is to be applied to the call                                |
| CT4Q: <ct4q name=""></ct4q>            | CT4Q name from table CT4QNAMS | Indicates the initial CT4Q applied to the call.<br>The name is defined in table CT4QNAMS. |

#### OAIN204 (end)

### Action

The assigned trigger profile index is not present in table OATPRFIX. Table OATPRFIX and the corresponding trigger profile tables (OACNNPRF, OATLKPRF, OADSCPRF and OADTFPRF) must be have datafill to use this trigger index. The use of any Trigger profile index and its associated datafill must be coordinated with the service node. A trigger profile index is assigned to a call by one of three methods:

- Table CT4QNAMS
- The Service Node can set the trigger profile index through the OAP.
- The operator terminal can update the trigger profile index through the OPP.

# **Associated OM registers**

### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when an attempt is made to select a CT4Q assigned to receive Operator Services Systems Advanced Intelligent Network (OSSAIN) processing with no corresponding entry in Table OAINCTLA.

### Format

The format for log report OAIN205 follows:

OAIN205 FEB28 07:46:17 8701 INFO NO OSSAIN CONTROL LIST CT4Q: <CT4Q name>

# Example

In the following example, a CT4Q was datafilled to receive OSSAIN processing in table CT4QNAMS, with no corresponding entry datafilled in table OAINCTLA. A call assigned this CT4Q cannot receive OSSAIN processing since a Control List has not be assigned in table OAINCTLA.

OAIN205 FEB28 07:46:17 8701 INFO NO OSSAIN CONTROL LIST CT4Q: NEW\_SERVICE1

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field                       | Value    | Description  |
|-----------------------------|----------|--|
| CT4Q: <ct4q name=""></ct4q> | 0 - 2047 | Indicates which Profile Index is to be applied to the call |

# Action

Determine whether this CT4Q should be datafilled as an OSSAIN CT4Q in table CT4QNAMS. If so, datafill Table OAINCTLA with the appropriate control list name from table OACTLDEF.

# **Associated OM registers**

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when a preopr, post-auto, recall, or assist refinement of a Traffic Operator Position System (TOPS) CT4Q results in an Operator Services Systems Advanced Intelligent Network (OSSAIN) CT4Q.

A CTQ is specified in table CT4QNAMS, field SYSTEM\_SEL, as either TOPSOPR or OSSAIN.

The initial OSSAIN release refinement tables are CT4QPFXT, CT4QREST, CT4QLANG, CT4QCLAS, CT4QAUTO, CT4QCAR, CT4QCLD, CT4QORIG, and CT4QTIME.

Specification of the refinement type(s) (postauto, recall, assist, and preopr) is given in tables TQORDERA and TQOIRDERB.

#### Format

The format for log report OAIN206 follows:

OAIN206 JAN24 07:46:17 8701 INFO Invalid CT4Q Refinement OLD\_CT4Q: <ct4q> NEW\_CT4Q: <ct4q> REFINEMENT: <refinement type>

#### Example

In the following example, a CT4Q defined as TOPS was refined (in a post-auto scenario) to a CT4Q defined as OSSAIN.

OAIN206 JAN24 07:46:17 8701 INFO Invalid CT4Q Refinement OLD\_CT4Q: 0\_MINUS\_TOPS NEW\_CT4Q: 0\_MINUS\_OSSAIN REFINEMENT: POST-AUTO

### **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                   | Value   | Description            |
|-------------------------|---|------------------------|
| OLD_CT4Q: <ct4q></ct4q> | Refer to list of refinement tables given above. | Call Type for Queueing |

# OAIN206 (end)

#### (Sheet 2 of 2)

| Field   | Value   | Description        |
|---|---|--------------------|
| NEW_CT4Q:   | N/A   | Tag for next field |
| REFINEMENT: <refinement<br>type&gt;</refinement<br> | Refinement type<br>specified in Tables<br>TQRDERA and<br>TQORDERB | QMS refinement     |

# Action

The craftsperson should check the refinement tables to find the erroneous refinement.

# **Associated OM registers**

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when an attempt is made to select a Call Type for Queuing (CT4Q) assignment that is assigned to receive Operator Services System Advanced Intelligent Network (OSSAIN) preprocessing with no corresponding entry in Table OAINPRE.

#### Format

The format for log report OAIN207 follows:

OAIN207 mmmdd hh:mm:ss ssdd INFO NO OAINPRE FUNCTION CT4Q: <CT4Q name>

### Example

An example of log report OAIN207 follows:

For this example a CT4Q assignment was datafilled to receive OSSAIN preprocessing in Table CT4QNAMS (value of Y in field OAINPRE). No corresponding entry was datafilled in Table OAINPRE (value of CT4Q name in field CT4Q). A call assigned to this CT4Q assignment cannot receive OSSAIN preprocessing since a function has not been assigned in Table OAINPRE.

OAIN207 FEB28 07:46:17 8701 INFO NO OAINPRE FUNCTION CT4Q: NEW\_SERVICE1

#### **Field descriptions**

The following table explains each of the fields in the log report:

| Field                       | Value  | Description   |
|-----------------------------|--|---|
| CT4Q <ct4q name="">:</ct4q> | (alphanumeric)<br>Range of QMS<br>CT4Q names | Mandatory. This field specifies the QMS CT4Q name in Table CT4QNAMS that is assigned to the call. |

# Action

Operating company personnel should check the following OSSAIN datafill for the specified CT4Q number:

- Verify that the CT4Q assignment is datafilled to receive OSSAIN preprocessing (value of Y in field OAINPRE).
- If the CT4Q assignment receives OSSAIN preprocessing, datafill the corresponding CT4Q name (field CT4Q), network service identifier (field NETWRKID), and function name (field OAFUNCNM) in Table OAINPRE.

# **Associated OM registers**

#### Explanation

This log is generated when the switch cannot make the voice link connection because the required voice link information is not datafilled in table SNVLGRP.

#### Format

The format for log report OAIN208 follows:

OAIN208 JAN24 07:46:17 8701 INFO BAD SNVLGRP DATAFILL MISSING VOICE LINK INFORMATION FOR SN: <node name> FUNCTION: <function name>

### Example

An example of log report OAIN208 follows:

OAIN208 JAN24 07:46:17 8701 INFO BAD SNVLGRP DATAFILL MISSING VOICE LINK INFORMATION FOR SN: NODE\_1 FUCNTION: CLG\_CARD

#### **Field descriptions**

The following table explains each of the fields in the log report:

| Field    | Value                 | Description  |
|----------|-----------------------|--|
| SN       | name from<br>OANODINV | Service node name datafilled in table OANODINV.    |
| FUNCTION | name from<br>OAFUNDEF | Function name, which is the key to table OAFUNDEF. |

#### Action

Datafill table SNVLGRP with voice link information against the service node and function indicated in the log.

For further information, refer to functionality OSSAIN 11 Enhancements, OSAN0006, in the applicable manual as follows:

- NA DMS-100 Translations Guide, 297-8021-350
- GTOP DMS-100 Translations Guide, 297-8441-350

# OAIN208 (end)

# Associated OM registers

None

# **Additional information**

### History

#### TOPS11

This log was created by feature AF7714 in functionality OSSAIN 11 Enhancements, OSAN0006.

#### **Explanation**

This log is produced for any of the following reasons:

- The switch cannot translate a directory number (DN) obtained from table OAFNDISP as part of disposition routing.
- Translations resulted in treatment for DN datafilled in table OAFNDISP.
- The DN datafilled in table OAFNDISP is greater than 10 digits for North American translations.

### Format

The format for log report OAIN209 follows:

OAIN209 MAY24 07:46:17 8701 DEFAULT DN TRANSLATIONS FAILURE CHECK TRANSLATIONS FOR FOLLOWING DN DATAFILLED IN OAFNDISP FN: <function name> DN: <directory number>

# Example

An example of log report OAIN209 follows:

```
OAIN209 MAY24 07:46:17 8701 DEFAULT DN TRANSLATIONS FAILURE
CHECK TRANSLATIONS FOR FOLLOWING DN DATAFILLED IN OAFNDISP
FN: CLG_CARD
DN: 201-220-1234
```

### **Field descriptions**

The following table explains each of the fields in the log report:

| Field | Value                  | Description  |
|-------|------------------------|--|
| FN    | name from<br>OAFNDISP  | Function name, which is the key to table OAFNDISP. |
| DN    | value from<br>OAFNDISP | DN datafilled in table OAFNDISP.                   |

# Action

Verify translations for the specified DN. If the DN is incorrect, change the DN datafilled in table OAFNDISP against the specified function.

# OAIN209 (end)

For further information, refer to functionality OSSAIN 11 Enhancements, OSAN0006, in the applicable manual as follows:

- NA DMS-100 Translations Guide, 297-8021-350
- GTOP DMS-100 Translations Guide, 297-8441-350

#### **Associated OM registers**

None

# **Additional information**

#### History

#### TOPS11

This log was created by feature AF7712 in functionality OSSAIN 11 Enhancements, OSAN0006.

#### Explanation

Log OAIN210 is generated when an unsupported protocol of the Directory Assistance System (DAS) is used in the OSSAIN environment.

#### Format

The format for log report OAIN210 follows.

OAIN210 mmmdd hh:mm:ss ssdd info das protocol not supported DAS Protocol: protocol name

### Example

An example of log report OAIN210 follows.

OAIN210 JAN24 07:46:17 8701 info das protocol not supported DAS protocol:IBM

#### **Field descriptions**

The following table explains each of the fields in the log report:

| Field         | Value | Description  |
|---------------|-------|--|
| Protocol name | IBM   | This field consists of the name of the DAS protocol. |

#### Action

Ensure Standard Nortel-DMS/DAS protocol is used when connecting to a passive operator.

#### **Related OM registers**

None

#### **Additional information**

### **Explanation**

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when a message arrives that is not expected. Note this does not include invalid messages from a service node. Invalid messages from a service node are handled by the Open Automated Protocol (OAP).

#### Format

The format for log report OAIN300 follows:

OAIN300 JAN24 07:46:17 8701 TBL OSSAIN UNEXPECTED MSG

| CALLID: | <callid></callid>              |         |   |
|---------|--------------------------------|---------|---|
| SN:     | <node name=""></node>          | SNID:   | <node id=""></node>                       |
| SNVL:   | <vl circuit="" id=""></vl>     |         |   |
| FN:     | <function name=""></function>  | SESSPL: | <pool id=""> <pool name=""></pool></pool> |
| POS:    | <pos circuit="" id=""></pos>   |         |   |
| CLG:    | <clg circuit="" id=""></clg>   | CLD:    | <cld circuit="" id=""></cld>              |
| FROM:   | <from circuit="" id=""></from> |         |   |
| TEXT:   | <type message="" of=""></type> |         |   |
| MSG:    | <message data=""></message>    |         |   |

#### **Example**

In the following log report, the incoming trunk, BELLIC 34, was force released. It was connected to the NAV listing services node (OSN 6). In this example, the call had been routed to the Yellow\_Pages function and served by an agent associated with the Listing\_Services session pool (session pool number 4).

OAIN300 JAN24 07:46:17 8701 TBL OSSAIN UNEXPECTED MSG CALLID: 0302 0011 SN: NAV\_LISTING\_SVCS SNID: OSN 6 SNVL: CKT OSSAINVL 22 FN: YELLOW\_PAGES SESSPL: 4 LISTING\_SERVICES POS: CLG: CKT BELLIC 34 CLD: CKT ITOG 11 FROM: CKT BELLIC 34 TEXT: TERMINAL FORCE RELEASED MSG: 0033B27BB00BEA18B00BEA300005FD0004150021B00BEA48000BCE14

# OAIN300 (continued)

# **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                                | Value                                      | Description                                      |
|--------------------------------------|--|--|
| CALLID: <callid></callid>            | 0000 0000toFFFF<br>FFFF                    | Tag for next field                               |
| SN: <node name=""></node>            | Defined in Table<br>OANODINV<br>(NODENAME) | OSSAIN service node identifier                   |
| SNID: <node id=""></node>            | Defined in Table<br>OANODINV<br>(NODEID)   | OSSAIN service node identifier                   |
| SNVL: <vl circuit="" id=""></vl>     | Defined in Table<br>OAVLMAP<br>(VOICENUM)  | OSSAIN service node identifier                   |
| FN: <function name=""></function>    | Defined in Table<br>OAFUNDEF<br>(FUNCNAME) | Function name currently associated with the call |
| SESSPL: <pool id=""></pool>          | Defined in Table<br>OASESNPL<br>(SESNPLID) | Session Pool Identifier                          |
| <pool name=""></pool>                | Defined in Table<br>OASESNPL<br>(SESNPLID) | Session Pool Name                                |
| POS: <pos circuit="" id=""></pos>    | Defined in Table<br>TOPSPOS<br>(POSNO)     | TOPSPOS position number                          |
| CLG: <clg circuit="" id=""></clg>    | Defined in Table<br>TRKMEM<br>(EXTRKNM)    | Calling party trunk identifier                   |
| CLD: <cld circuit="" id=""></cld>    | Defined in Table<br>TRKMEM<br>(EXTRKNM)    | Called party trunk identifier                    |
| FROM: <from circuit="" id=""></from> | Defined in Table<br>TRKMEM<br>(EXTRKNM)    | Identifies which circuit the message came from   |

# OAIN300 (end)

#### (Sheet 2 of 2)

| Field                                | Value  | Description   |
|--------------------------------------|--|---|
| TEXT: <type message="" of=""></type> | TERMINAL<br>FORCED<br>RELEASED,PERI<br>PHERAL<br>INDICATED CALL<br>FAILURE,TERMIN<br>AL LOST<br>INTEGRITY,PERI<br>PHERAL<br>INDICATED<br>CONFUSION,INV<br>ALID MSG IN<br>CURRENT<br>STATE. | Identifies unexpected message if possible,<br>otherwise indicates that the message is<br>invalid for the current state. |
| MSG: <message data=""></message>     | N/A  | Message body of unexpected message  |

# Action

Collect logs. Check the suspect circuit specified as the "FROM:" circuit in the log.

# Associated OM registers

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when the switch fails to obtain a required switch resource associated with Operator Services Systems Advanced Intelligent Network (ODSSAIN) call processing.

#### Format

The log report format for OAIN301 is as follows:

OAIN301 mmmdd hh:mm:ss ssdd TBL OSSAIN RESOURCE PROBLEM CALLID: <callid> TROUBLE: <resource failure>

# Example

An example of log report OAIN301 follows:

OAIN301 FEB28 07:46:17 8701 TBL OSSAIN RESOURCE PROBLEM CALLID: 0302 0011 TROUBLE: OSSAIN RECORDING UNIT UNAVAILABLE

# **Field descriptions**

The following table describes each field in the log report:

| Field  | Value                                | Description   |
|--|--------------------------------------|---|
| CALLID                                       | 0000 0000 to FFFF FFFF               | This is the DMS Call Identifier.  |
| TROUBLE:<br><resource failure=""></resource> | OSSAIN recording unit<br>unavailable | OSSAIN call processing failed to obtain an<br>OSSAIN recording unit which stores switch call<br>data for OSSAIN calls.  |
|  | Service change failed                | Indicates that a service change attempt over<br>the transition to SN failed because the called<br>party is attached or the call origination is<br>country direct. |

### OAIN301 (end)

### Action

The action depends on the trouble indicated:

• OSSAIN recording unit unavailable

Check the value of office parameter OSSAIN\_NUM\_RU in table OFCENG. Most likely it needs to be increased.

• Service change failed

SN needs to release called party and then request service change through OAP.

# **Associated OM registers**

None.

# Alarms

Not applicable.

# Limitations and restrictions

There are no limitations and restrictions.

# Log history

### SN09 (DMS)

New trouble code "Service change failed" introduced by feature a00009012.

#### Explanation

This log is generated for any of the following reasons:

- An Operator Services Systems Advanced Intelligent Network (OSSAIN) Software Optionality Control (SOC) option that is required for a call is IDLE and should be ON. The log indicates the required OSSAIN SOC option, call identity, and CT4Q.
- The call attempts to use the QMS ASST refinement ordering in table TQORDERA or TQORDERB but the ADVQ0006 SOC option is not turned on. This requirement is added by functionality OSSAIN 11 Enhancements, OSAN0006.
- The call attempts to use the new QMS CT4Q Refinements capability but the OSAN0006 SOC option is not turned on. The log indicates the required OSSAIN SOC option, call identity, and CT4Q.
- The call attempts to use the new switch selected voice link capability but the OSAN0006 SOC option is not turned on. This capability is added by functionality OSSAIN 11 Enhancements, OSAN0006.

*Note:* When this log is generated at the OSAC host switch, the CT4Q field in the log is set to UNKNOWN CT4Q.

### Format

The format for log report OAIN302 follows:

OAIN302 FEB28 07:46:17 8701 INFO OSSAIN SOC NOT ON CALLID: <callid> CT4Q: <CT4Q name> SOCID <OSSAIN SOC option number>

### **Example**

In the following example, the OSSAIN SOC option is set to IDLE effectively disabling OSSAIN call processing. Any calls attempting to perform OSSAIN processing that use table CT4QNAMS generate this log.

```
OAIN302 FEB28 07:46:17 8701 INFO OSSAIN SOC NOT ON
CALLID: 0302 0011
CT4Q: NEW_SERVICE1
SOCID OSAN0002
```

# OAIN302 (end)

### **Field descriptions**

The following table explains each of the fields in the log report:

| Field                                  | Value                    | Description   |
|--|--------------------------|---|
| CALLID: <callid></callid>              | 0000 0000to FFFF<br>FFFF | DMS Call Identifier   |
| CT4Q: <ct4q name=""></ct4q>            | Range of CT4Q<br>Names   | Indicates which CT4Q was to be applied to the call                      |
| SOC <ossain option="" soc=""></ossain> | OSANxxxx                 | Indicates the OSSAIN SOC option service that should be ON for the call. |

### Action

Check the indicated OSSAIN SOC option. It should be set to ON when attempting to use OSSAIN services.

Check datafill in QMS refinement tables and table CT4QNAMS to determine whether calls should continue to receive OSSAIN service.

# **Associated OM registers**

### Explanation

This log is generated when Operator Services Systems Advanced Intelligent Network (OSSAIN) trigger processing attempts to route a call to a TOPS automated system or treatment. Trigger events can route calls only to an OSSAIN service node or TOPS operator.

This log can also be produced when the call is attempting to trigger to an operator while the call is in the middle of an OSSAIN conference.

*Note:* When this log is generated, the call continues normal processing, with no redirection of the call.

### Format

The format for log report OAIN303 follows:

OAIN303 FEB28 07:46:17 8701 INFO TRIGGER ROUTE ERROR CALLID: <callid> PROFIDX: <trigger profile idx> TRIGEVNT: <trigger event name> ACTION: <function or control list name> TEXT: <descriptive text>

### **Example**

In the following example, a trigger event has attempted to route the call to a TOPS automated system.

OAIN303 FEB28 07:46:17 8701 INFO TRIGGER ROUTE ERROR CALLID: 0302 0011 PROFIDX: 21 TRIGEVNT: PTYD ACTION: ACTS TEXT: TRIGGER TO TOPS AUTO ERROR

# OAIN303 (continued)

### **Field descriptions**

The following table explains each of the fields in the log report:

| Field  | Value   | Description   |
|--|---|---|
| CALLID: <callid></callid>                                      | 0000 0000- FFFF<br>FFFF   | This field indicates the Digital Multiplex<br>System (DMS) call identifier.   |
| PROFIDX: <profile number=""></profile>                         | 0-2046  | This field indicates which profile index is applied to the call. It is an index into table OATPRFIX.  |
| TRIGEVNT: <trigger event<br="">name&gt;</trigger>              | ANS CLGD<br>DTMF FLASH<br>ISUPCAUS<br>NOANS NTFY<br>OPLSF<br>PTYD<br>RING TRMT                            | This field indicates which trigger event is<br>applied to the call. The possible trigger<br>events are flash, calling disconnect, notify,<br>party disconnect, outpulsing failure, no<br>answer, answer, ringing, dual-tone<br>multfrequency (DTMF) digit, Integrated<br>Services Digital Network User Part (ISUP)<br>cause, and treatment. Reference tables<br>OADSCPRF, OATLKPRF, OADTFPRF,<br>OACAUPRF and OACNNPRF. |
| ACTION: <function control="" list="" name="" or=""></function> | range of OSSAIN<br>Functions and<br>Control List names  | This field indicates which OSSAIN function<br>or control list is datafilled against the trigger<br>event that has occurred. Reference tables<br>OAFUNDEF and OACTLDEF.  |
| TEXT:  | TRIGGER TO<br>OPERATOR<br>ERROR,<br>TRIGGER TO<br>TOPS AUTO<br>ERROR,<br>TRIGGER TO<br>TREATMENT<br>ERROR | This field indicates the reason for the trigger<br>routing failure. If the call is routed to a TOPS<br>automated system, an operator, or a<br>treatment, trigger routing fails. Reference<br>the FUNCTYPE field table OAFUNDEF and<br>the BLCKACTN field in table OAFNDISP.   |

# Action

Operating company personnel should check OSSAIN trigger datafill for the trigger profile index and trigger event provided in this log. The operating company personnel should ensure that the specified trigger event routes only to a control list or function that maps to an OSSAIN service node or TOPS operator.

# OAIN303 (end)

The tables that should be reference for OSSAIN trigger datafill are the following:

- OACAUPRF (to determine ISUP cause trigger events)
- OACNNPRF (to determine trigger events)
- OACTLDEF (to determine control list names)
- OADSCPRF (to determine trigger events)
- OADTFPRF (to determine DTMF trigger events)
- OAFUNDEF (to detemine function names; to determine the function type to which a call is routed)
- OAFNDISP (to determine the function type to which a call is routed; to determine the block action of a specific function)
- OATLKPRF (to determine trigger events)
- OATPRFIX (to determine profile indices)

### **Associated OM registers**

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when the Operator Services Systems Advanced Intelligent Network (OSSAIN) triggers processing attempts to inform the service node of a trigger event, but fails to obtain a session to the service node.

#### Format

The format for log report OAIN304 follows:

OAIN304 FEB28 07:46:17 8701 INFO INVALID REQUEST SESSION CALLID: <callid> REASON: <request session rc> TEXT: <descriptive text>

#### Example

In the following example, a trigger event occurred that attempted to send a trigger event inform message to a service node. A session to the service node could not be obtained.

*Note:* A trigger event inform message is sent when the trigger event datafill has the SNCONTRL field set to N. Refer to tables OACNNPRF, OATLKPRF, and OADSCPRF.

OAIN304 FEB28 07:46:17 8701 INFO INVALID REQUEST SESSION CALLID: 0302 0011 REASON: call\_deflected TEXT: Invalid call queue definition for Trigger Event Inform

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field   | Value                                       | Description  |
|---|---|--|
| CALLID: <callid></callid>                       | 00000000 to<br>FFFF FFFF                    | DMS Call Identifier  |
| REASON: <request session<br="">RC&gt;</request> | Range of Request<br>Session Return<br>Codes | Indicates which request session return code caused the error |
| TEXT: <descriptive text=""></descriptive>       | N/A   | Text describing the failure                                  |

# Action

Check OSSAIN function (Table OAFUNDEF) and call queue (Table QMSCQDEF) datafill, and verify that the CallQ datafilled against this function does not support queuing.

# **Associated OM registers**

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when a Call Type for Queuing (CT4Q) assignment that is eligible for Operator Services System Advanced Intelligent Network (OSSAIN) preprocessing, maps to a function provided by a Traffic Operator Position System (TOPS) operator or a TOPS automated system - Automated Alternate Billing Service (AABS). Calls that use OSSAIN preprocessing can only map to functions provided by OSSAIN service nodes (SN).

Enhancements to OSSAIN in TOPS07 allow calls assigned to a TOPS operator or a TOPS automated system to receive OSSAIN preprocessing from an SN. Appropriate datafill in Tables CT4QNAMS and OAINPRE (introduced in TOPS07) enable this capability.

### Format

The format for log report OAIN305 follows:

OAIN305 FEB28 07:46:17 8701 INFO OSSAIN ROUTE ERROR CALLID: <callid> CT4Q: <QMS CT4Q name> FUNCTION: <OSSAIN function name> TEXT: <descriptive text>

### **Example**

An example of log report OAIN305 follows:

OAIN305 FEB28 07:46:17 8701 INFO OSSAIN ROUTE ERROR CALLID: 0302 0011 CT4Q: 0\_PLUS\_TOPS FUNCTION: AABS\_VSN TEXT: PREPROCESSING TO TOPS AUTO ERROR

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field   | Value  | Description   |
|---|--|---|
| CALLID <callid></callid>                        | 0000 0000-FFFF<br>FFFF<br>(hexadecimal)      | Mandatory. This field specifies the Digital Multiplex System (DMS) call identifier.   |
| CT4Q <qms ct4q="">:</qms>                       | Range of QMS<br>CT4Q names<br>(alphanumeric) | Mandatory. This field specifies the QMS<br>CT4Q name in Table CT4QNAMS that is<br>eligible for OSSAIN preprocessing (value of<br>Y in field OAINPRE). This name must also<br>be defined in field CT4Q of Table OAINPRE. |
| FUNCTION <ossain function="" name="">:</ossain> | OSSAIN function<br>name<br>(alphanumeric)    | Mandatory. This field specifies the function<br>name in table OAINPRE that is to be applied<br>to the call. The function must also be<br>defined in Table OAFUNDEF.   |
| TEXT <descriptive text="">:</descriptive>       | PREPROCESS-<br>ING TO<br>OPERATOR<br>ERROR   | Mandatory. This field specifies the reason the failure occurred. Defined in Table OAFUNDEF.   |
|   | PREPROCESS-<br>ING TO TOPS<br>AUTO ERROR     |   |

# Action

Operating company personnel should check OSSAIN datafill against the CT4Q and function that is specified in the log as follows:

- Note the function name in Table OAINPRE that is assigned to that CT4Q.
- Ensure that this function is datafilled with a function type of SN in Table OAFUNDEF.

# **Associated OM registers**

# OAIN305 (end)

# Additional information

The table that follows provides the specific values that can be displayed in the TEXT field with their respective explanations.

| TEXT message                        | Explanation  |
|-------------------------------------|--|
| Preprocessing to Operator Error     | Function is assigned a functype of "TOPSOPER." Must be "SN." |
| Preprocessing to TOPS Auto<br>Error | Function is assigned a functype of "TOPSAUTO." Must be "SN." |

### **OAIN306**

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when a call was routed to treatment because too many DA recalls had already been performed, and the call was attempting another DARECALL function.

### Format

The log report format for OAIN306 is as follows:

OAIN306 mmmdd hh:mm:ss ssdd INFO TRMT: MAX DA RECALL REACHED CALLID: FUNCTION: CALLING:

## Example

An example of log report OAIN306 follows:

OAIN306 FEB28 07:46:17 8701 INFO TRMT: MAX DA RECALL REACHED CALLID: 0302 0011 FUNCTION: DA\_RECALL CALLING: CKT T907T100 1

# **Field descriptions**

The following table describes each field in the log report:

| Field    | Description   |
|----------|---|
| CALLID   | This is the Call ID of the call.  |
| FUNCTION | This is the function that the call was routing to when it failed, and was routed treatment instead. |
| CALLING  | This is the trunk of the calling party.   |

## OAIN306 (end)

#### Action

The action you can take on receipt of Log OAIN306 is:

• Check Table VROPT maximum\_da\_recalls to ensure that the count defined is as required.

*Note:* This includes TOPS operator DA recalls also.

- Check Table OAFUNDEF to ensure that the function datafill DARECALL is set as required.
- Change the transfer or trigger information to route to a different function.
- Maintain a count in the context block to route the call appropriately.

### **Associated OM registers**

None.

### Log history

#### SN09 (TDM)

Log OAIN306 was introduced by Feature a00009012.

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log only when the session pool test fails.

### Format

The format for log report OAIN500 follows:

OAIN500 mmmdd hh:mm:ss xxxx DIAG FAIL <pm-id> STATE: Change to <state> from <state> SN: <service node name> SND: OSNM <xxx> SESSPL: <sessnpool#> <session pool name> REASON TEXT: <reason-text> MAINT MSG: <maint-text>

# Example

An example of log report OAIN500 follows:

```
OAIN500 DEC08 11:02:27 0900 FAIL SesnPool Diag Fail
SN: BRTPH7F1 SNID: OSNM 28
SESSPL: 42 Branding_1
Reason Text:
Maint Msg:
```

# **Field descriptions**

The following table explains each of the fields in the log report:

| (Sheet | 1 | of | 2) |  |
|--------|---|----|----|--|
|--------|---|----|----|--|

| Field      | Value   | Description                                    |
|------------|---|--|
| mmmdd      | This field contains the current month and day.                      | This field contains the current month and day. |
| "hh:mm:ss" | This field contains the current time.                               | This field contains the current time.          |
| "xxxx"     | This field contains<br>the sequence<br>number of the log<br>report. | This field contains the sequence number.       |

### OAIN500 (end)

(Sheet 2 of 2)

| Field                                   | Value  | Description   |
|---|--|---|
| <pm-id></pm-id>                         | This field contains the peripheral identification.               | This field identifies the peripheral that supports the reported session pool.                         |
| <session_pool_name></session_pool_name> | Session pool name as datafilled in table OASESNPL.               | This field indicates the name of the session pool that failed the diagnostics.                        |
| <session_pool_id></session_pool_id>     | Session pool id<br>number as<br>datafilled in table<br>OASESNPL. | This field indicates the identification number<br>of the session pool that failed the<br>diagnostics. |
| <reason-text></reason-text>             | No reply from session pool.                                      | Diagnostics failed.   |
| Maint_msg                               | 32 character<br>message sent from<br>session pool.               | Message sent from the session pool.   |

## Action

None

*Note:* For post-analysis, if the reason text is "No reply from session pool," check that the service node is in service.

If reason text is anything else, consult the service node session pool application information provided by the service node vendor for specific recovery action.

### **Associated OM registers**

For each occurrence of a session pool test failure in OM group SESNPOOL, register TSTFAIL is pegged.

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when a session pool goes system busy due to either a failure to return to service or an audit fail.

### Format

The format for log report OAIN502 follows:

| OAIN502 mmmdd hh    | :mm:ss xxxx SYSB <pm–id></pm–id>   |                       |
|---------------------|--|-----------------------|
| STATE:              | Change to <state> from <state></state></state>                                   | >                     |
| SN:                 | <service name="" node=""></service>  | SND: OSNM <xxx></xxx> |
| SESSPL:             | <sesnpool#> <session nan<="" pool="" th=""><th>ne&gt;</th></session></sesnpool#> | ne>                   |
| <b>REASON TEXT:</b> | <reason-text></reason-text>  |                       |
| MAINT MSG:          | <maint-text></maint-text>  |                       |

# Example

An example of log report OAIN502 follows:

```
OAIN502 DEC08 10:29:47 0501 SYSB Session Pool
State change to SYSB from CBSY
SN: BRTPH7F1 SNID: OSNM 28
SESSPL: 42 Branding_1
Reason Text: System Action
Maint Msg:
```

# **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field      | Value   | Description                                    |
|------------|---|--|
| "mmmdd"    | This field contains the current month and day.                      | This field contains the current month and day. |
| "hh:mm:ss" | This field contains the current time.                               | This field contains the current time.          |
| "xxxx"     | This field contains<br>the sequence<br>number of the log<br>report. | This field contains the sequence number.       |

### OAIN502 (end)

(Sheet 2 of 2)

| Field                                   | Value  | Description  |
|---|--|--|
| <pm-id></pm-id>                         | This field contains<br>the peripheral<br>identification.         | This field identifies the peripheral that supports the reported session pool.      |
| <prev-status></prev-status>             | MANB, ISTB,<br>INSV, CBSY.                                       | This field indicates the from state of the session pool.                           |
| <session_pool_name></session_pool_name> | Session pool name<br>as datafilled in<br>table OASESNPL.         | This field indicates the name of the session pool that went SYSB.                  |
| <session_pool_id></session_pool_id>     | Session pool id<br>number as<br>datafilled in table<br>OASESNPL. | This field indicates the identification number of the session pool that went SYSB. |
| <reason-text></reason-text>             | Audit failed. Failed message threshold exceeded.                 | This field identifies the reason why the session pool diagnostics failed.          |
| Maint_msg                               | 32 character<br>message sent from<br>session pool.               | Message sent from the session pool.  |

# Action

Consult the service node session pool application information provided by the service node vendor for specific recovery action.

# **Associated OM registers**

In OM Group SESNPOOL, register SPSYSB is pegged whenever a session pool goes SYSB.

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when a session pool is placed in the offlined state.

### Format

The format for log report OAIN503 follows:

OAIN503 mmmdd hh:mm:ss xxxx OFFL <pm-id> STATE: Change to <state> from <state> SN: <service node name> SND: OSNM <xxx> SESSPL: <sessnpool#> <session pool name> REASON TEXT: <reason-text> MAINT MSG: <maint-text>

## Example

An example of log report OAIN503 follows:

OAIN503 DEC08 11:04:11 1100 OFFL Session Pool State change to OFFL from MANB SN: BRTPH7F1 SNID: OSNM 28 SESSPL: 42 Branding\_1 Reason Text: Manual Action Maint Msg:

### **Field descriptions**

The following table explains each of the fields in the log report:

| (Sheet | 1 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field      | Value   | Description                                    |
|------------|---|--|
| mmmdd      | This field contains the current month and day.                      | This field contains the current month and day. |
| "hh:mm:ss" | This field contains the current time.                               | This field contains the current time.          |
| "xxxx"     | This field contains<br>the sequence<br>number of the log<br>report. | This field contains the sequence number.       |

# OAIN503 (end)

(Sheet 2 of 2)

| Field                                   | Value  | Description   |
|---|--|---|
| <pm-id></pm-id>                         | This field contains<br>the peripheral<br>identification.         | This field identifies the peripheral that supports the reported session pool.         |
| <prev-status></prev-status>             | MANB, UNEQ.  | This field indicates the from state of the session pool.                              |
| <session_pool_name></session_pool_name> | Session pool name<br>as datafilled in<br>table OASESNPL.         | This field indicates the name of the session pool that was offlined.                  |
| <session_pool_id></session_pool_id>     | Session pool id<br>number as<br>datafilled in table<br>OASESNPL. | This field indicates the identification number of the session pool that was offlined. |
| <reason-text></reason-text>             | Manual action.   | This field identifies the reason why the session pool was offline.                    |
| Maint_msg                               | 32 character<br>message sent from<br>session pool.               | Message sent from the session pool.   |

# Action

None

# Associated OM registers

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when a session pool is deleted from table OASESNPL.

### Format

The format for log report OAIN504 follows:

OAIN504 mmmdd hh:mm:ss xxxx UNEQ <pm-id> STATE: Change to <state> from <state> SN: <service node name> SND: OSNM <xxx> SESSPL: <sessnpool#> <session pool name> REASON TEXT: <reason-text> MAINT MSG: <maint-text>

## Example

An example of log report OAIN504 follows:

OAIN504 DEC08 11:04:11 1100 UNEQ Session Pool State change to UNEQ from OFFL SN: BRTPH7F1 SNID: OSNM 28 SESSPL: 42 Branding\_1 Reason Text: Session Pool Deleted Maint Msg:

### **Field descriptions**

The following table explains each of the fields in the log report:

| (Sheet | 1 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field      | Value   | Description                                    |
|------------|---|--|
| mmmdd      | This field contains the current month and day.                      | This field contains the current month and day. |
| "hh:mm:ss" | This field contains the current time.                               | This field contains the current time.          |
| "xxxx"     | This field contains<br>the sequence<br>number of the log<br>report. | This field contains the sequence number.       |

# OAIN504 (end)

(Sheet 2 of 2)

| Field                                   | Value  | Description  |
|---|--|--|
| <pm-id></pm-id>                         | This field contains<br>the peripheral<br>identification.         | This field identifies the peripheral that supports the reported session pool.                            |
| <session_pool_name></session_pool_name> | Session pool name as datafilled in table OASESNPL.               | This field indicates the name of the session pool that was deleted from OASESNPL.                        |
| <session_pool_id></session_pool_id>     | Session pool id<br>number as<br>datafilled in table<br>OASESNPL. | This field indicates the identification number<br>of the session pool that was deleted from<br>OASESNPL. |
| <reason-text></reason-text>             | Manual action.   | This field identifies the reason why the session pool was offline.                                       |
| Maint_msg                               | 32 character<br>message sent from<br>session pool.               | Message sent from the session pool.  |

# Action

None

# Associated OM registers

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when a session pool is placed in the MANB state.

### Format

The format for log report OAIN505 follows:

OAIN505 mmmdd hh:mm:ss xxxx MANB <pm-id> STATE: Change to <state> from <state> SN: <service node name> SND: OSNM <xxx> SESSPL: <sessnpool#> <session pool name> REASON TEXT: <reason-text> MAINT MSG: <maint-text>

## Example

An example of log report OAIN505 follows:

OAIN505 DEC08 10:56:45 1000 MANB Session Pool State change to MANB from INSV SN: BRTPH7F1 SNID: OSNM 28 SESSPL: 42 Branding\_1 Reason Text: Manual Action Maint Msg:

### **Field descriptions**

The following table explains each of the fields in the log report:

| (Sheet | 1 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field      | Value   | Description                                    |
|------------|---|--|
| mmmdd      | This field contains the current month and day.                      | This field contains the current month and day. |
| "hh:mm:ss" | This field contains the current time.                               | This field contains the current time.          |
| "xxxx"     | This field contains<br>the sequence<br>number of the log<br>report. | This field contains the sequence number.       |

### OAIN505 (end)

(Sheet 2 of 2)

| Field                                   | Value  | Description  |
|---|--|--|
| <pm-id></pm-id>                         | This field contains<br>the peripheral<br>identification.         | This field identifies the peripheral that supports the reported session pool.      |
| <prev-status></prev-status>             | OFFL, SYSB,<br>INSV, ISTB,<br>CBSY.                              | This field indicates the from state of the session pool.                           |
| <session_pool_name></session_pool_name> | Session pool name<br>as datafilled in<br>table OASESNPL.         | This field indicates the name of the session pool that went MANB.                  |
| <session_pool_id></session_pool_id>     | Session pool id<br>number as<br>datafilled in table<br>OASESNPL. | This field indicates the identification number of the session pool that went MANB. |
| <reason-text></reason-text>             | Manual action.   | This field identifies the reason why the session pool was set MANB.                |
| Maint_msg                               | 32 character<br>message sent from<br>session pool.               | Message sent from the session pool.  |

# Action

None

# **Associated OM registers**

In OM group SESNPOOL, register SPMANB is pegged whenever a session pool goes MANB.

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when a session pool comes in-service as a result of either a successful session pool audit or a manual action.

### Format

The format for log report OAIN506 follows:

| STATE:      | Change to <state> from <stat< th=""><th>e&gt;</th></stat<></state>               | e>                    |
|-------------|--|-----------------------|
| SN:         | <service name="" node=""></service>  | SND: OSNM <xxx></xxx> |
| SESSPL:     | <sesnpool#> <session na<="" pool="" th=""><th>ame&gt;</th></session></sesnpool#> | ame>                  |
| REASON TEXT | <pre>c <reason_text></reason_text></pre>   |                       |
| MAINT MSG:  | <maint-text></maint-text>  |                       |

# Example

An example of log report OAIN506 follows:

```
OAIN506 DEC08 10:56:14 0800 RTS Session Pool
State change to INSV from MANB
SN: BRTPH7F1 SNID: OSNM 28
SESSPL: 42 Branding_1
Reason Text: Manual Action
Maint Msg:
```

# **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field      | Value   | Description                                    |
|------------|---|--|
| mmmdd      | This field contains the current month and day.                      | This field contains the current month and day. |
| "hh:mm:ss" | This field contains the current time.                               | This field contains the current time.          |
| "xxxx"     | This field contains<br>the sequence<br>number of the log<br>report. | This field contains the sequence number.       |

# OAIN506 (end)

(Sheet 2 of 2)

| Field                                   | Value  | Description   |
|---|--|---|
| <pm-id></pm-id>                         | This field contains the peripheral identification.               | This field identifies the peripheral that supports the reported session pool.                               |
| <prev-status></prev-status>             | MANB, CBSY,<br>SYSB.   | This field indicates the from state of the session pool.  |
| <session_pool_name></session_pool_name> | Session pool name<br>as datafilled in<br>table OASESNPL.         | This field indicates the name of the session pool that is being returned to service.                        |
| <session_pool_id></session_pool_id>     | Session pool id<br>number as<br>datafilled in table<br>OASESNPL. | This field indicates the identification number<br>of the session pool that is being returned to<br>service. |
| <reason-text></reason-text>             | Manual action,<br>System action<br>node returned to<br>service.  | This field identifies the reason for the session pool returning to service.                                 |
| Maint_msg                               | 32 character<br>message sent from<br>session pool.               | Message sent from the session pool.   |

### Action

None

# Associated OM registers

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when an in-service session pool goes c-side busy due to the service node, that it is dependent upon, going out of service.

### Format

The format for log report OAIN507 follows:

| OAIN507 mmmdd hh:mm:ss xxxx CBSY <pm-< th=""><th>-id&gt;</th></pm-<> | -id> |
|--|------|
|--|------|

| STATE:              | Change to <state> from <state></state></state>                                   | >                     |
|---------------------|--|-----------------------|
| SN:                 | <service name="" node=""></service>  | SND: OSNM <xxx></xxx> |
| SESSPL:             | <sesnpool#> <session nam<="" pool="" th=""><th>ne&gt;</th></session></sesnpool#> | ne>                   |
| <b>REASON TEXT:</b> | <reason-text></reason-text>  |                       |
| MAINT MSG:          | <maint_text></maint_text>  |                       |

# Example

An example of log report OAIN507 follows:

OAIN507 DEC08 10:57:30 1500 CBSY Session Pool State change to CBSY from INSV SN: BRTPH7F1 SNID: OSNM 28 SESSPL: 42 Branding\_1 Reason Text: OSNM node out of service Maint Msg:

# **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field      | Value   | Description                                    |
|------------|---|--|
| mmmdd      | This field contains the current month and day.                      | This field contains the current month and day. |
| "hh:mm:ss" | This field contains the current time.                               | This field contains the current time.          |
| "xxxx"     | This field contains<br>the sequence<br>number of the log<br>report. | This field contains the sequence number.       |

### OAIN507 (end)

(Sheet 2 of 2)

| Field                                   | Value  | Description   |
|---|--|---|
| <pm-id></pm-id>                         | This field contains<br>the peripheral<br>identification.         | This field identifies the peripheral that supports the reported session pool.             |
| <session_pool_name></session_pool_name> | Session pool name<br>as datafilled in<br>table OASESNPL.         | This field indicates the name of the session pool that went c-side busy.                  |
| <session_pool_id></session_pool_id>     | Session pool id<br>number as<br>datafilled in table<br>OASESNPL. | This field indicates the identification number of the session pool that went c-side busy. |
| <reason-text></reason-text>             | OSNM node out of service.  | This field identifies the reason for the session pool going C-side busy.                  |
| Maint_msg                               | 32 character<br>message sent from<br>session pool.               | Message sent from the session pool.   |

## Action

Determine the reason for the service node going out of service. Once the service node comes into service, the session pool, if left in the CBSY state, will automatically be returned to service.

# **Associated OM registers**

In OM group SESNPOOL, register SPCBSY is pegged whenever a session pool goes CBSY.

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when the subscriber on-hook timer expires, and the other subscribers' on-hook timers and hook status information are evaluated to determine if the call sanity timer should be initiated. The on-hook timer itself does not take the call down. However, if the call sanity timer expires, the call is taken down.

### Format

The format for log report OAIN600 follows:

| OAIN600 JAN | N24 07:46:17 8701 I           | INFO ON-                                      | -HOOK TIMER EXPIRED                                  |
|-------------|-------------------------------|---|--|
| CALLID:     | <callid></callid>             |   |  |
| SN:         | <node name=""></node>         | SNID:   | <node id=""></node>                                  |
| SNVL:       | <vl circuit="" id=""></vl>    |   |  |
| FN:         | <function name=""></function> | SESSPL:                                       | <pre><pool id=""> <pool name=""></pool></pool></pre> |
| PTY:        | <party></party>               | <circuit i<="" td=""><td>d&gt;</td></circuit> | d>   |

## Example

In the following log report, the on-hook timer associated with the originator expired. The originator's facility is represented in datafill as incoming trunk BELLIC 34. The subscriber was connected to the NAV listing services node (OSN 6). In this example, the call had been routed to the Yellow\_Pages function and served by an agent associated with the Listing\_Services session pool (session pool number 4).

| OAIN600 JAN | 24 07:46:17 8701 INF | O ON-HOOK TIMER EXPIRED    |
|-------------|----------------------|----------------------------|
| CALLID:     | 0302 0011            |                            |
| SN:         | NAV_LISTING_SVCS     | SNID: OSN 6                |
| SNVL:       | CKT OSSAINVL 22      |                            |
| FN:         | YELLOW_PAGES         | SESSPL: 4 LISTING_SERVICES |
| PTY:        | CALLING              | CKT BELLIC 34              |

### OAIN600 (continued)

### **Field descriptions**

The following table explains each of the fields in the log report:

| Field                             | Value                                      | Description                                       |
|-----------------------------------|--|---|
| CALLID: <callid></callid>         | 0000 0000toFFFF<br>FFFF                    | DMS Call Identifier                               |
| SN: <node name=""></node>         | Defined in Table<br>OANODINV<br>(NODENAME) | OSSAIN service node identifier                    |
| SNID: <node id=""></node>         | Defined in Table<br>OANODINV<br>(NODEID)   | OSSAIN service node identifier                    |
| SNVL: <vl circuit="" id=""></vl>  | Defined in Table<br>OAVLMAP<br>(VOICENUM)  | OSSAIN service node voice link                    |
| FN: <function name=""></function> | Defined in Table<br>OAFUNDEF<br>(FUNCNAME) | Function name currently associated with the call  |
| SESSPL: <pool id=""></pool>       | Defined in Table<br>OASESNPL<br>(SESNPLID) | Session Pool Identifier                           |
| <pool name=""></pool>             | Defined in Table<br>OASESNPL<br>(SESNPLID) | Session Pool Name                                 |
| PTY: <party></party>              | CALLING,CALLED                             | Identifies which party was released from the call |
| <circuit id=""></circuit>         | Defined in Table<br>TRKMEM<br>(EXTRKNM)    | Identifies the circuit that was released          |

### Action

Check the on-hook sanity timer value for the session pool specified. Increase the value if it is insufficient. If sufficient, check the service node logic associated with the session pool to ensure that it is not inadvertantly holding the connection to the subscriber.

Log reports 1-163

# OAIN600 (end)

# **Associated OM registers**

### **OAIN601**

#### **Explanation**

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log under one of two conditions:

- when the call sanity timer expires and the service node and its associated facilities (for example, voice link) are disconnected and the call is taken down
- when the queued sanity timer expires, the call is taken down

#### Format

The format for log report OAIN601 follows:

OAIN601 JAN24 07:46:17 8701 INFO CALL SANITY TIMER EXPIRED

| CALLID: | <call1d></call1d>             |        |   |
|---------|-------------------------------|--------|---|
| SN:     | <node name=""></node>         | SNID:  | <node id=""></node>                         |
| SNVL:   | <vl circuit="" id=""></vl>    |        |   |
| FN:     | <function name=""></function> | SESSPL | : <pool id=""> <pool name=""></pool></pool> |

#### Example

In the following example, the Network Applications Vehicle (NAV) Listing Services Node (OSN 6) was disconnected and taken down due to the call sanity timer expiring. In this example, the call is routed to the Yellow\_Pages function and served by an agent associated with the Listing\_Services session pool (session pool number 4).

| OAIN601 JAN | 24 07:46:17 8701 IN | IFO CALL | SANITY   | TIMER E   | XPIRED |
|-------------|---------------------|----------|----------|-----------|--------|
| CALLID:     | 0302 0011           |          |          |           |        |
| SN:         | NAV_LISTING_SVCS    | SNID:    | OSN 6    |           |        |
| SNVL:       | CKT OSSAINVL 22     |          |          |           |        |
| FN:         | YELLOW_PAGES        | SESSPI   | L: 4 LIS | STING_SER | RVICES |

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field                             | Value                                      | Description                                      |
|-----------------------------------|--|--|
| CALLID: <callid></callid>         | 0000 0000 to FFFF<br>FFFF                  | DMS Call Identifier                              |
| SN: <nodename></nodename>         | Defined in Table<br>OANODINV<br>(NODENAME) | OSSAIN service node identifier                   |
| SNID: <node id=""></node>         | Defined in Table<br>OANODINV<br>(NODEID)   | OSSAIN service node identifier                   |
| SNVL: <vl circuit="" id=""></vl>  | Defined in Table<br>OAVLMAP<br>(VOICENUM)  | OSSAIN service node voice link                   |
| FN: <function name=""></function> | Defined in Table<br>OAFUNDEF<br>(FUNCNAME) | Function name currently associated with the call |
| SESSPL: <pool id=""></pool>       | Defined in Table<br>OASESNPL<br>(SESNPLID) | Session Pool Identifier                          |
| <pool name=""></pool>             | Defined in Table<br>OASESNPL<br>(SESNPLID) | Session Pool Name                                |

### Action

If a session pool is specified in the log, the call sanity timer (while at service node) has expired. Check the call sanity timer value for the session pool specified. Increase the value if it is insufficient. If sufficient, check the service node logic associated with the specified session pool.

If the session pool is NIL, the queued sanity timer has expired. Check the states of the session pools that serve the call queue associated with the function indicated in the log.

### **Associated OM registers**

### **OAIN602**

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when a service node requests a connection to a logical voice channel that the switch thinks is already in use. The switch will use positive assertion and take down the previous voice connection and make the new connection, per the SNs request.

#### Format

The format for log report OAIN602 follows:

OAIN602 JAN24 07:46:17 8701 INFO VOICE CKT IN USE SN: <node name> SNVL: <vl circuit id>

### Example

In the following example, service node NODE\_1 requested a voice connection to logical voice channel 30, (which table OAVLMAP mapped to CKT OSSAINVL 24), and the switch thought the voice circuit was already in use. The switch will use positive assertion and take down the previous voice connection and make the new connection, per the SNs request.

OAIN602 JAN24 07:46:17 8701 INFO VOICE CKT IN USE SN: NODE\_1 SNVL: CKT OSSAINVL 24

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field                            | Value                                      | Description                    |
|----------------------------------|--|--------------------------------|
| SN: <node name=""></node>        | Defined in Table<br>OANODINV<br>(NODENAME) | Node Name                      |
| SNVL: <vl circuit="" id=""></vl> | Defined in Table<br>OAVLMAP<br>(VOICENUM)  | OSSAIN service node voice link |

### OAIN602 (end)

### Action

No immediate action.

*Note:* For post-analysis, one possibility for receiving this log is that the Release Voice message or the Call End message for the previous call was lost, causing the DMS to not release the voice link. Frequent occurrences of this log may indicate the transport mechanism for messages between the switch and the service node is unreliable.

## **Associated OM registers**

### **OAIN603**

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when a service node requests a connection to a logical voice channel that is in the busy state. The switch will report the error to the service node at which time it can select a new voice channel.

#### Format

The format for log report OAIN603 follows:

OAIN603 JAN24 07:46:17 8701 INFO VOICE CKT BSY SN: <node name> SNVL: <vl circuit id>

## Example

In the following log report, service node NODE\_1 requested a voice connection to logical voice channel 30, (which table OAVLMAP mapped to CKT OSSAINVL 24), and the voice circuit is in a busy state at the MAP. The switch will report the error to the service node at which time it can select a new voice channel.

OAIN603 JAN24 07:46:17 8701 INFO VOICE CKT BSY SN: NODE\_1 SNVL: CKT OSSAINVL 24

### **Field descriptions**

The following table explains each of the fields in the log report:

| Field                            | Value                                      | Description                    |
|----------------------------------|--|--------------------------------|
| SN: <node name=""></node>        | Defined in Table<br>OANODINV<br>(NODENAME) | Node Name                      |
| SNVL: <vl circuit="" id=""></vl> | Defined in Table<br>OAVLMAP<br>(VOICENUM)  | OSSAIN service node voice link |

#### Action

The craftsperson should post the voice circuit at the MAP and bring it into service.

Log reports 1-169

# OAIN603 (end)

# **Associated OM registers**

### **OAIN604**

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when a node attempts to transfer to an operator at any time other than initial call setup.

#### Format

The format for log report OAIN604 follows:

OAIN604 JAN24 07:46:17 8701 INFO Invalid Transfer Attempt FN: <function>

### Example

In the following example, a node attempts to transfer to an operator after the call had been previously floated.

OAIN604 JAN24 07:46:17 8701 INFO Invalid Transfer Attempt FN: NODE\_TO\_OPR

### **Field descriptions**

The following table explains each of the fields in the log report:

| Field                     | Value                                    | Description     |
|---------------------------|--|-----------------|
| FN: <function></function> | Defined in Table<br>OAFUNDEF<br>(FUNCID) | OSSAIN function |

#### Action

The craftsperson should change the function in table OAFUNDEF to something other than operator.

### **Associated OM registers**

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when data communications receives a message with an Open Automated Protocol (OAP) version that is not optimal. The originating service node should be upgraded to a supported OAP version as needed.

### Format

The format for log report OAIN605 follows:

OAIN605 JAN24 07:46:17 8701 INFO INVALID PROTOCOL VERSION MESSAGE PROTOCOL RELEASE: <release> MESSAGE PROTOCOL INCREMENT: <increment> SENDERS PROTOCOL RELEASE: <release> SENDERS PROTOCOL INCREMENT: <increment> SWITCH PROTOCOL RELEASE: <release> SWITCH PROTOCOL INCREMENT: <increment> NETWORK ADDRESS: <network address> MESSAGE: <message data>

### Example

An example of log report OAIN605 follows:

```
OAIN605 JAN24 07:46:17 8701 INFO INVALID PROTOCOL VERSION
MESSAGE PROTOCOL RELEASE: 1
MESSAGE PROTOCOL INCREMENT: 2
SENDERS PROTOCOL RELEASE: 1
SENDERS PROTOCOL INCREMENT: 2
SWITCH PROTOCOL RELEASE: 5
SWITCH PROTOCOL INCREMENT: 0
NETWORK ADDRESS : 47 55 1 2 : 7001
MESSAGE:
05000003300180002010201C02F620128230001
40110F0005006400000941101AB0F2205F63301
501FFFF2FDE0160BCDF230155F0F022FFFF
```

## OAIN605 (end)

## Field descriptions

The following table explains each of the fields in the log report:

| Field  | Value  | Description  |
|--|--|--|
| MESSAGE PROTOCOL<br>RELEASE: <release></release>       | 0 to 255   | Message protocol release number                          |
| MESSAGE PROTOCOL<br>INCREMENT: <increment></increment> | 0 to 255   | Message protocol increment number                        |
| SENDERS PROTOCOL<br>RELEASE: <release></release>       | 0 to 255   | Senders protocol release number                          |
| SENDERS PROTOCOL<br>INCREMENT: <increment></increment> | 0 to 255   | Senders protocol increment number                        |
| SWITCH PROTOCOL<br>RELEASE: <release></release>        | 0 to 255   | Switch OAP release                                       |
| SWITCH PROTOCOL<br>INCREMENT: <increment></increment>  | 0 to 255   | Switch's OAP increment                                   |
| NETWORK ADDRESS:<br><network address=""></network>     | Dependent on<br>transport<br>protocol.{UDP} <ip<br>addr&gt;<port#>IP<br/>Addr - four numeric<br/>values. Numeric<br/>values range from<br/>0 to 255.Port# -<br/>numeric value<br/>range from 256 to<br/>32, 767.</port#></ip<br> | Network address information provided by incoming message |
| MESSAGE: <message data=""></message>                   | Message  | OAP message causing protocol version violation           |

## Action

The session pool listed on the identified service node is running at an OAP version that cannot be supported by the OAP version running on the DMS. The session pool must be disabled and upgraded to a compatible OAP version.

### **Associated OM registers**

ORCVRTFL, ONRCRTFL, and OSRCRTFL

# **OAIN606**

#### **Explanation**

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when data communications cannot determine where to route a service node originated message. This can be caused by the following reasons.

- Invalid message class identifier
- Invalid message length
- Invalid operation offset
- Invalid source node identifier
- Invalid network address
- Invalid session pool identifier
- Invalid session identifier
- Invalid session pool state
- Invalid node state
- Invalid message size
- TLI Transmit failure
- Unable to deliver message
- Session pool not supported by node
- Unable to forward message to destination
- Unable to forward message to maintenance application
- Invalid solicitor number in message
- Unsolicited task already running
- Buffer unavilable
- Destination's queue at maximum depth

### Format

The format for log report OAIN606 follows:

### OAIN606 (continued)

OAIN606 JAN24 07:46:17 8701 INFO UNDELIVERABLE MESSAGE MESSAGE PROTOCOL RELEASE: <release> MESSAGE PROTOCOL INCREMENT: <increment> SENDERS PROTOCOL RELEASE: <release> SENDERS PROTOCOL INCREMENT: <increment> NODE NAME: <nodename> NODE ID: <nodeid> SESSION POOL NAME: <sessplnm> SESSION POOL ID: <sessplid> SESSION ID : <sessionid> MESSAGE CLASS: <msgclass> MESSAGE CLASS ID: <msgclassid> NETWORK ADDRESS: <network address> REASON: <failure reason> MESSAGE: <message data>

### Example

An example of log report OAIN606 follows:

RTPC07BZ OAIN606 MAR12 13:56:45 8500 INFO UNDELIVERABLE MESSAGE MESSAGE PROTOCOL RELEASE: 5 MESSAGE PROTOCOL INCREMENT: 0 SENDERS PROTOCOL RELEASE: 5 SENDERS PROTOCOL INCREMENT: 0 NODE NAME: TO RTPV NODE ID: 70 SESSION POOL NAME: SESSION POOL ID: 0 SESSION ID: 0 MESSAGE CLASS: OSAC NODE CLASS MESSAGE CLASS ID: 22 NETWORK ADDRESS : 47 245 9 1 : 5290 REASON: MSG RECEIVED AT UNEXPECTED DESTINATION ADDRESS MESSAGE: 160000036001200005000546006400FF0082A1 26000202640102020B0282041A0005E016002000 00FF00FF00FF00FF00FF00FF00FF00FF00FF 00FF00FF00FF00FF00FF00FF00FF00FF00FF

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field  | Value  | Description  |
|--|--|--|
| MESSAGE PROTOCOL<br>RELEASE: <release></release>       | 0 to 255   | Message protocol release number                                |
| MESSAGE PROTOCOL<br>INCREMENT: <increment></increment> | 0 to 255   | Message protocol<br>increment number                           |
| SENDERS PROTOCOL<br>RELEASE: <release></release>       | 0 to 255   | Senders protocol release number                                |
| SENDERS PROTOCOL<br>INCREMENT: <increment></increment> | 0 to 255   | Senders protocol<br>increment number                           |
| NODE NAME:<br><nodename></nodename>                    | Defined in Table OANODINV<br>(NODENAME)  | Node name  |
| NODE ID: <nodeid></nodeid>                             | Defined in Table OANODINV (NODEID)   | Node identifier  |
| SESSION POOL NAME:<br><sessplnm></sessplnm>            | Defined in Table OASESNPL<br>(SESNPLNM)  | Session pool name  |
| SESSION POOL ID:<br><sessplid></sessplid>              | Defined in Table OASESNPL<br>(SESNPLID)  | Session pool identifier  |
| SESSION ID: <sessionid></sessionid>                    | 0 to 1022  | Session identifier   |
| MESSAGE CLASS:<br><msgclass></msgclass>                | NODE, SESNPL, CALLP  | Class of message   |
| MESSAGE CLASS ID:<br><msgclassid></msgclassid>         | #01, #03, #04  | Class of message identifier                                    |
| NETWORK ADDRESS:<br><network address=""></network>     | Dependent on transport<br>protocol.{UDP} <ip addr=""> <port#>IP<br/>Addr - four numeric values. Numeric<br/>values range from 0 to 255.Port# -<br/>numeric value range from 256 to 32,<br/>767.</port#></ip> | Network address<br>information provided by<br>incoming message |

# OAIN606 (continued)

| Field                                      |         | lue  | Description        |
|--|---------|--|--------------------|
| REASON: <failure reason=""></failure>      | •       | INVALID MESSAGE CLASS<br>IDENTIFIER                  | Reason for failure |
|  | ٠       | INVALID MESSAGE LENGTH                               |                    |
|  | •       | INVALID OPERATION OFFSET                             |                    |
|  | •       | INVALID SOURCE NODE                                  |                    |
|  | •       | MSG RECEIVED WITH<br>UNEXPECTED SOURCE<br>ADDRESS    |                    |
|  | •       | MSG RECEIVED AT<br>UNEXPECTED DESTINATION<br>ADDRESS |                    |
|  | •       | INVALID SESSION POOL<br>IDENTIFIER                   |                    |
|  | •       | INVALID SESSION IDENTIFIER                           |                    |
|  | •       | INVALID SESSION POOL STATE                           |                    |
|  | •       | INVALID NODE STATE                                   |                    |
|  | •       | INVALID MESSAGE SIZE                                 |                    |
|  | ٠       | TLI TRANSMIT FAILURE                                 |                    |
|  | •       | UNABLE TO DELIVER MESSAGE                            |                    |
|  | •       | SESSION POOL NOT<br>SUPPORTED BY NODE                |                    |
|  | •       | UNABLE TO FORWARD MSG TO DESTINATION                 |                    |
|  | •       | UNABLE TO FORWARD MSG TO<br>MTC APP                  |                    |
|  | •       | INVALID SOLICITOR NUMBER IN<br>MESSAGE               |                    |
|  | •       | UNSOLICITED TASK ALREADY<br>RUNNING                  |                    |
|  | •       | BUFFER UNAVAILABLE                                   |                    |
|  | •       | DESTINATION'S QUEUE AT MAX<br>DEPTH                  |                    |
| MESSAGE: <message<br>data&gt;</message<br> | Message |  | OAP message        |

# Action

Action to take depends on the failure reason as noted in the following:

- 1. Invalid message class identifier This can occur if a message has been corrupted or the sending software is using an invalid message class identifier. Message corruption may be suspected if the log is being generated for other nodes on the same LAN subnet. If this is the only node causing the log to be generated, the node's software should be investigated to verify that it is correctly transmitting OAP messages.
- 2. Invalid message length This can occur if a message has been corrupted or the sending software is incorrectly calculating the message length. Refer to point 1. above for action to be taken.
- 3. Invalid operation offset Either the message has been corrupted or the offset value provided by the service node was incorrectly calculated. Refer to point 1. for action to be taken.
- 4. Invalid source node identifier Either the message has been corrupted or the service node has provided an incorrect node identifier. Refer to point 1. for action to be taken.
- 5. Msg received with unexpected source address Indicates that the source IP address, port, or both in the incoming message do not match switch datafill for the node whose node name and ID are shown in the log. The NETWORK ADDRESS field shows the actual source address.

The most likely explanation is incorrect datafill for the node's IP address at the switch at which the log is generated. Another possibility is that network security may have been compromised, and a rogue node may be sending OAP messages to the switch.

Check parallel datafill between the node that sent the message and the switch at which the log was generated. Check for logs or alarms at the node that sent the message. If the problem is not resolved, contact the next level of support.

6. Msg received at unexpected destination address - Indicates that a message incoming from the node whose name and ID are shown in the log was delivered to a core IP address other than the one datafilled in the switch for the far-end node. The NETWORK ADDRESS in the log is the actual destination address at which the message was received.

The most likely explanation is that the node that sent the message is configured to have the wrong one of the core's IP addresses. If the switch where the log was generated is datafilled to use an EIU for messaging with the far-end node, the IP address in table IPNETWRK at the switch should be configured in the far-end node as the switch address. If the switch is datafilled to use XA-Core Ethernet interface for messaging with the node,

### OAIN606 (continued)

the CM IP address datafilled against the node in table OANODINV in the switch should be configured in the node as the switch IP address. Another possibility is that network security may have been compromised in a way that causes messages to be misrouted.

Refer to point 5. for action to be taken.

- 7. Invalid session pool identifier Either the message has been corrupted or the service node has provided an unregistered session pool identifier. If message corruption is not suspected, verify that the session pool has been datafilled in the DMS switch.
- 8. Invalid session identifier Either the message has been corrupted or the session identifier provided by the node is incorrect. If message corruption is not suspected, the invalid session identifier reason may be produced by the service node specifying a session identifier that exceeds the current maximum session limit for the node. This indicates a service node software error. Refer to point 1. for action to be taken.
- 9. Invalid session pool state The session pool identified by the message is in an invalid state for sending or receiving a message. The session pool may not have successfully processed a maintenance busy message. This would cause the state maintained by the session pool to differ from the state maintained by the switch.
- 10. Invalid node state The service node identified by the message is in an invalid state for sending or receiving a message. The service node may not have successfully processed a maintenance busy message. This would cause the state maintained by the service node to differ from the state maintained by the switch.
- 11. Invalid message size The message does not provide the minimum amount of information to be processed by data communications. This may be caused by a service node sending a malformed message or the message has been corrupted. Refer to point 1. for action to be taken.
- 12. TLI transmit failure The Transport Layer Interface is having problems sending messages. Check for logs concerning the TLI specifically.
- 13. Unable to deliver message Unable to determine why a message cannot be sent. Check for other logs.
- 14. Session pool not supported by node The session pool identified by the message is not datafilled for the service node specified by the message. Check the service node to verify that it is using the correct session pool identifier and node identifier.
- 15. Unable to forward message to destination Either an internal DMS messaging failure has occurred or an unsolicited maintenance message has been received from a service node or session pool. Verify that the

#### OAIN606 (continued)

indicated service node or session pool is properly responding to DMS originated maintenance messages. In the case of internal messaging failure, SWERs should be checked for additional information.

- 16. Unable to forward msg to mtc app The base maintenance application is having problems processing messages. Check for other logs.
- 17. Invalid solicitor number in message The solicitor number in the incoming maintenance message is invalid. Manually perform the maintenance action again.
- 18. Unsolicited task already runing There is an outstanding maintenance action on the node or session pool. Another maintenance action cannot be taken. The node or session pool should perform the maintenance after the previous one is complete.
- 19. Buffer unavailable There are no message buffers to process the incoming or outgoing message. The node or session pool should resend the request if possible or the maintenance action should be redone.
- 20. Destination's queue at max depth:
  - Cannot queue the log on the node -This only happens when the maximum queue depth is reached.
  - Cannot queue the unsol msg on the node This only happens when the maximum queue depth is reached.
  - Cannot queue the log on the session pool This only happens when the maximum queue depth is reached.
  - Cannot queue the alarm on the session pool This only happens when the maximum queue depth is reached.
  - Cannot queue the unsol msg on the node The site should contact their next level of support if the logs persist.

*Note:* For post-analysis, if message corruption is suspected, the data path between the DMS switch and service node must be investigated. If message corruption is not suspected, switch and service node datafill should be examined to verify that session pools are datafilled correctly. If datafill appears to be correct, the service nodes software must be investigated.

## **Associated OM registers**

This log is associated with the following OM registers:

- ORCVRTFL
- ONRCRTFL

## OAIN606 (end)

- OSRCRTFL
- OMSGRCFL
- ONMSGRFL
- OSMSGRFL

## Log history

## SN07 (DMS)

Failure reason "Invalid network address" removed, and new failure reasons "Msg received with unexpected source address" and "Msg received at unexpected destination address" added for feature A00005160, OSSAIN XA-Core Data Messaging Capacity Enhancements.

#### CSP18

Description of failure reason "Destination's queue at max depth" updated according to CR Q00480370.

#### **Explanation**

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when an error is encountered by data communications while interfacing with the data transport software. Possible reasons for failure include:

- TLI Transmit Failure the TLI (for EIU) data transport software suffered an unrecoverable error while processing a request from data communications.
- XAETHR transmit failure the XA-Core Ethernet interface data transport software suffered an unrecoverable error while processing a request from data communications.

## Format

The format for log report OAIN607 follows:

OAIN607 JAN24 07:46:17 8701 INFO DATA TRANSPORT INTERFACE ERROR NODE NAME: <nodename> NODE ID: <nodeid> SESSION POOL NAME: <sessplnm> SESSION POOL ID: <sessplid> MESSAGE CLASS: <msgclass> MESSAGE CLASS ID: <msgclassid> NETWORK ADDRESS: <network address> REASON: <failure reason> MESSAGE: <msgtext>

## Example

An example of log report OAIN607 follows:

## OAIN607 (continued)

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field  | Value  | Description  |
|--|--|--|
| NODE NAME: <nodename></nodename>                   | Defined Table<br>OANODINV<br>(NODENAME)  | Node name  |
| NODE ID: <nodeid></nodeid>                         | Defined Table<br>OANODINV (NODEID)   | Node identifier  |
| SESSION POOL NAME:<br><sessplnm></sessplnm>        | Defined in Table<br>OASESNPL<br>(SESNPLNM)   | Session pool name  |
| SESSION POOL ID:<br><sessplid></sessplid>          | Defined in Table<br>OASESNPL<br>(SESNPLID)   | Session pool identifier                                  |
| MESSAGE CLASS:<br><msgclass></msgclass>            | NODE, SESNPL, CALLP  | Class of message   |
| MESSAGE CLASS ID:<br><msgclassid></msgclassid>     | #01, #04, #05  | Class of message identifier                              |
| NETWORK ADDRESS:<br><network address=""></network> | Dependent on transport<br>protocol.{UDP} <ip addr=""><br/><port#>IP Addr - four<br/>numeric values. Numeric<br/>values range from 0 to<br/>255.Port# - numeric<br/>value range from 256 to<br/>32, 767.</port#></ip> | Network address information provided by incoming message |
| REASON: <failure reason=""></failure>              | <ul> <li>Processing error</li> <li>TLI transmit failure</li> <li>Bad endpoint condition</li> <li>XAETHR transmit<br/>failure</li> </ul>  | Reason for failure                                       |
| MESSAGE: <message data=""></message>               | Message  | OAP message  |

## Action

The InTer Network (ITN) subsystem operates the IP protocol for communication between SuperNode and third-party host computers by the Ethernet interface units (EIU). The following ITN logs may be generated by the events that cause an OAIN607 log. The ITN logs should be consulted to determine action(s) to take when the logs are received. Relevant ITN logs include:

- ITN 301 The Internet Protocol (IP) subsystem generates this report when an incoming IP packet cannot be delivered to its destination because the route to the destination is unknown.
- ITN 302 The Internet Protocol (IP) subsystem generates this report when an incoming IP packet cannot be delivered to its destination because the route to the destination is unavailable.
- ITN 305 The Internet Protocol (IP) subsystem generates this report when an incoming IP packet cannot be delivered to its destination due to IP screening.
- ITN 310 The Internet Protocol (IP) subsystem generates this report when the subsystem fails to transmit a message originating on the node due to IP screening.
- ITN 312 The Internet Protocol (IP) subsystem generates this report when it fails to transmit a message originating on the node because the route to the destination is unknown.
- ITN 313 The Internet Protocol (IP) subsystem generates this report when it fails to transmit a message generated on the node because the route to the destination is unavailable.

*Note:* For post-analysis, events that cause an OAIN607 error to be generated may also cause the transport layer interface and lower software sub-systems to generate a SWERR. These should be investigated in order to determine the reason for the error.

#### **XAETHR transmit failure - explanation and action**

"XAETHR transmit failure" is a failure reason added at SN07. This value indicates that the OSSAIN attempted to send a message using the XA-Core Ethernet interface, but the lower-layer transport software reported back to OSSAIN that the message could not be sent. The cause of the problem is more likely to be in lower-layer software or hardware than in OSSAIN code.

Investigate the underlying transport facilities. Check logs for any that might suggest the root cause of the transport failure. Investigate at MAP levels MAPCI;MTC;XAC;IO and MAPCI;MTC;XAC;ETHR. The peg counts in CI XAIPTOOL may be useful

*Note:* OSSAIN does not generate an OAIN607 log if the reason for failure to send an OAP message via XA-Core Ethernet interface is that no route exists for the source IP address. In this case, the problem is definitely with the underlying transport, and OAIN logs would only clutter up the reporting

## OAIN607 (end)

and possibly make it more difficult to troubleshoot the underlying problem. The underlying transport always raises an XAC alarm when there is no route for messages from a CM host IP address.

## **Associated OM registers**

The following registers are associated with log OAIN607:

- OMSGSNFL
- ONMSGSFL
- OSMSGSFL

## Log history

### SN07 (DMS)

Failure reason "XAETHR transmit failure" added for feature A00005160, OSSAIN XA-Core Data Messaging Capacity Enhancements.

"Log history" section added.

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when data communications message tracing has been enabled for the session pool or node specified by an incoming or outgoing call processing class message.

## Format

The format for log report OAIN608 follows:

OAIN608 JAN24 07:46:17 8701 INFO OAP CALLP MSG DUMP <msgdir> **CLASSID:** <msgclassid> **OPTIONS:** <options> LENGTH: <msglen> **OFFSET:** <msgoffset> <release> <increment> MSG REL: MSG INC: SND REL: <release> SND INC: <increment> SRC NODEID: <source\_node\_id> SEQ NUM: <seqnum> **DEST NODEID:** <dest node id> FN ID: <funcid> POOLID: <sessplid> <sessionid> <callid> SESN ID: CALLID: MSG LEN: <length> <operation request name> <msgtype> **OPERATION ID:** <opid> INVOKE ID: <invokeid> OP LEN: <oplen> ARG LEN: <arglen> <dbname> <dbdata> <opdata>

## Example

In this example, a call processing class trace log is generated due to an incoming call processing class message.

## OAIN608 (continued)

```
OAIN608 JAN24 07:46:17 8701 INFO OAP CALLP MSG DUMP
OAP IC CALLP CLASS MESSAGE
CLASSID: 5 OPTIONS: 0
LENGTH: 48 OFFSET: 26
MSG REL: 1 MSG INC: 0
SND REL: 1 SND INC: 0
SRC NODEID: 0 SEQ NUM: 1
DEST NODEID: 32
FN ID: 10 POOLID: 0
SESN ID: 0 CALLID: FFFF FFFF
MSG LEN: 27
Invoke Session Initiation Request
OPERATION ID: 060F INVOKE ID: 010D
OP LEN: 24 ARG LEN: 12
Network Service DB
0F01 0200 0500
Charge Status DB
0A01 0200 FF00
82A1180002020D0102020F0682040C000F01020005000A010200FF00
```

## **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field  | Value                                    | Description                              |
|--|--|--|
| <msgdir></msgdir>                                | Variable                                 | Describes class and direction of message |
| CLASSID: <msgclassid></msgclassid>               | #01, #04, #05                            | Class of message identifier              |
| OPTIONS: <options></options>                     | 0 to 32, 767                             | Message options data                     |
| LENGTH: <msglen></msglen>                        | 0 to 32, 767                             | Length                                   |
| OFFSET: <msgoffset></msgoffset>                  | 0 to 32, 767                             | Offset                                   |
| MSG REL: <release></release>                     | 0 to 255                                 | Message protocol release number          |
| MSG INC: <increment></increment>                 | 0 to 255                                 | Message protocol increment number        |
| SND REL: <release></release>                     | 0 to 255                                 | Senders protocol release number          |
| SND INC: <increment></increment>                 | 0 to 255                                 | Message protocol increment number        |
| SRC NODEID:<br><source_node_id></source_node_id> | Defined in Table<br>OANODINV<br>(NODEID) | Source node identifier                   |

## OAIN608 (continued)

| (Sheet | 2 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field   | Value                                      | Description                 |
|---|--|-----------------------------|
| SEQ NUM: <seqnum></seqnum>                    | 0 to 32, 767                               | Sequence number             |
| DEST NODEID:<br><dest_node_id></dest_node_id> | Defined in Table<br>OANODINV<br>(NODEID)   | Destination node identifier |
| FN ID: <funcid></funcid>                      | Defined in Table<br>OAFUNDEF<br>(FUNCID)   | Function Id                 |
| POOLID: <sessplid></sessplid>                 | Defined in Table<br>OASESNPL<br>(SESNPLID) | Session pool identifier     |
| SESSION ID: <sessionid></sessionid>           | 0 to 1022                                  | Session identifier          |
| CALLID: <callid></callid>                     | #00000000 to<br>#FFFFFFF                   | Call Id                     |
| MSG LEN: <length></length>                    | 0 to 32, 767                               | Message length              |
| <msgtype></msgtype>                           | Refer to OAP Spec                          | Message type                |
| <operation name="" request=""></operation>    | Refer to OAP Spec                          | Operation request name      |
| OPERATION ID: <opid></opid>                   | Refer to OAP Spec                          | Operation Id                |
| INVOKE ID: <invokeid></invokeid>              | #0100 to #FFFF                             | Invoke Id                   |
| OP LEN: <oplen></oplen>                       | 0 to 32, 767                               | Operation length            |
| ARG LEN: <arglen></arglen>                    | 0 to 32, 767                               | Argument length             |
| <dbname></dbname>                             | Refer to OAP Spec                          | Data block name             |
| <dbdata></dbdata>                             | Refer to OAP Spec                          | Data block hex data         |
| <opdata></opdata>                             | Refer to OAP Spec                          | Operation hex data          |

## Action

This log is generated when data communications processes a call processing class message specifying a session pool or node has been selected for tracing via the OSSAIN command increment. This log displays the OAP message in a formatted manner consisting of the call processing class header and formatted operation data. The operation data area will vary depending on the message contents.

## OAIN608 (end)

The text area at the beginning of the log will indicate whether the message was originated from the DMS (OG - outgoing) or from a service node (IC - incoming).

## Associated OM registers

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when data communications message tracing has been enabled for the node specified by an incoming or outgoing node class message.

#### Format

The format for log report OAIN609 follows:

OAIN609 JAN24 07:46:17 8701 INFO OAP NODE MSG DUMP

| <msgdir></msgdir>    |   |                  |                         |
|----------------------|---|------------------|-------------------------|
| CLASSID:             | <msgclassid></msgclassid>                             | <b>OPTIONS</b> : | <options></options>     |
| LENGTH:              | <msglen></msglen>                                     | OFFSET:          | <msgoffset></msgoffset> |
| MSG REL:             | <release></release>                                   | MSG INC:         | <increment></increment> |
| SND REL:             | <release></release>                                   | SND INC:         | <increment></increment> |
| SRC NODEID:          | <source_node_id></source_node_id>                     | SEQ NUM:         | <seqnum></seqnum>       |
| DEST NODEID:         | <dest_node_id></dest_node_id>                         |                  |                         |
| MSG LEN:             | <length></length>                                     |                  |                         |
| <msgtype></msgtype>  | <pre><operation pre="" request<=""></operation></pre> | name>            |                         |
| <b>OPERATION ID:</b> | <opid></opid>   | INVOKE ID:       | <invokeid></invokeid>   |
| OP LEN:              | <oplen></oplen>                                       | ARG LEN:         | <arglen></arglen>       |
| <dbname></dbname>    |   |                  |                         |
| <dbdata></dbdata>    |   |                  |                         |
| <opdata></opdata>    |   |                  |                         |

## **Example**

In this example, a node class trace log is generated due to an incoming node class message.

OAIN609 JAN24 07:46:17 8701 INFO OAP NODE MSG DUMP OAP OG NODE CLASS MESSAGE CLASSID: 1 OPTIONS: 0 LENGTH: 36 OFFSET: 16 MSG REL: 1 MSG INC: 0 SND REL: 1 SND INC: 0 SRC NODEID: 32 SEQ NUM: 0 DEST NODEID: 0 MSG LEN: 27 Invoke Node RTS Request OPERATION ID: 0110 INVOKE ID: 0139 OP LEN: 22 ARG LEN: 10 Time DB 1E01 0600 0B13 0F0F 2A09 82A11600020239010202100182040A001E0106000B130F0F2A09

## OAIN609 (continued)

## **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field  | Value                                    | Description                              |
|--|--|--|
| <msgdir></msgdir>                                | Variable                                 | Describes class and direction of message |
| CLASSID: <msgclassid></msgclassid>               | #01, #04, #05                            | Class of message identifier              |
| OPTIONS: <options></options>                     | 0 to 32, 767                             | Message options data                     |
| LENGTH: <msglen></msglen>                        | 0 to 32, 767                             | Length                                   |
| OFFSET: <msgoffset></msgoffset>                  | 0 to 32, 767                             | Offset                                   |
| MSG REL: <release></release>                     | 0 to 255                                 | Message protocol release number          |
| MSG INC: <increment></increment>                 | 0 to 255                                 | Message protocol increment number        |
| SND REL: <release></release>                     | 0 to 255                                 | Senders protocol release number          |
| SND INC: <increment></increment>                 | 0 to 255                                 | Message protocol increment number        |
| SRC NODEID:<br><source_node_id></source_node_id> | Defined in Table<br>OANODINV<br>(NODEID) | Source node identifier                   |
| SEQ NUM: <seqnum></seqnum>                       | Variable                                 | Sequence number                          |
| DEST NODEID:<br><dest_node_id></dest_node_id>    | Defined in Table<br>OANODINV<br>(NODEID) | Destination node identifier              |
| MSG LEN: <length></length>                       | 0 to 32, 767                             | Message length                           |
| <msgtype></msgtype>                              | Refer to OAP Spec                        | Message type                             |
| <operation name="" request=""></operation>       | Refer to OAP Spec                        | Operation request name                   |
| OPERATION ID: <opid></opid>                      | Refer to OAP Spec                        | Operation Id                             |
| INVOKE ID: <invokeid></invokeid>                 | #0100 to #FFFF                           | Invoke Id                                |
| OP LEN: <oplen></oplen>                          | 0 to 32, 767                             | Operation length                         |
| ARG LEN: <arglen></arglen>                       | 0 to 32, 767                             | Argument length                          |
| <dbname></dbname>                                | Refer to OAP Spec                        | Data block name                          |

## OAIN609 (end)

#### (Sheet 2 of 2)

| Field             | Value             | Description         |
|-------------------|-------------------|---------------------|
| <dbdata></dbdata> | Refer to OAP Spec | Data block hex data |
| <opdata></opdata> | Refer to OAP Spec | Operation hex data  |

## Action

This log is generated when data communications processes a node class message specifying nodes have been selected for tracing via the OSSAIN command increment. This log displays the OAP message in a formatted manner consisting of the node class header and formatted operation data. The operation data area will vary depending on the message contents.

The text area at the beginning of the log will indicate whether the message was originated from the DMS (OG - outgoing) or from a service node (IC - incoming).

## **Associated OM registers**

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when data communications message tracing has been enabled for the session pool or node specified by an incoming or outgoing session pool class message.

#### Format

The format for log report OAIN610 follows:

OAIN610 JAN24 07:46:17 8701 INFO DATA OAP SESN POOL MSG DUMF <msgdir> **CLASSID:** <msgclassid> **OPTIONS:** <options> LENGTH: <msglen> <msgoffset> OFFSET: <release> MSG REL: MSG INC: <increment> <release> SND REL: SND INC: <increment> SRC NODEID: <source node id> SEQ NUM: <seqnum> DEST NODEID: <dest\_node\_id> <sessplid> POOLID: MSG LEN: <length> <operation request name> <msgtype> **OPERATION ID:** <opid> INVOKE ID: <invokeid> OP LEN: <oplen> ARG LEN: <arglen> <dbname> <dbdata> <opdata>

#### Example

In this example, a session pool class trace log is generated due to an incoming session pool class message.

OAIN610 (continued)

```
OAIN610 JAN24 07:46:17 8701 INFO DATA OAP SESN POOL MSG DUMP
OAP IC SESSION POOL CLASS MESSAGE
CLASSID: 4 OPTIONS: 0
LENGTH: 48 OFFSET: 26
MSG REL: 1 MSG INC: 0
SND REL: 1 SND INC: 0
SRC NODEID: 0 SEQ NUM: 1
DEST NODEID: 32
POOLID: 0
MSG LEN: 27
Invoke Session Initiation Request
OPERATION ID: 060F INVOKE ID: 010D
OP LEN: 24 ARG LEN: 12
Network Service DB
0F01 0200 0500
Charge Status DB
0A01 0200 FF00
82A1180002020D0102020F0682040C000F01020005000A010200FF00
```

## **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field  | Value                                    | Description                              |
|--|--|--|
| <msgdir></msgdir>                                | Variable                                 | Describes class and direction of message |
| CLASSID: <msgclassid></msgclassid>               | #01, #04, #05                            | Class of message identifier              |
| OPTIONS: <options></options>                     | 0 to 32, 767                             | Message options data                     |
| LENGTH: <msglen></msglen>                        | 0 to 32, 767                             | Length                                   |
| OFFSET: <msgoffset></msgoffset>                  | 0 to 32, 767                             | Offset                                   |
| MSG REL: <release></release>                     | 0 to 255                                 | Message protocol release number          |
| MSG INC: <increment></increment>                 | 0 to 255                                 | Message protocol increment number        |
| SND REL: <release></release>                     | 0 to 255                                 | Senders protocol release number          |
| SND INC: <increment></increment>                 | 0 to 255                                 | Message protocol increment number        |
| SRC NODEID:<br><source_node_id></source_node_id> | Defined in Table<br>OANODINV<br>(NODEID) | Source node identifier                   |

## OAIN610 (end)

#### (Sheet 2 of 2)

| Field   | Value                                      | Description                 |
|---|--|-----------------------------|
| SEQ NUM: <seqnum></seqnum>                    | 0 to 32, 767                               | Sequence number             |
| DEST NODEID:<br><dest_node_id></dest_node_id> | Defined in Table<br>OANODINV<br>(NODEID)   | Destination node identifier |
| POOLID: <sessplid></sessplid>                 | Defined in Table<br>OASESNPL<br>(SESNPLID) | Session pool identifier     |
| MSG LEN: <length></length>                    | 0 to 32, 767                               | Message length              |
| <msgtype></msgtype>                           | Refer to OAP Spec                          | Message type                |
| <operation name="" request=""></operation>    | Refer to OAP Spec                          | Operation request name      |
| OPERATION ID: <opid></opid>                   | Refer to OAP Spec                          | Operation Id                |
| INVOKE ID: <invokeid></invokeid>              | #0100 to #FFFF                             | Invoke Id                   |
| OP LEN: <oplen></oplen>                       | 0 to 32, 767                               | Operation length            |
| ARG LEN: <arglen></arglen>                    | 0 to 32, 767                               | Argument length             |
| <dbname></dbname>                             | Refer to OAP Spec                          | Data block name             |
| <dbdata></dbdata>                             | Refer to OAP Spec                          | Data block hex data         |
| <opdata></opdata>                             | Refer to OAP Spec                          | Operation hex data          |

## Action

This log is generated when data communications processes a session pool class message specifying a session pool or node has been selected for tracing by the OSSAIN command increment. This log displays the OAP message in a formatted manner consisting of the session pool class header and formatted operation data. The operation data area will vary depending on the message contents.

The text area at the beginning of the log will indicate whether the message was originated from the DMS (OG - outgoing) or from a service node (IC - incoming).

## **Associated OM registers**

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when data communications message tracing has been enabled and a message of undetermined format is processed.

### Format

The format for log report OAIN611 follows:

OAIN611 JAN24 07:46:17 8701 INFO OAP UNKNOWN MSG DUMP <msgdir> MSG LEN: <length> <msgdata>

## Example

In this example, data communications tracing has been enabled and a message with an invalid class identifier has been processed.

```
OAIN611 JAN24 07:46:17 8701 INFO OAP UNKNOWN MSG DUMP
OAP IC MESSAGE
MSG LEN: 15
1111000018001200000100010000020000082A2080002020F0182040000
```

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field                      | Value        | Description                    |
|----------------------------|--------------|--------------------------------|
| <msgdir></msgdir>          | Variable     | Describes direction of message |
| MSG LEN: <length></length> | 0 to 32, 767 | Message length                 |
| <msgdata></msgdata>        | N/A          | Message hex data               |

## Action

This log is generated whenever data communications tracing has been enabled and a message of undetermined format is processed. The length of the message is displayed and the message is dumped in hex format.

The text area at the beginning of the log will indicate whether the message was originated from the DMS (OG - outgoing) or from a service node (IC - incoming).

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# OAIN611 (end)

# Associated OM registers

#### **Explanation**

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when an internal audit process determines that the state of a queuing agent (the internal queuing mechanism used to represent a session) does not match the state of the Virtual Terminal Identifier (VID) that is associated with the session. The VID is the internal data communications representation of the session that is also used to refer to the call utilizing the specified session.

#### Format

The format for log report OAIN612 follows:

OAIN612 mmmdd hh:mm:ss ssdd INFO AGENT STATE MISMATCH STATE OF OSSAIN QUEUING AGENT DOES NOT MATCH ITS EXPECTED VALUE OF LINKEDTOCPTLB. AGENT NUMBER: <agent num> SESSION POOL: <sessplid> SESSION ID: <sessionid> VID STATE: <vidstate>

## Example

An example of log report OAIN612 follows:

OAIN612 JAN24 07:46:17 8701 INFO AGENT STATE MISMATCH STATE OF OSSAIN QUEUING AGENT DOES NOT MATCH ITS EXPECTED VALUE OF LINKEDTOCPTLB. AGENT NUMBER: 48 SESSION POOL: 2 SESSION ID: 5 VID STATE: 0

#### OAIN612 (end)

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field  | Value    | Description  |
|--|----------|--|
| INFO AGENT STATE<br>MISMATCH   | constant | Mandatory. This field indicates that there is an agent state mismatch.   |
| STATE OF OSSAIN QUEUING<br>AGENT DOES NOT MATCH<br>ITS EXPECTED VALUE OF<br>LINKEDTOCPTLB. | constant | Mandatory. This field indicates that a mismatch has occurred in the internal system software.                    |
| AGENT NUMBER   | 0-8190   | Mandatory. This field indicates the internal agent number range.   |
| SESSION POOL   | numeric  | Mandatory. This field indicates the session pool identifier that is defined in field SESNPLID of table OASESNPL. |
| SESSION ID   | 0-1022   | Mandatory. This field indicates the session identifier.  |
| VID STATE  | 0-9      | Mandatory. This field indicates the call/session state.  |

## Action

This log is only displayed in the rare instance in which internal resources are not properly freed or initialized. When it is generated, operating company personnel should contact a regional Northern Telecom (NORTEL) customer representative to arrange contact with the NORTEL support group for further investigation.

## **Associated OM registers**

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when an internal audit process determines that the state of a Virtual Terminal Identifier (VID) indicates that the specified session is in use by a call or could be utilized by a call when the session pool is not in an in-service state. The VID is the internal data communications representation of the session that is also used to refer to the call utilizing the specified session.

The OAIN subsystem also generates this log when the state of a VID indicates that the specified session cannot be utilized by a call when the session pool is actually in-service and the session is in the range of sessions allocated for use.

#### Format

The format for log report OAIN613 follows:

OAIN613 mmmdd hh:mm:ss ssdd INFO VID STATE MISMATCH STATE OF OSSAIN VID DOES NOT MATCH ITS EXPECTIED VALUE. SESSION POOL: <sessplid> SESSION ID: <sessionid> CURRENT STATE: <vidstate> EXPECTED STATE: <vidstate>

## Example

An example of log report OAIN613 follows:

OAIN613 JAN24 07:46:17 8701 INFO VID STATE MISMATCH STATE OF OSSAIN VID DOES NOT MATCH ITS EXPECTED VALUE. SESSION POOL: 2 SESSION ID: 5 CURRENT STATE: 5 EXPECTED STATE: 2

#### OAIN613 (end)

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field  | Value    | Description  |
|--|----------|--|
| INFO VID STATE MISMATCH                                      | constant | Mandatory. This field indicates that there is a VID state mismatch.  |
| STATE OF OSSAIN VID DOES<br>NOT MATCH ITS EXPECTED<br>VALUE. | constant | Mandatory. This field indicates that the state of the OSSAIN VID does not match its expected value.              |
| SESSION POOL   | numeric  | Mandatory. This field indicates the session pool identifier that is defined in field SESNPLID of table OASESNPL. |
| SESSION ID   | 0-1022   | Mandatory. This field indicates the session identifier.  |
| CURRENT STATE  | 0-9      | Mandatory. This field indicates the current state of the session.  |
| EXPECTED STATE   | 0-9      | Mandatory. This field indicates the expected state of session.   |

## Action

This log is only displayed in the rare instance in which internal resources are not properly freed or initialized. When it is generated, operating company personnel should contact a regional Northern Telecom (NORTEL) customer representative to arrange contact with the NORTEL support group for further investigation.

## **Associated OM registers**

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when the Digital Multiplex System (DMS) switch changes the Open Automated Protocol (OAP) version that is being used for communication with a service node (SN) or session pool. This change occurs when the OAP version is renegotiated between the DMS switch and an SN.

*Note:* For more information about OAP negotiation, refer to the *OSSAIN Open Automated Protocol Specification*, NIS: Q235-1.

#### Format

The format for log report OAIN614 follows:

OAIN614 mmmdd hh:mm:ss ssdd INFO OAP PROTOCOL VERSION CHANGE

NODE NAME: <nodename>NODE ID: <nodeid>SESSION POOL NAME: <sessplnm> SESSION POOL ID: <sessplid>PREVIOUS PROTOCOL RELEASE:<release>PREVIOUS PROTOCOL INCREMENT:<increment>NEW PROTOCOL RELEASE:<release>NEW PROTOCOL INCREMENT:<increment>NEW PROTOCOL INCREMENT:<increment>

## Example

An example of log report OAIN614 follows:

OAIN614 AUG21 10:35:00 6500 INFO OAP PROTOCOL VERSION CHANGE NODE NAME: NODE\_01 NODE ID: 1 SESSION POOL NAME: BRANDSP1 SESSION POOL ID: 1 PREVIOUS PROTOCOL RELEASE: 2 PREVIOUS PROTOCOL INCREMENT: 0 NEW PROTOCOL RELEASE: 1 NEW PROTOCOL INCREMENT: 0

*Note:* In this example, the DMS switch has changed the OAP version that is used to communicate with session pool BRANDSP1 from 2.0 to 1.0.

## OAIN614 (continued)

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field                          | Value   | Description   |
|--------------------------------|---|---|
| NODE NAME                      | alphanumeric (up<br>to twelve<br>characters)  | This field displays the name of the SN.<br>Names appearing in this field are defined in<br>the NODENAME field of table OANODINV.<br>Refer to table OANODINV in the<br><i>Translations Guide</i> .   |
| NODE ID                        | numeric                                       | This field displays the node identifier<br>associated with the SN. Values appearing<br>in this field are defined in the NODEID field<br>of table OANODINV. Refer to table<br>OANODINV in the <i>Translations Guide</i> .                            |
| SESSION POOL NAME              | alphanumeric (up<br>to sixteen<br>characters) | This field displays the name of the session<br>pool. Names appearing in this field are<br>defined in the SESNPLNM field of table<br>OASESNPL. Refer to table OASESNPL in<br>the <i>Translations Guide</i> .   |
| SESSION POOL ID                | numeric                                       | This field displays the session pool identifier<br>associated with a given session pool.<br>Values appearing in this field are defined in<br>the SESNPLID field of table OASESNPL.<br>Refer to table OASESNPL in the<br><i>Translations Guide</i> . |
| PREVIOUS PROTOCOL<br>RELEASE   | 0-255   | This field displays the protocol release that was used between the DMS switch and the SN before the protocol was changed.   |
| PREVIOUS PROTOCOL<br>INCREMENT | 0-255   | This field displays the protocol increment<br>that was used between the DMS switch and<br>the SN before the protocol was changed.   |
| NEW PROTOCOL RELEASE           | 0-255   | This field displays the protocol release that is used between the DMS switch and the SN after the protocol is changed.  |
| NEW PROTOCOL<br>INCREMENT      | 0-255   | This field displays the protocol increment<br>that is used between the DMS switch and<br>the SN after the protocol is changed.  |

## Action

The purpose of this log is to inform operating company personnel that OAP version renegotiation has been performed between the DMS switch and the SN. Generally, no action is required when this log is generated.

If a maintenance action performed at the MAP (maintenance and administration position) terminal fails because of protocol version incompatibility, renegotiation takes place.

Subsequently, log OAIN614 is generated. If the maintenance action is repeated, it executes successfully if no other failure reasons exist. Therefore, it is recommended that the maintenance action be repeated before investigating the reason for the command failure.

In some instances, log OAP603 is generated with OAIN614. Refer to actions 1 and 2 for log OAP603 in the "OAP log reports" section of this document.

## Associated OM registers

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when the Traffic Operator Position System (TOPS) switch denies a request from an Operator Services System Advanced Intelligent Network (OSSAIN) service node (SN) to perform Release Link Trunking (RLT) relative to a call.

*Note:* This log is only associated with RLT Variant 2.

#### Format

The format for log report OAIN615 follows:

OAIN615 JAN24 07:46:17 8701 INFO RLT REQUEST DENIED CALLID: <callid> SN: <node name> SNID: <node id> SNVL: <vl circuit id> FN: <function name> SESSPL: <pool id> <pool name> CLG: <clg circuit id> CLD: <cld circuit id>

#### Example

An example of log report OAIN615 follows:

OAIN615 JAN24 07:46:17 8701 INFO RLT REQUEST DENIED CALLID: 0302 0011 SN: NAV\_LISTING\_SVCS SNID: OSN 6 SNVL: CKT OSSAINVL 22 FN: YELLOW\_PAGES SESSPL: 4 LISTING\_SERVICES CLG: CKT ISUPIC 34 CLD: CKT ISUPOG 11

#### **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                    | Value   | Description  |
|--------------------------|---|--|
| INFO RLT REQUEST DENIED  | constant  | Request to release link trunk was denied.  |
| CALLID <callid></callid> | 0000 0000 to FFFF<br>FFFF<br>(hexadecimal data) | Mandatory. This field displays the Digital Multiplex System (DMS) call identifier. |

# OAIN615 (continued)

| Field                            | Value  | Description   |
|----------------------------------|--|---|
| SN <node name=""></node>         | node name<br>(alphanumeric)                        | Mandatory. This field displays the OSSAIN<br>service node name. The NODENAME field,<br>in Table OANODINV, defines valid values<br>for this field.                                   |
| SNID <node id=""></node>         | node identifier<br>(alphanumeric)                  | Mandatory. This field displays the OSSAIN service node identifier. The NODEID field, in Table OANODINV, defines valid values for this field.  |
| SNVL <vl circuit="" id=""></vl>  | voice link circuit<br>identifier<br>(alphanumeric) | Mandatory. This field displays the OSSAIN service node voice link. The MEMVAR field, in Table TRKMEM, defines valid values for this field.  |
| FN <function name=""></function> | function name<br>(alphanumeric)                    | Mandatory. This field displays the function<br>name that is associated with the call. The<br>FUNCNAME field, in Table OAFUNDEF,<br>defines valid values for this field.             |
| SESSPL                           |  | Mandatory. This field consists of two components: pool identifier and pool name. Values and descriptions follow.  |
|                                  | pool identifier<br>(numeric)                       | Mandatory. This component displays the session pool identifier. The SESNPLID field, in Table OASESNPL, defines the valid values for this component.                                 |
|                                  | pool name<br>(alphanumeric)                        | Mandatory. This component displays the session pool name associated with the session pool identifier. The SESNPLNM field, in Table OASESNPL, defines valid values for these fields. |
| CLG <clg circuit="" id=""></clg> | calling circuit<br>identifier<br>(alphanumeric)    | Mandatory. This field displays the calling<br>party trunk identifier. The MEMVAR field, in<br>Table TRKMEM, defines valid values for this<br>field.                                 |
| CLD <cld circuit="" id=""></cld> | called circuit<br>identifier<br>(alphanumeric)     | Mandatory. This field displays the called<br>party trunk identifier. The MEMVAR field, in<br>Table TRKMEM, defines valid values for this<br>field.                                  |

#### (Sheet 2 of 2)

## OAIN615 (end)

### Action

When the OAIN subsystem generates this log, operating company personnel should check trunk datafill to ensure proper routing of calls that are RLT capable. Ensure that RLT Variant 2 datafill (the RLT field set to RLT\_FAR) is specified in table ISUPTRK.

## **Associated OM registers**

None

Additional information

Release history TOPS07

This log was introduced in TOPS07.

#### Explanation

This log is generated when an MIS buffer is sent to the MIS node. The log generates the date and time that the transmission was attempted and dumping of the OAP class and operation headers and the Information data block.

#### Format

The format for log report OAIN624 follows:

<meadir>

OAIN624 mmmdd hh:mm:ss ssdd INFO OAP MIS MSG DUMP

| <insgun></insgun>    |   |                                  |
|----------------------|---|----------------------------------|
| CLASSID:             | <msgclassid></msgclassid>                                       | OPTIONS: <options></options>     |
| LENGTH:              | <msglen></msglen>   | OFFSET: <msgoffset></msgoffset>  |
| MSG REL:             | <release></release>   | MSG INC: <increment></increment> |
| SND REL:             | <release></release>   | SND INC: <increment></increment> |
| SRC NODEID:          | <source_node_id></source_node_id>                               |                                  |
| DEST NODEID:         | <destination_node_< td=""><td>_id&gt;</td></destination_node_<> | _id>                             |
| MSG LEN:             | <length></length>   |                                  |
| <msgtype></msgtype>  | <pre><operation pre="" request<=""></operation></pre>           | name>                            |
| <b>OPERATION ID:</b> | <opid></opid>   | INVOKE ID: <invokeid></invokeid> |
| OP LEN:              | <oplen></oplen>   | ARG LEN: <arglen></arglen>       |
| <dbname></dbname>    |   |                                  |
| <dbdata></dbdata>    |   |                                  |
| <opdata></opdata>    |   |                                  |
|                      |   |                                  |

### Example

An example of log report OAIN624 follows:

OAIN624 APR14 13:43:54 0510 INFO OAP MIS MSG DUMP OAP OG MIS CLASS MESSAGE CLASSID: 8 OPTIONS: 0 LENGTH: 42 OFFSET: 18 MSG REL: 5 MSG INC: 0 SND REL: 5 SND INC: 0 SRC NODEID: 60 DEST NODEID: 38 MSG LEN: 24 Invoke MIS OSSAIN Inform OPERATION ID: 010D INVOKE ID: 7FFF OP LEN: 26 ARG LEN: 14 Information ID DB 5701 0A00 0D01 362B 0462 000E 7C3A 82A11A000202FF7F02020D0182040E0057010A000D01362B0462000E 7C3A

## OAIN624 (continued)

## **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field  | Value                           | Description   |
|--|---------------------------------|---|
| INFO OAP MIS MSG DUMP                                      | constant                        | An MIS buffer is sent to the MIS node.  |
| <msgdir></msgdir>  | 28 alphanumeric characters      | Mandatory. This field describes the class and direction of the message                    |
| CLASSID <msgclassdir></msgclassdir>                        | 28 alphanumeric characters      | Mandatory. This field describes the MIS class message identifier.                         |
| OPTIONS <options></options>                                | 8 characters                    | Mandatory. Message options data.  |
| LENGTH <msglen></msglen>                                   | 0 to 32,767                     | Mandatory. This field displays the length. Refer to the OAP specification.                |
| OFFSET <msgoffset></msgoffset>                             | 0 to 32,767                     | Mandatory. This field displays the offset.<br>Refer to the OAP specification.             |
| MSG REL <release></release>                                | 0 to 255                        | Mandatory. This field indicates the message protocol release number.                      |
| MSG INC <increment></increment>                            | 0 ti 255                        | Mandatory. This field indicates the message protocol increment number.                    |
| SND REL <release></release>                                | 0 to 255                        | Mandatory. This field indicates the sender's protocol release number.                     |
| SND INC <increment></increment>                            | 0 to 255                        | Mandatory. This field indicates the sender's protocol increment number.                   |
| SRC NODEID<br><source_node_id></source_node_id>            | Refer to table<br>OANODINV      | Mandatory. This field indicates the OSSAIN source node id defined in table OANODINV.      |
| DEST NODEID<br><destination_node_id></destination_node_id> | Refer to table<br>OANODINV      | Mandatory. This field indicates the OSSAIN destination node id defined in table OANODINV. |
| MSG LEN <length></length>                                  | 0 to 32,767                     | Mandatory. This field displays the message length.  |
| <msgtype></msgtype>  | Refer to the OAP specification. | Mandatory. This field displays the message type.  |
| <operation name="" request=""></operation>                 | Refer to the OAP specification. | Mandatory. This field displays the operation request name.                                |

## OAIN624 (end)

| (Sheet | 2 | of | 2) |
|--------|---|----|----|
| (0     | _ |    | -, |

| Field                           | Value                           | Description  |
|---------------------------------|---------------------------------|--|
| OPERATION ID <opid></opid>      | #010D                           | Mandatory. This field displays the MIS OSSAIN inform ID.                             |
| INVOKE ID <invokeid></invokeid> | #0100 to #FFFF                  | Mandatory. This field displays the invoke ID. Refer to the OAP specification.        |
| OP LEN <oplen></oplen>          | 0 to 32,767                     | Mandatory. This field displays the operation length. Refer to the OAP specification. |
| ARG LEN <length></length>       | 0 to 32,767                     | Mandatory. This field displays the argument length. Refer to the OAP specification.  |
| <dbname></dbname>               | Information ID DB               | Mandatory. This field displays the data block name.                                  |
| <dbdata></dbdata>               | Refer to the OAP specification. | Mandatory. This field displays the data block hex data.                              |
| <opdata></opdata>               | Refer to the OAP specification. | Mandatory. This field displays the operaton hex data.                                |

## Action

None

# Associated OM registers

None

# Additional information Release history

TOPS10

This log was created by feature AF7439.

#### Explanation

This log is generated when the switch makes the voice link selection but cannot connect to a voice channel because all circuits are busy.

#### Format

The format for log report OAIN625 follows:

OAIN625 JAN24 07:46:17 8701 INFO VOICE TRUNK BUSY ALL CIRCUITS ARE BUSY SN: <node name> FUNCTION: <function name> CLLI: <voice trunk name>

## Example

An example of log report OAIN625 follows:

OAIN625 JAN24 07:46:17 8701 INFO VOICE TRUNK BUSY ALL CIRCUITS ARE BUSY SN: NODE\_1 FUNCTION: CLG\_CARD CLLI: VL\_X

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field    | Value                 | Description  |
|----------|-----------------------|--|
| SN       | name from<br>OANODINV | Service node name datafilled in table OANODINV.    |
| FUNCTION | name from<br>OAFUNDEF | Function name, which is the key to table OAFUNDEF. |
| CLLI     | name from CLLI        | Voice trunk name from table CLLI                   |

## Action

Ensure enough voice links are available for the SN and function indicated in the log. For SN applications (functions) that require a voice link connection on every call, it is recommended that the number of voice links available for the function is equal to the maximum number of SN sessions serving that function.

## OAIN625 (end)

For further information, refer to functionality OSSAIN 11 Enhancements, OSAN0006, in the applicable manual as follows:

- NA DMS-100 Translations Guide, 297-8021-350
- GTOP DMS-100 Translations Guide, 297-8441-350

For OSSAIN basic datafill, refer to functionality OSSAIN 07 Enhancements, OSAN0003, in the above manuals.

#### **Associated OM registers**

None

#### Additional information

#### History

#### TOPS11

This log was created by feature AF7714 in functionality OSSAIN 11 Enhancements, OSAN0006.

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when an Operator Services System Advanced Intelligent Network (OSSAIN) maintained service node requests that the DMS generate a log.

#### Format

The format for log report OAIN700 follows:

OAIN700 mmmdd hh:mm:ss nnnn INFO OSNM REPORT SN: <SN name> SNID: <SN identifier> <Line of ASCII text>

## Example

An example of log report OAIN700 follows:

OAIN700 JUL29 16:58:38 3486 INFO OSNM REPORT SN: BRTPH72 SNID: OSNM 3 CRITICAL RESOURCE FAILURE DUE TO SOFTWARE ERROR

### **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field             | Value   | Description  |
|-------------------|---|--|
| mmmdd             | The first 3<br>characters of the<br>current month<br>followed by the<br>current day of the<br>month | The current month and day of the month                     |
| hh:mm:ss          | The current hour,<br>minute, and<br>second of the day   | The current hour, minute, and second of the day            |
| nnnn              | The log report sequence number  | The log report sequence number                             |
| <sn name=""></sn> | An OSSAIN SN<br>name that is<br>datafilled in Table<br>OANODINV                                     | The name of the OSSAIN SN that made the log report request |

## OAIN700 (end)

#### (Sheet 2 of 2)

| Field                                | Value  | Description   |
|--------------------------------------|--|---|
| <sn identifier=""></sn>              | The SN type {OSN,<br>OSNM, OSAC}<br>followed by<br>external node<br>number {0 to 31} | The identifier of the OSSAIN SN that made the log report request  |
| <line ascii="" of="" text=""></line> | ASCII characters   | The verbatim line of text sent from the SN to<br>the DMS. Up to 3 lines of ASCII text can be<br>printed and each line can contain up to 80<br>characters. |

## Action

None

# **Associated OM registers**

#### Explanation

The Operator Advanced Intelligent Network (OAIN) subsystem generates this log when an Operator Services System Advanced Intelligent Network (OSSAIN) session pool requests that the DMS generate a log.

#### Format

The format for log report OAIN701 follows:

OAIN701 mmmdd hh:m:ss nnnn INFO SESSION POOL REPORT SP: <SP name> SPID: <SP number> <Line of ASCII text>

## Example

An example of log report OAIN701 follows:

OAIN701 JUL29 16:58:38 3486 INFO SESSION POOL REPORT SP: PH98\_ORIG\_SP SPID: 6 NUMBER OF ACTIVE SESSIONS WILL DECREASE AT 1600

### **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field             | Value   | Description  |
|-------------------|---|--|
| mmmdd             | The first 3<br>characters of the<br>current month<br>followed by the<br>current day of the<br>month | The current month and day of the month                               |
| hh:mm:ss          | The current hour,<br>minute, and<br>second of the day   | The current hour, minute, and second of the day                      |
| nnnn              | The log report sequence number  | The log report sequence number                                       |
| <sp name=""></sp> | A session pool<br>name that is<br>datafilled in Table<br>OASESNPL                                   | The name of the OSSAIN session pool that made the log report request |

# OAIN701 (end)

(Sheet 2 of 2)

| Field                                | Value   | Description   |
|--------------------------------------|---|---|
| <sp number=""></sp>                  | A session pool<br>number that is<br>datafilled in Table<br>OASESNPL | The number of the OSSAIN session pool that made the log report request  |
| <line ascii="" of="" text=""></line> | ASCII characters  | The verbatim line of text sent from the SP to<br>the DMS. Up to 3 lines of ASCII text can be<br>printed and each line can contain up to 80<br>characters. |

## Action

None

# Associated OM registers

None

#### **OAP600**

#### Explanation

The Open Automated Protocol (OAP) subsystem generates this report when an invalid value is received in an OAP message field. If the invocation ID of the operation in question could not be determined, the operation is discarded (for example, not processed by OSSAIN Call Processing). If the invocation ID of the operation could be determined, a Reject operation is returned to the sender (the operation is still discarded, but it is possible that the sending node will resend or take an alternate action). In either case, the section "Actions" should be performed, as the operation of the service being performed by the sending node is likely being impacted (the severity of the impact of the event logged cannot be determined by the log alone, as OAP messaging is a framework for general service/application development).

#### Format

The format for log report OAP600 follows:

*Note 1:* POOLID and POOLNAME are not displayed for Node Class messages.

*Note 2:* SESSION, CALL ID, FUNCID, and FUNCNAME are displayed for Call Processing Class messages only.

#### OAP600 mmmdd:hh:mm:ss ssdd INFO OAP Protocol Violation

| in ooo mmmaa          |   |                   | iuuion                        |
|-----------------------|---|-------------------|-------------------------------|
| CLASS:                | <classid></classid>   | INVOKE ID:        | <invokeid></invokeid>         |
| NODEID:               | <nodeid></nodeid>   | NODE NAME:        | <nodename></nodename>         |
| <b>RELEASE:</b>       | <msgrel></msgrel>   | <b>INCREMENT:</b> | <msgincr></msgincr>           |
| POOLID:               | <poolid></poolid>   | POOLNAME:         | <poolname></poolname>         |
| SESSION:              | <sessionid></sessionid>   | CALL ID:          | <callid></callid>             |
| FUNCID:               | <function></function>   | FUNCNAME:         | <functionname></functionname> |
| OP TYPE:              | <optype></optype>   |                   |                               |
| OP ID:                | <opid></opid>   | OP NAME:          | <opname></opname>             |
| FIELD ID:             | <fieldname></fieldname>   | FIELD VAL:        | {on next line}                |
| <fieldval></fieldval> |   |                   |                               |
| <b>RESULT:</b>        | <operationresu< td=""><td>lt&gt;</td><td></td></operationresu<> | lt>               |                               |
| PROBLEM:              | <problemtext></problemtext>                                     |                   |                               |
| <opdata></opdata>     |   |                   |                               |
|                       |   |                   |                               |

#### Example

In the following example, the DMS switch received a message from a Service Node that included an operation with an invalid argument length. The message was sent from Service Node SN\_1, function 12, requesting Session Initiation

OAP600 (continued)

operation. This log provides the node name, the session, and the message protocol release and increment, allowing identification of both the sending process and the attempted protocol. From the Result field, it is clear that the switch sent a Reject in response to the operation (InvokeID = 010A).

| OAP600 | JUN21 | 12:07:05  | 2134 INE  | 70 OAP Prot | ocol Violation     |
|--------|-------|-----------|-----------|-------------|--------------------|
| CLAS   | s:    | 5         |           | INVOKE ID:  | 010A               |
| NODE   | ID:   | 3         |           | NODE NAME:  | SN_1               |
| RELE   | ASE:  | 1         |           | INCREMENT:  | 0                  |
| POOL   | ID:   | 15        |           | POOLNAME:   | SP_15              |
| SESS   | ION:  | 0         |           | CALL ID:    | #7700 #0000        |
| FUNC   | ID:   | 12        |           | FUNCNAME:   | Func_12            |
| OP T   | YPE:  | INVOKE    |           |             |                    |
| OP I   | D:    | 060F      |           | OP NAME:    | Session Initiation |
| FIEL   | D ID: | Arg Ler   | ı         | FIELD VAL:  | {on next line}     |
| 00     |       |           |           |             |                    |
| RESU   | LT:   | Operati   | ion Rejec | ted         |                    |
| PROB   | LEM:  | Invalio   | l Value   |             |                    |
| A182   | 0016  | 0202 0100 | 0202 060  | )F 0482 000 | 0                  |
| 010F   | 0006  | 1234 5678 | 9ABC      |             |                    |

### **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                            | Value   | Description                                      |
|----------------------------------|---|--|
| Class: <classid></classid>       | 1 (Node),4<br>(Session Pool), or<br>5 (Call Processing) | Class of the message                             |
| Invoke ID: <invokeid></invokeid> | #0000 to #FFFF  | InvokeID value. Valid range is #0100 -<br>#FFFF. |
| NodeID: <nodeid></nodeid>        | 0 to 31   | Node ID value                                    |
| Node Name: <nodename></nodename> | Defined in Table<br>OANODINV<br>(NODENAME)              | Sender's Node Name                               |
| Release: <msgrel></msgrel>       | 0 to 255  | Protocol release of the message                  |
| Increment: <msgincr></msgincr>   | 0 to 255  | Protocol increment of the message                |
| PoolID: <pool></pool>            | Defined in Table<br>OASESNPL<br>(SESNPLID)              | Session Pool Identifier                          |

# OAP600 (continued)

#### (Sheet 2 of 2)

| Field                                    | Value  | Description  |
|--|--|--|
| PoolName: <poolname></poolname>          | N/A  | Session Pool Name  |
| Session: <session></session>             | #0000 to #FFFF   | Session ID   |
| Call ID: <callid></callid>               | #00000000 to<br>#FFFFFFF                                       | Call ID  |
| FuncID: <function></function>            | Defined in Table<br>OAFUNDEF<br>(FUNCID)                       | Function ID  |
| FuncName: <function name=""></function>  | Defined in Table<br>OAFUNDEF<br>(FUNCNAME)                     | Function Name  |
| Op Type: <optype></optype>               | Invoke,Return<br>Result,Return<br>Error,Reject                 | Op Type (ROSE APDU type)   |
| Op ID: <opid></opid>                     | #0000 to #FFFF   | Operation value for Invokes  |
| Op Name: <operationname></operationname> | Refer to OSSAIN<br>Open Automated<br>Protocol, NIS:<br>Q235-1. | OAP Operation Name   |
| Field ID: <name></name>                  | Refer to OSSAIN<br>Open Automated<br>Protocol, NIS:<br>Q235-1. | OAP Field Name   |
| Field Val: <fieldval></fieldval>         | Refer to OSSAIN<br>Open Automated<br>Protocol, NIS:<br>Q235-1. | Hex dump of field. See OSSAIN Open<br>Automated Protocol, NIS: Q235-1, for field<br>data format (e.g. BCD, numeric, etc.). |
| Result: <result></result>                | Operation<br>Discarded,Operati<br>on Rejected                  | DMS switch response to operation   |
| Problem: <problemtext></problemtext>     | Variable   | Problem text description   |
| <opdata></opdata>                        | Hex  | Hex dump of operation  |

### Action

This error indicates that invalid data is being sent by the sending node. The following should be checked:

- 1. It should be verified that the proper software load is resident in the sending node.
- 2. The error should be validated in the OSSAIN Open Automated Protocol document, NIS: Q235-1, and in the application documentation provided with the sending node. Different message fields have different validation criteria.
- 3. Other Logs and OMs (including OM groups OAPMERRS, OAPMERRN, OAPMTYPN, and OAPMTYPS) should be checked to determine if this event is related to another problem.
- 4. Related datafill and software switches (such as CM SOC settings) should be verified to be properly set on both the sending and receiving nodes.

## **Associated OM registers**

Operation Rejects indicated in the Result field of this log will be pegged in OGREJECT, in OM group OAPMTYPS (and corresponding peg of NOREJCT in OM group OAPMTYPN). Also, one or more of the following OMs in OM group OAPMERRS will be pegged depending on the OpType and Field Name of the error: INVKERR, RRESLTER, RERRORER, REJECTER, INVLFN, INVLTSK, INVLOPHD, and INVLFLD. Likewise on a node basis, one or more of the following OMs in OM group OAPMERRN will be pegged depending on the OpType and Field Name of the error: NINVKER, NRESLTER, NERRORER, NREJCTE, NINVTSK, NINVOPHD, and NINVDFD.

#### OAP601

#### Explanation

The Open Automated Protocol (OAP) subsystem generates this report when an unrecognized OAP operation is requested. This log indicates sending nodes are attempting operations that the switch does not recognize.

#### Format

The format for log report OAP601 follows:

*Note 1:* POOLID and POOLNAME are not displayed for Node Class messages.

*Note 2:* SESSION, CALL ID, FUNCID, and FUNCNAME are displayed for Call Processing Class messages only.

| OAP601 | mmmdd:hh:mm:ss | ssdd | INFO | Unrecognized | OAP Operation |
|--------|----------------|------|------|--------------|---------------|
|        |                |      |      |              |               |

| CLASS:            | <classid></classid>     | INVOKE ID:        | <invokeid></invokeid> |
|-------------------|-------------------------|-------------------|-----------------------|
| NODEID:           | <nodeid></nodeid>       | NODE NAME:        | <nodename></nodename> |
| <b>RELEASE:</b>   | <msgrel></msgrel>       | <b>INCREMENT:</b> | <msgincr></msgincr>   |
| POOLID:           | <poolid></poolid>       | POOLNAME:         | <poolname></poolname> |
| SESSION:          | <sessionid></sessionid> | CALL ID:          | <callid></callid>     |
| FUNCID:           | <funcid></funcid>       | FUNCNAME:         | <funcname></funcname> |
| OP ID:            | <opid></opid>           |                   |                       |
| <opdata></opdata> |                         |                   |                       |

#### Example

In the following example, the DMS switch received a message from a Service Node SN\_1 that included an unrecognized operation 1700. The switch Rejected the request.

OAP601 JUN24 11:47:38 2133 INFO Unrecognized OAP Operation CLASS: 5 INVOKE ID: 0200 NODEID: 3 NODE NAME: SN\_1 RELEASE 1 INCREMENT: 0 POOLID: 15 POOLNAME: SP\_15 SESSION: 20 CALL ID: #7700 #2300 FUNCID: 32 FUNCNAME: FUNC\_32 OP ID: 1700 A182 0014 0202 9108 0202 1700 0482 0008 0169 0004 1234 5678

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field                                   | Value   | Description                       |
|---|---|-----------------------------------|
| Class: <classid></classid>              | 1 (Node),4<br>(Session Pool), or<br>5 (Call Processing) | Class of the message              |
| Invoke ID: <invokeid></invokeid>        | #0000 to #FFFF  | InvokeID value                    |
| NodeID: <nodeid></nodeid>               | 0 to 31   | Node ID value                     |
| Node Name: <nodename></nodename>        | Defined in Table<br>OANODINV<br>(NODENAME)              | Sender's Node Name                |
| Release: <msgrel></msgrel>              | 0 to 255  | Protocol release of the message   |
| Increment: <msgincr></msgincr>          | 0 to 255  | Protocol increment of the message |
| PoolID: <pool></pool>                   | Defined in Table<br>OASESNPL<br>(SESNPLID)              | Session Pool Identifier           |
| PoolName: <poolname></poolname>         | N/A   | Session Pool Name                 |
| Session: <session></session>            | #0000 to #FFFF  | Session ID                        |
| Call ID: <callid></callid>              | #00000000 to<br>#FFFFFFF                                | Call ID                           |
| FuncID: <function></function>           | Defined in Table<br>OAFUNDEF<br>(FUNCID)                | Function ID                       |
| FuncName: <function name=""></function> | Defined in Table<br>OAFUNDEF<br>(FUNCNAME)              | Function Name                     |
| Op ID: <opid></opid>                    | #0000 to #FFFF  | Operation value for Invokes       |
| <opdata></opdata>                       | Hex   | Hex dump of operation             |

#### OAP601 (end)

### Action

This error indicates that invalid data is being sent by the sending node. The following should be checked:

- 1. It should be verified that the proper software load is resident in the sending node.
- 2. The error should be validated in the OSSAIN Open Automated Protocol document, NIS: Q235-1, and in the application documentation provided with the sending node.
- 3. Other Logs and OMs (including OM groups OAPMERRS, OAPMERRN, OAPMTYPN, and OAPMTYPS) should be checked to determine if this event is related to another problem.
- 4. Related datafill and software switches (such as CM SOC settings) should be verified to be properly set on both the sending and receiving nodes.

### **Associated OM registers**

OGREJECT, in OM group OAPMTYPS; NOREJCT, in OM group OAPMTYPN; UNKWNOP, in OM group OAPMERRS; and NUNKNOP, in OM group OAPMERRN will be pegged.

The Open Automated Protocol (OAP) subsystem generates this report when an OAP operation request from a sending node either includes a data block that is not recognized as being associated with the requested operation/response or excludes a data block that is required (mandatory) with the requested operation.

### Format

The format for log report OAP602 follows:

*Note 1:* POOLID and POOLNAME are not displayed for Node Class messages.

*Note 2:* SESSION, CALL ID, FUNCID, and FUNCNAME are displayed for Call Processing Class messages only.

| CLASS:                | <classid></classid>     | INVOKE ID: | <invokeid></invokeid>         |
|-----------------------|-------------------------|------------|-------------------------------|
| NODEID:               | <nodeid></nodeid>       | NODE NAME: | <nodename></nodename>         |
| <b>RELEASE</b> :      | <msgrel></msgrel>       | INCREMENT: | <msgincr></msgincr>           |
| POOLID:               | <poolid></poolid>       | POOLNAME:  | <poolname></poolname>         |
| SESSION:              | <sessionid></sessionid> | CALL ID:   | <callid></callid>             |
| FUNCID:               | <function></function>   | FUNCNAME:  | <functionname></functionname> |
| OP TYPE:              | <optype></optype>       |            |                               |
| OP ID:                | <opid></opid>           | OP NAME:   | <opname></opname>             |
| DB ID:                | <dbid></dbid>           | Result:    | <db error="" type=""></db>    |
| FIELD ID:             | <fieldname></fieldname> | FIELD VAL: | {on next line}                |
| <fieldval></fieldval> |                         |            |                               |
| <dbdata></dbdata>     |                         |            |                               |

### **Example**

In the following example, the DMS switch received a message from a Service Node SN\_2 for operation that included an unexpected data block for that operation. The switch Rejected the operation request.

## OAP602 (continued)

| OAP602 | JUN28  | 10:47:08 | 2137 | INFO Data | Block | C Error            |
|--------|--------|----------|------|-----------|-------|--------------------|
| CLAS   | s:     | 5        |      | INVOKE ID | :     | 010A               |
| NODE   | ID:    | 3        |      | NODE NAME | :     | SN_2               |
| RELE   | ASE:   | 1        |      | INCREMENT | ':    | 0                  |
| POOL   | ID:    | 15       |      | POOLNAME: |       | SP_15              |
| SESS   | ION:   | 0        |      | CALL ID:  |       | #7700 #0000        |
| FUNC   | ID:    | 12       |      | FUNCNAME: |       | Func_12            |
| OP T   | YPE:   | INVOKE   |      |           |       |                    |
| OP I   | D:     | 060F     |      | OP NAME:  |       | Session Initiation |
| DB I   | D:     | 0110     |      | Result:   |       | Unexpected         |
| Fiel   | d ID:  | 46       |      | Field Val | :     | {on next line}     |
| 0110   |        |          |      |           |       |                    |
| 0110   | 0002 ( | 0202     |      |           |       |                    |

# **Field descriptions**

The following table explains each of the fields in the log report:

| (Sheet | 1 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field                            | Value   | Description                                      |
|----------------------------------|---|--|
| Class: <classid></classid>       | 1 (Node),4<br>(Session Pool), or<br>5 (Call Processing) | Class of the message                             |
| Invoke ID: <invokeid></invokeid> | #0000 to #FFFF  | InvokeID value. Valid range is #0100 -<br>#FFFF. |
| NodeID: <nodeid></nodeid>        | 0 to 31   | Node ID value                                    |
| Node Name: <nodename></nodename> | Defined in Table<br>OANODINV<br>(NODENAME)              | Sender's Node Name                               |
| Release: <msgrel></msgrel>       | 0 to 255  | Protocol release of the message                  |
| Increment: <msgincr></msgincr>   | 0 to 255  | Protocol increment of the message                |
| PoolID: <pool></pool>            | Defined in Table<br>OASESNPL<br>(SESNPLID)              | Session Pool Identifier                          |
| PoolName: <poolname></poolname>  | N/A   | Session Pool Name                                |
| Session: <session></session>     | #0000 to #FFFF  | Session ID                                       |

# OAP602 (continued)

| (Sheet | 2 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field                                    | Value  | Description  |
|--|--|--|
| Call ID: <callid></callid>               | #00000000 to<br>#FFFFFFF   | Call ID  |
| FuncID: <function></function>            | Defined in Table<br>OAFUNDEF<br>(FUNCID)                                     | Function ID  |
| FuncName: <function name=""></function>  | Defined in Table<br>OAFUNDEF<br>(FUNCNAME)                                   | Function Name  |
| Op Type: <optype></optype>               | Invoke,Return<br>Result,Return<br>Error,Reject                               | Op Type (ROSE APDU type)   |
| Op ID: <opid></opid>                     | #0000 to #FFFF   | Operation value for Invokes  |
| Op Name: <operationname></operationname> | Refer to OSSAIN<br>Open Automated<br>Protocol, NIS:<br>Q235-1.               | OAP Operation Name   |
| DBID: <dbid></dbid>                      | #0000 to #FFFF   | Data Block ID. (See OAP Spec, NIS: Q235-1).  |
| Result: <result></result>                | Unrecognized,Bad<br>Format,Invalid,Out<br>of<br>Range,Unexpecte<br>d,Missing | DMS switch response to operation   |
| Field NAME: <name></name>                | Refer to OSSAIN<br>Open Automated<br>Protocol, NIS:<br>Q235-1.               | OAP Field Name   |
| Field Val: <fieldval></fieldval>         | Refer to OSSAIN<br>Open Automated<br>Protocol, NIS:<br>Q235-1.               | Hex dump of field. See OSSAIN Open<br>Automated Protocol, NIS: Q235-1, for field<br>data format (e.g. BCD, numeric, etc.). |
| <dbdata></dbdata>                        | Hex  | Hex dump of data block   |

#### OAP602 (end)

### Action

This error indicates that invalid data is being sent by the sending node. The following should be checked:

- 1. It should be verified that the proper software load is resident in the sending node.
- 2. The error should be validated in the OSSAIN Open Automated Protocol document, NIS: Q235-1, document and in the application documentation provided with the sending node.
- 3. Other Logs and OMs (including OM groups OAPMERRS, OAPMERRN, OAPMTYPN, and OAPMTYPS) should be checked to determine if this event is related to another problem.
- 4. Related datafill and software switches (such as CM SOC settings) should be verified to be properly set on both the sending and receiving nodes.

### **Associated OM registers**

OGREJECT, in OM group OAPMTYPS; NOREJCT, in OM group OAPMTYPN; UNKWNDB, (or MISSNGDB) in OM group OAPMERRS; and NUNKNDB, (or NMSNGDB) in OM group OAPMERRN will be pegged.

The Open Automated Protocol (OAP) subsystem generates this report when a Reject is received from another node. This log indicates that the sending node could not interpret a message it received from the switch. The actions in section "Action" should be performed, as the operation of the service being performed by the sending node is likely being impacted (the severity of the impact of the event logged cannot be determined by the log alone, as OAP messaging is simply a framework for general service/application development).

#### Format

The format for log report OAP603 follows:

OAP603 mmmdd:hh:mm:ss ssdd INFO OAP Reject Received

| CLASS:          | <classid></classid>           | INVOKE ID: | <invokeid></invokeid>         |
|-----------------|-------------------------------|------------|-------------------------------|
| NODEID:         | <nodeid></nodeid>             | NODE NAME: | <nodename></nodename>         |
| <b>RELEASE:</b> | <msgrel></msgrel>             | INCREMENT: | <msgincr></msgincr>           |
| POOLID:         | <poolid></poolid>             | POOLNAME:  | <poolname></poolname>         |
| SESSION:        | <sessionid></sessionid>       | CALL ID:   | <callid></callid>             |
| FUNCID:         | <function></function>         | FUNCNAME:  | <functionname></functionname> |
| ProblemType:    | <problemtype></problemtype>   |            |                               |
| RejectReason:   | <rejectreason></rejectreason> |            |                               |

*Note 1:* SESSION, CALL ID, FUNCID, and FUNCNAME are displayed for Call Processing Class messages only.

Note 2: POOLID and POOLNAME are not displayed for Node Class messages.

### Example

In the Example log report, the DMS switch received a message from a Service Node SN\_1 indicating the Service Node received a Return Result for an Operation request that contained a parameter that could not be interpreted. The message was sent from function 9, Session Pool SP\_15, Session 10, with regard to Call ID 700 0000. For Rejects of Session Begin operations, the switch performs the actions identified in Table OAFNDISP (See AN1532: OSSAIN Routing and Queueing). For Rejects of other operation types, no action other than log generation and OM pegging is performed by the switch. Details of the original reason for the Reject should be provided by the source node in its logs (or equivalent error reporting).

An example of log report OAP603 follows:

### OAP603 (continued)

```
OAP603 JUN24 11:47:38 2133 INFO OAP Reject Received

CLASS: 5 INVOKE ID: 010A

NODEID: 3 NODE NAME: SN_1

RELEASE: 1 INCREMENT: 0

POOLID: 15 POOLNAME: SP_15

SESSION: 10 CALL ID: #7700 #0000

FUNCID: 9 FUNCNAME: Func_12

PROBLEM TYPE: ReturnResult Problem

Reject Reason: Mistyped Argument
```

### **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                            | Value   | Description                                     |
|----------------------------------|---|---|
| Class: <classid></classid>       | 1 (Node),4<br>(Session Pool), or<br>5 (Call Processing) | Class of the message                            |
| Invoke ID: <invokeid></invokeid> | #0000 to #FFFF  | InvokeID value. Valid range is #0100 -<br>#FFFF |
| NodeID: <nodeid></nodeid>        | 0 to 31   | Node ID value                                   |
| Node Name: <nodename></nodename> | Defined in Table<br>OANODINV<br>(NODENAME)              | Sender's Node Name                              |
| Release: <msgrel></msgrel>       | 0 to 255  | Protocol release of the message                 |
| Increment: <msgincr></msgincr>   | 0 to 255  | Protocol increment of the message               |
| PoolID: <pool></pool>            | Defined in Table  | Session pool identifier                         |
|                                  | OASESNPL<br>(SESNPLID)                                  | Tag for next field                              |
| PoolName: <poolname></poolname>  | N/A   | Session pool Name                               |
| Session: <session></session>     | #0000 to #FFFF  | Session ID                                      |
| Call ID: <callid></callid>       | #00000000 to<br>#FFFFFFF                                | Call ID   |
| FuncID: <function></function>    | Defined in Table<br>OAFUNDEF<br>(FUNCID)                | Function ID                                     |

# OAP603 (continued)

#### (Sheet 2 of 2)

| Field   | Value                                      | Description        |
|---|--|--------------------|
| FuncName: <function name=""></function>         | Defined in Table<br>OAFUNDEF<br>(FUNCNAME) | Function Name      |
| Problem Type: <problemtype></problemtype>       | Refer to the following chart               | ROSE Problem Type  |
| Reject Reason:<br><rejectreason></rejectreason> | Refer to the following chart               | ROSE Reject Reason |

### OAP603 (continued)

#### **ROSE Problem Types and Reject Reasons**

#### PROBLEM TYPE 0 – General Problem 1 – Invoke Problem 2 - ReturnResult Problem 3 – ReturnError Problem **REJECT REASONS General Problem** 0 – Unrecognized APDU 1 – Mistyped APDU 2 - BadlyStructured APDU **Invoke Problem** 0 - Duplicate Invocation 1 – Unrecognized Operation 2 – Mistyped Argument 3 - Resource Limitation 4 - Initiator Releasing 5 - Unrecognized LinkID 6 - Linked Response Unexpected 7 – Unexpected Child Operation ReturnResult Problem 0 - Unrecognized Invocation 1 - ResultResponse Expected 2 - Mistyped Result **ReturnError Problem** 0 – Unrecognized Invocation 1 - ErrorResponse Expected 2 - Unrecognized Error 3 - Unexpected Error

4 – Mistyped Parameter

#### Action

This error indicates that invalid data is being sent to the sending node. The following should be checked:

- 1. The source node logs (or equivalent error reporting) should be checked for details of the operation Reject.
- 2. It should be verified that the proper software load is resident in the sending node. (Note: A Protocol Version Reject is normal when either a node is brought in service as part of normal protocol level establishment, or if the

#### OAP603 (end)

DMS protocol version is changed. Other cases should be investigated further.)

- 3. The error should be validated in the OSSAIN Open Automated Protocol document, NIS: Q235-1, and in the application documentation provided with the sending node. Different message fields have different validation criteria.
- 4. Other Logs and OMs (including OM groups OAPMERRS, OAPMERRN, OAPMTYPN, and OAPMTYPS) should be checked to determine if this event is related to another problem.
- 5. Related datafill and software switches (such as CM SOC settings) should be verified to be properly set on both the sending and receiving nodes.

#### **Associated OM registers**

INREJCT, in OM group OAPMTYPS, and NIREJCT, in OM group OAPMTYPN will be pegged.

### **OCCP100**

#### Explanation

The Occupancy Peak (OCCP) subsystem generates OCCP100 when the central control (CC) is in an occupancy peak condition. This condition occurs for 12 consecutive five second periods. The subsystem generates OCCP100 when an occupancy peak condition that has a duration of ten seconds or more subsides.

Occupancy peak means the CC runs under a high percent of load. Log report OCCP100 is an international-only log report.

#### Format

The log report format for OCCP100 is as follows:

OCCP100 mmmdd hh:mm:ss ssdd INFO OCCUPANCY PEAK nnnnnnnnnn

#### Example

An example of log report OCCP100 follows:

OCCP100 JAN01 14:32:10 4700 INFO OCCUPANCY PEAK 111000000000

### Field descriptions

The following table describes each field in the log report:

| Field                  | Value                        | Description   |
|------------------------|------------------------------|---|
| INFO OCCUPANCY<br>PEAK | Constant                     | Indicates a report of an occupancy peak condition   |
| nnnnnnnnn              | 00000000000 -<br>11111111111 | Each bit indicates the occupancy peak status<br>for a 5 s period. All 12 bits provide a history of<br>occupancy peak conditions for the last minute.<br>A 1 indicates an occupancy peak condition<br>was present for that 5 s period. A 0 indicates<br>an occupancy peak condition that was not<br>present for that 5 s period. |

### Action

If the subsystem generates a high number of these logs in a short period of time, contact the next level of maintenance.

## OCCP100 (end)

# **Associated OM registers**

### OCS100

#### Explanation

The Overload Control System (OCS) subsystem generates log report OCS100 when the OCS fails to get a guaranteed timer. The OCS dies as a result.

The system performance degrades quickly.

#### Format

The log report format for OCS100 is as follows:

\*\*OCS100 mmmdd hh:mm:ss ssdd FAIL GUAR TIMER FAIL OVERLOAD CONTROL SYSTEM DEAD

#### Example

An example of log report OCS100 follows:

\*\*OCS100 APR35 11:36:58 6610 FAIL GUAR TIMER FAIL OVERLOAD CONTROL SYSTEM DEAD

#### **Field descriptions**

The following table describes each field in the log report:

| Field  | Value    | Description   |
|--|----------|---|
| FAIL GUAR TIMER<br>FAIL OVERLOAD<br>CONTROL SYSTEM<br>DEAD | Constant | Indicates that OCS fails to get a guaranteed timer. The OCS dies as a result. |

#### Action

Contact field support immediately.

#### **Associated OM registers**

The SuperNode (SN) Operations Controller (OPC) appears as a peripheral to the CM and acts as a peripheral node. The SN OPC connects to the CM through Ethernet interface units (EIU). The SN OPC has two connections: ODM serial link and ODM inter-nodal LAN connection. The OPC Duplex Manager (ODM) process uses these connections to control the job of the SN OPC unit in the duplex pair.

The subsystem generates ODM300 if a failure occurs in the inter-nodal LAN connection between the two OPC units along the inter-nodal LAN connection. This log indicates a hardware failure on this path. If an ODM202 log generates in one minute after the ODM300 log generates, refer to the ODM202 log report.

### Format

The log report format for ODM300 is as follows:

\*ODM300 mmmdd hh:mm:ss ssdd FAIL <ProcessName>(<ProcessId>) Failure of internodal LAN connection LOG:FAILED 1 Expert data; <ProcedureName>(<LineNo>)

# Example

An example of log report ODM300 follows:

\*ODM300 NOV21 16:27:49: 4232 FAIL odm(14876) Failure of internodal LAN connection LOG:FAILED 1 Expert data:odmmain.c(437)

### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field       | Value    | Description                                      |
|-------------|----------|--|
| FAIL        | Constant | Indicates that the ODM process detects a failure |
| ProcessName | odm      | Indicates the maintenance process name           |

### ODM300 (end)

(Sheet 2 of 2)

| Field   | Value          | Description  |
|---|----------------|--|
| ProcessId   | 14876          | Provides the identification code of the maintenance process                              |
| Failure of internodal LAN connection                                    | Constant       | Indicates the failed connection between OPC units  |
| Expert data:<br><procedurename><br/>(<lineno>)</lineno></procedurename> | odmmain.c(437) | Provides the name of the maintenance process and related line in HP maintenance software |

### Action

The fault isolation and detection for the OPC duplex system is based on a diagnostic system that Hewlett Packard (HP) provides. The diagnostic system has two different levels: Local Diagnostic and Remote Diagnostic.

Perform diagnostics to separate the defective component in this connection. This problem can occur because of a defective LAN card or a cable connection failure.

### **Associated OM registers**

The system generates ODM301 to indicate a hardware failure along the heartbeat connection of the ODM serial link between the two Operations Controller (OPC) units. If an ODM202 log follows this log in one minute, refer to *ODM202 log report*.

### Format

The log report format for ODM301 is as follows:

\*ODM301 mmmdd hh:mm:ss ssdd FAIL <ProcessName>(<ProcessId>) Failure of serial connection. LOG:FAILED 1 Expert data: <ProcedureName>(<LineNo>)

## Example

An example of log report ODM301 follows:

```
*ODM301 MAY)6 16:00:30 4100 FAIL odm(14876)
Failure of serial connection.
LOG:FAILED
1
Expert data:odmmain.c(437)
```

### **Field descriptions**

The following table describes each field in the log report:

| Field  | Value           | Description  |
|--|-----------------|--|
| FAIL   | Constant        | Indicates that ODM process detects a failure                     |
| ProcessName  | odm             | Indicates the maintenance process name                           |
| ProcessId  | 14876           | Provides the identification code of the process                  |
| Failure of serial connection   | Constant        | Provides the defective heartbeat connection type                 |
| Expert data:<br><procedurename>(&lt;<br/>LineNo&gt;)</procedurename> | odmmain.c(1437) | Provides the maintenance process and related line in HP software |

### ODM301 (end)

### Action

Use the HP diagnostic process to check the serial ports or the serial cables. Use MAP level commands like *QueryPM* to monitor OPC unit.

### **Associated OM registers**

A heartbeat mechanism is present between the CM and each SuperNode (SN) Operations Controller (OPC) unit. When CM detects connection failure, CM updates the OPC MAP level and generates the PM log.

The system generates ODM302 when the connection between the OPC units fails because of hardware or important software problem.

#### Format

The log report format for ODM302 is as follows:

ODM302 mmmdd hh:mm:ss ssdd FAIL <Process Name>(<ProcessId>) Suspected failure of unit <unit no> LOG:FAILED 1 Expert data:<ProcedureName>(<LineNo>)

### **Example**

An example of log report ODM302 follows:

```
ODM302 MAY05 17:30:00 4200 FAIL odm(14876)
Suspected failure of unit 1
LOG:FAILED
1
Expert data:
```

### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                     | Value    | Description   |
|---------------------------|----------|---|
| FAIL                      | Constant | Indicates that ODM process detects a failure                |
| Process Name              | odm      | Indicates maintenance process name                          |
| ProcessId                 | 14876    | Provides the identification code of the maintenance process |
| Suspected failure of unit | Constant | Identifies the defective unit of OPC                        |

### ODM302 (end)

#### (Sheet 2 of 2)

| Field   | Value          | Description  |
|---|----------------|--|
| Unit No   | 0-1            | Indicates which unit of the OPC is defective                                     |
| Expert data:<br><procedurename><br/>(<lineno>)</lineno></procedurename> | odmmain.c(437) | Indicates the name of the process and the related line number of the HP software |

### Action

Use HP diagnostic facilities like Local diagnostic and Remote diagnostic, to investigate the sanity of the defective OPC unit. Monitor the MAP level OPC unit from the PM.

If the maintenance shell commands of HP diagnostic process are not enough, use the ISOLATE command in the MAP display to separate the defective OPC unit from the CM. Check the cards in the unit.

### **Associated OM registers**

The system implements a heartbeat mechanism between the CM and each SuperNode (SN) Operation Processor Control (OPC) unit.

When CM detects heartbeat failure during audit period of CM, the CM updates the OPC MAP level and generates the PM log. The system generates log report ODM303 when the CM-OPC unit communication fails.

#### Format

The log report format for ODM303 is as follows:

ODM303 mmmdd hh:mm:ss ssdd FAIL <ProcessName>(<ProcessId>) CM Communication Failure with Unit <UnitNo> Reason:<FailureReason> LOG:FAILED 1 Expert data:<ProcedureName>(<LineNo>)

### Example

An example of log report ODM303 follows:

```
ODM303 MAY06 16:30:00 FAIL odm(14876)
CM Communication Failure with Unit 1
Reason:Unknown, Possible CM Restart
LOG:FAILED
1
Expert data:odmmain.c(437)
```

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                                 | Value    | Description  |
|---------------------------------------|----------|--|
| FAIL                                  | Constant | Indicates that ODM process detects a failure         |
| ProcessName                           | odm      | Provides the maintenance process name                |
| ProcessId                             | 14876    | Provides the maintenance process identification code |
| CM Communication<br>Failure with Unit | Constant | Provides the defective unit                          |

### ODM303 (end)

(Sheet 2 of 2)

| Field          | Value                           | Description   |
|----------------|---------------------------------|---|
| UnitNo         | 0-1                             | Indicates the defective unit of the OPC                                   |
| Failure Reason | Unknown, Possible CM<br>Restart | Indicates that the failure can result from a CM restart.                  |
|                | Manual DISCONNECT               | Indicates that the failure can result from a manual disconnection request |

### Action

If the reason text is unknown, a CM restart is the possible cause of the communication failure. Determine if the CM is in-service. If the CM is in-service, you must check the EIUs that provide interface with the CM and OPC.

If the reason is Manual DISCONNECT, use the "CONNECT" command at the OPC MAP level to connect the OPC.

### **Associated OM registers**

The SuperNode (SN) Operations Controller (OPC) has two units. One unit is active, the other unit is inactive.

The system generates log report ODM304 when an inactive SN OPC unit becomes active. The unit becomes active because of the failure of a minimum of one critical resource in the other unit. This log indicates a hardware or severe software failure of the other unit.

The SN OPC appears as a peripheral to the CM and acts as a peripheral node between the CM and Telco LAN in SNODE.

The SN OPC connects to the CM through Ethernet interface units (EIU). The SN OPC provides log processing through the Data Collector, the Problem Manager and the Problem Viewer. The Data Collector collects SN logs and SN OPC Unix Application Environment (UAE) logs. The Problem Manager correlates the SN logs. The Problem View browses through logs and problems. The SN OPC also delivers logs to a local printer.

### Format

The log report format for ODM304 is as follows:

ODM304 mmmdd hh:mm:ss ssdd INFO <ProcessName> <ProcessID> Switch of Activity – Critical resource failed. LOG: FAILED 1 Expert data: odmmain.c (437)

### Example

An example of log report ODM304 follows:

ODM304 OCT05 18:20:03 4233 INFO odm (14876) Switch of Activity - Critical resource failed. LOG: FAILED 1 Expert data: odmmain.c (437) ODM304 (end)

## **Field descriptions**

The following table describes each field in the log report:

| Field  | Value    | Description  |
|--|----------|--|
| ProcessName                                      | odm      | Indicates the running process of the OPC           |
| ProcessID  | nnnn     | Indicates the identification code of the process.  |
| Switch of Activity -<br>Critical resource failed | Constant | Indicates that the active unit of the OPC changed. |

### Action

Use MAP level commands to test the inactive unit of the OPC.

# **Associated OM registers**

The system generates log report ODM305 when an inactive SuperNode (SN) Operations Controller (OPC) unit becomes active. The SN OPC unit becomes active as the result of duality failure between the units.

This log indicates a hardware or software failure of the indicated OPC unit. The SN OPC appears as a peripheral to the CM and acts as a peripheral node between the CM and Telco LAN in SNODE.

The SN OPC connects to the CM through Ethernet interface units (EIU). The SN OPC provides log processing through the Data Collector, the Problem Manager, and the Problem Viewer. The Data Collector collects SN logs and SN OPC Unix Application Environment (UAE) logs. The Problem viewer browses through logs and problems. The SNOPC also delivers logs to a local printer.

### Format

The log report format for ODM305 is as follows:

ODM305 mmmdd hh:mm:ss ssdd INFO <ProcessName> <ProcessID> Switch of Activity – Suspected failure of unit <unitNo> LOG: FAILED 1 Expert data: odmmain.c (437)

# Example

An example of log report ODM305 follows:

ODM305 OCT05 18:20:03 4233 INFO odm (14876) Switch of Activity - Suspected failure of unit 0 LOG: FAILED 1 Expert data: odmmain.c (437) ODM305 (end)

## **Field descriptions**

The following table describes each field in the log report:

| Field  | Value    | Description                                       |
|--|----------|---|
| ProcessName  | odm      | Indicates the running process of OPC              |
| ProcessID  | nnnn     | Indicates the identification code of the process  |
| Switch of Activity -<br>Suspected failure of<br>unit <unitno></unitno> | Constant | Indicates that the active unit of the OPC changed |

# Action

Use the MAP level commands to test the latest OPC inactive unit.

## **Associated OM registers**

The SuperNode (SN) Operations Controller (OPC) has two units. One of the units is active and the other is inactive. The system generates the report when SN OPC unit becomes active because of a manual switch of activity (SWACT).

This information log indicates why and when the SWACT occurred. The SN OPC appears as a peripheral to the computing module (CM). The SN OPC acts as a peripheral node that resides between the CM and the operating company LAN in SNODE.

The SN OPC connects to the CM through Ethernet interface units (EIU). The SN OPC uses the following method to process the logs:

- the Data Collector collects SN logs and SN OPC Unix Application Environment (UAE) logs
- the Problem Manager correlates SN logs
- the Problem Viewer browses logs and problems
- the SN OPC delivers logs to the local printer

#### Format

The log report format for ODM600 is as follows:

ODM600 mmmdd hh:mm:ss ssdd INFO <ProcessName> <ProcessID> Manual Switch of Activity LOG: 1 Expert data: odmmain.c (437)

### Example

An example of log report ODM600 follows:

```
ODM600 OCT05 18:20:03 4233 INFO odm (14876)
Manual Switch of Activity
LOG:
1
Expert data: odmmain.c (437)
```

ODM600 (end)

## **Field descriptions**

The following table describes each field in the log report:

| Field        | Value    | Description                                      |
|--------------|----------|--|
| ProcessName  | odm      | Indicates the running process of OPC             |
| ProcessID    | nnnn     | Indicates the identification code of the process |
| Manual SWACT | Constant | Indicates a change in the active unit of the OPC |

## Action

There is no immediate action required because a manual SWACT occurred.

### **Associated OM registers**

The SuperNode (SN) Operations Controller (OPC) has two units. One of the units is active and the other is inactive.

The system generates the report when a SN OPC unit becomes active. The other unit enters the manual busy (ManB) state. The information log indicates why and when the SWACT occurred.

The SN OPC appears as a peripheral to the computing module (CM). This SN OPC acts as a peripheral node that resides between the CM and the operating company LAN in SNODE.

The SN OPC connects to the CM through Ethernet interface units (EIU). The SN OPC uses the following method to process the logs:

- the Data Collector collects SN logs and SN OPC Unix Application Environment (UAE) logs
- the Problem Manager correlates SN logs
- the Problem Viewer browses logs and problems
- the SN OPC delivers logs to the local printer

#### Format

The log report format for ODM601 is as follows:

ODM601 mmmdd hh:mm:ss ssdd INFO <ProcessName> <ProcessID> Switch of Activity – Active unit busied. LOG: 1 Expert data: odmmain.c (437)

### **Example**

An example of log report ODM601 follows:

```
ODM601 OCT05 18:20:03 4233 INFO odm (14876)
Switch of Activity - Active unit busied.
LOG:
1
Expert data: odmmain.c (437)
```

ODM601 (end)

# **Field descriptions**

The following table describes each field in the log report:

| Field                         | Value    | Description   |
|-------------------------------|----------|---|
| Process Name                  | odm      | Indicates the running process of OPC                |
| ProcessID                     | nnnn     | Indicates the identification code of the process    |
| SWACT - Active unit<br>busied | Constant | Indicates that the active unit of the OPC is busied |

### Action

There is no immediate action required because a manual SWACT occurred.

# **Associated OM registers**

The SuperNode (SN) Operations Controller (OPC) has two units. One of the units is active and the other is inactive. The system generates the report when an SN OPC unit becomes active because of the failure of the duality between units.

This log indicates a hardware or dangerous software failure of the OPC unit. The SN OPC appears as a peripheral to the computing module (CM). The SN OPC behaves as a peripheral node that resides between the CM and the operating company LAN in SNODE.

The SN OPC connects to the CM through Ethernet Interface Units (EIUs). The SN OPC uses the following methods to process logs:

- the Data Collector collects SN logs and SN OPS Unix Application Environment (UAE) logs
- the Problem Manager correlates SN logs
- the Problem Viewer browses logs and problems
- the SN OPC delivers logs to the local printer

#### Format

The log report format for ODM602 is as follows:

ODM602 mmmdd hh:mm:ss ssdd INFO <ProcessName> <ProcessID> Switch of Activity – Suspected failure of unit <unitNo>. LOG: FAILED 1 Expert data: odmmain.c (437)

#### Example

An example of log report ODM602 follows:

ODM602 OCT05 18:20:03 4233 INFO odm (14876) Switch of Activity - Suspected failure of unit <unitNo>. LOG: FAILED 1 Expert data: odmmain.c (437) **ODM602** (end)

# **Field descriptions**

The following table describes each field in the log report:

| Field  | Value    | Description                                  |
|--|----------|--|
| ProcessName  | odm      | Indicates the running process of OPC         |
| ProcessID  | nnnn     | Indicates the identification code of process |
| Switch of Activity -<br>Suspected failure of<br>unit <unitno></unitno> | Constant | Indicates failure of the OPC unit            |

# Action

Enter the PM MAP level and investigate if the suspected OPC is in service (InSv).

# **Associated OM registers**

The system generates the Office Data Modification (ODM) NE36 log report when the system reestablishes communication with the computing module (CM). The generation of the report depends on the restoration of the CM and ODM.

The ODM process has two connections. The ODM serial link connection and the ODM InterNodal LAN connection. The connections control the activity between SuperNode (SN) Operations Controller (OPC) units.

The SN OPC appears as a peripheral to the CM. The SN OPC acts as a peripheral node that resides between the CM and the operating company LAN in SNODE. The SN OPC connects to the CM through Ethernet interface units (EIU). The SN OPC uses the following methods to process the logs:

- the Data Collector collects SN logs and SN OPC Unix Application Environment (UAE) logs
- the Problem Manager correlates SN logs
- the Problem Viewer browses logs and problems
- the SN OPC delivers logs to the local printer

#### Format

The log report format for ODM603-NE36 is as follows:

ODM603 mmmdd hh:mm:ss ssdd INFO <ProcessName> <ProcessID> CM Communication Re – Established with Unit <unitNo> Failure Reason: <reason> LOG: FAILED 1 Expert data: odmmain.c (437)

#### Example

An example of log report ODM603-NE36 follows:

```
ODM603 OCT05 18:20:03 4233 INFO odm (14876)
CM Communication Re - Established with Unit 1
Failure Reason: SOS WARM restart no.2 at OCT-05 18:18:00
LOG: FAILED
1
Expert data: odmmain.c (437)
```

### ODM603-NE36 (end)

# **Field descriptions**

The following table describes each field in the log report:

| Field       | Value                                   | Description                                      |
|-------------|---|--|
| ProcessName | odm                                     | Indicates the running process of OPC             |
| ProcessID   | nnnn                                    | Indicates the identification code of the process |
| reason      | SOS WARM restart no.2 at mmmdd hh:mm:ss | Indicates the reason of failure                  |

### Action

There is no action required.

# **Associated OM registers**

The Data Collector Interface delivers the logs to Log Store as the Data Collector receives the logs. Log Store receives logs from Data Collector and stores them in UNIX files. The Log Store rotates through a set of files and fills each file before over-writing the oldest one. The files are overwritten in a way that the size allocated remains constant.

The operations controller (OPC) Log Store (OLS) generates log report OLS301. The system generates the report when Log Store fails to connect to the Data Collector. This log does not appear while the Data Collector Interface software processes polling for the Data Collector.

### Format

The log report format for OLS301 is as follows:

OLS301 mmmdd hh:mm:ss FAIL OLS <SeqNo><EventType> Unable to Connect to DCI, <ProcessName>(<ProcessId>) <Description> <Label> LOG:<Faulty mnemonic> 1 Expert data:<ProcedureName>(<LineNo>)

# Example

An example of log report OLS301 follows:

OLS301 OCT22 13:24:05 0012 FAIL OLS(10032) Unable to Connect to DCI, return code=-10 Init Fail LOG:FAILED 1 Expert data:dcilogp.c(264) OLS301 (end)

### **Field descriptions**

The following table describes each field in the log report:

| Field                    | Value    | Description   |
|--------------------------|----------|---|
| FAIL OLS                 | Constant | Indicates when OPC OLS encounters trouble   |
| Cannot Connect to<br>DCI | Constant | Indicates when a connection problem occurs between DCI (Data Collector Interface) and Log Store |
| Init Fail                | Constant | Indicates failure of initialization   |
| Expert data              | String   | Indicates the procedure name written in C++ programming language                                |

# Action

The initialization process reads the Log Store configuration file. The system cannot establish a connection through Log Storage facility if a failure occurs during initialization. To clear the problem, restart the OLS and Data Collector.

# **Associated OM registers**

The system reads Log Store configuration file during initialization. This file has two parameters: the path to the storage files and the number of storage files. The Log Store allocates new files ahead of time. If the number of files increases, the Log Store includes the new log in the round buffer.

The system generates log report OLS302 when operations controller (OPC) log storage (OLS) cannot access the directory that includes the configuration file.

#### Format

The log report format for OLS302 is as follows:

OLS302 mmmdd hh:mm:ss FAIL OLS <SeqNo><EventType> Error in path to storage files, <ProcessName>(<ProcessId>) Init Fail LOG:<Faultymnemonic> 1 Expert data:<ProcedureName>(<LineNo>)

# Example

An example of log report OLS302 follows:

```
LS302 OCT22 13:24:05 0012 FAIL OLS(10032)
Error in path to storage files, erno=2
Init Fail
LOG:FAILED
1
Expert data:dcilogp.c(264)
```

#### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                          | Value    | Description   |
|--------------------------------|----------|---|
| FAIL OLS                       | Constant | Indicates a problem on OPC OLS  |
| Error in path to storage files | Constant | Indicates an error in the path to the storage files in the configuration file |

#### **OLS302** (end)

(Sheet 2 of 2)

| Field       | Value    | Description  |
|-------------|----------|--|
| Init Fail   | Constant | Indicates failure of initialization                              |
| Expert data | String   | Indicates the procedure name written in C++ programming language |

#### Action

Edit the path to the storage in the configuration file or change the permission of the path.

### **Associated OM registers**

The operations controller (OPC) log storage (OLS) subsystem generates log report OLS303. The Log Store writes storage files. Log retrieval reads the storage files. To reserve space, the system allocates storage space for new files. Before the creation of the storage files, the Log Store checks if enough disk space is available for the files. Log Store generates the report and terminates file storage if not enough storage space is available.

### Format

The log report format for OLS303 is as follows:

OLS303 mmmdd hh:mm:ss FAIL OLS <SeqNo><EventType> Insufficient disk space for storage files. Init Fail LOG:<Faulty mnemonic> 1 Expert data:<ProcedureName>(<LineNo>)

# Example

An example of log report OLS303 follows:

```
OLS303 OCT21 13:24:05 0012 FAIL OLS(10032)
Insufficient disk space for storage files.
Init Fail
LOG:FAILED
1
Expert data:dcilogp.c(264)
```

# **Field descriptions**

The following table describes each field in the log report:

| Field                                   | Value    | Description  |
|---|----------|--|
| FAIL OLS                                | Constant | Indicates a problem on the OPC OLS                               |
| Not enough disk space for storage files | Constant | Indicates not enough disk space for the storage files is present |
| Init Fail                               | Constant | Indicates initialization failure                                 |
| Expert data                             | String   | Indicates the procedure name written in C++ programming language |

### OLS303 (end)

### Action

Consult the system administrator to increase the free disk space. You also can reduce the value of the `Number of files' parameter in the configuration file.

#### **Associated OM registers**

The operations controller (OPC) log storage (OLS) subsystem generates log report OLS304. The system generates this report if a failure to read or write the directory file occurs during initialization. The directory file allows log store and log retrieval to communicate. The directory file allows the log store to determine which files to access.

#### Format

The log report format for OLS304 is as follows:

OLS304 mmmdd hh:mm:ss FAIL OLS <SeqNo><EventType> Invalid directory file Init Fail LOG:<Faulty mnemonic> 1 Expert data:<ProcedureName>(<LineNo>)

### Example

An example of log report OLS304 follows:

```
OLS304 OCT21 13:24:05 0012 FAIL OLS(10032)
Invalid directory file
Init Fail
LOG:FAILED
1
Expert data:dcilogp.c(264)
```

#### **Field descriptions**

The following table describes each field in the log report:

| Field                         | Value    | Description   |
|-------------------------------|----------|---|
| FAIL OLS                      | Constant | Indicates a problem on OPC OLS.   |
| Directory file not<br>correct | Constant | Indicates that the directory file contains information that is not correct. |
| Init Fail                     | Constant | Indicates that initialization fails.  |
| Expert data                   | String   | Indicates the procedure name written in C++ programming language.           |

### OLS304 (end)

### Action

Edit the directory file and correct the problem. If the edit fails, delete the directory file and restart the log store.

#### **Associated OM registers**

### **OLS305**

#### **Explanation**

The system reads the log store configuration file during initialization. The two parameters in the configuration file are: the path to the storage files and the number of storage files. The system generates log report OLS305 when the configuration file contains invalid information.

#### Format

The log report format for OLS305 is as follows:

OLS305 mmmdd hh:mm:ss FAIL OLS<SeqNo><EventType> invalid configuration file Init Fail LOG:<Faulty mnemonic> 1 Expert data:<ProcedureName>(<LineNo>)

### Example

An example of log report OLS305 follows:

```
OLS305 OCT21 13:24:05 0012 FAIL OLS(10032)
   Invalid configuration file
   Init Fail
   LOG:FAILED
   1
   Expert data:dcilogp.c(264)
```

# **Field descriptions**

The following table describes each field in the log report:

| Field                          | Value    | Description   |
|--------------------------------|----------|---|
| FAIL OLS                       | Constant | Indicates a problem on OPC OLS.   |
| configuration file not correct | Constant | Indicates that the configuration file contains information that is not correct. |
| Init Fail                      | Constant | Indicates that initialization fails.  |
| Expert data                    | String   | Indicates the procedure name written in C++ programming language.               |

# OLS305 (end)

### Action

Edit the configuration file and correct the problem.

# **Associated OM registers**

The operations controller (OPC) log storage (OLS) subsystem generates log report OLS306. The subsystem generates this report when the configuration file does not have permission to read for the OPC OLS.

During initialization, the system reads the log store configuration file. This configuration file has (either) the default UNIX name of ols.config, on storage in the /iws/opcfiles directory, or a different UNIX name. The log store reads the path name and the number of files from the ols.config file.

#### Format

The log report format for OLS306 is as follows:

OLS306 mmmdd hh:mm:ss FAIL OLS<SeqNo><EventType> Failed to open configuration file Init Fail LOG:<Faulty mnemonic> 1 Expert data:<ProcedureName>(<LineNo>)

# Example

An example of log report OLS306 follows:

```
OLS306 OCT21 13:24:05 0012 FAIL OLS(10032)
Failed to open configuration file
   /iws/opcfiles/ols.config, erno=2
Init Fail
LOG:FAILED
1
Expert data:dcilogp.c(264)
```

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field  | Value    | Description   |
|--|----------|---|
| FAIL OLS   | Constant | Indicates a problem on OPC OLS.   |
| Fails to open<br>configuration file<br>/iws/opcfiles/ols. config | Constant | Indicates that the configuration file does not have permission to read for OLS. |

# OLS306 (end)

(Sheet 2 of 2)

| Field       | Value    | Description   |
|-------------|----------|---|
| Init Fail   | Constant | Indicates that initialization fails.                              |
| Expert data | String   | Indicates the procedure name written in C++ programming language. |

#### Action

Change the permission of the configuration file so that OLS can read the configuration file.

# Associated OM registers

The log store creates the storage files and establishes an interprocessor communications (IPC) connection with the Data Collector. The log store establishes a connection to get the UNIX Application Environment (UAE) loop and the loop from the DMS switch. The system generates log report OLS307 when OPC log storage (OLS) cannot create a storage file during initialization.

### Format

The log report format OLS307 is as follows:

OLS307 mmmdd hh:mm:ss FAIL OLS<SeqNo><EventType> Failed to create storage file <ProcessName>(<ProcessId>) Init Fail LOG:<Faulty mnemonic> 1 Expert data:<ProcedureName>(<LineNo>)

# Example

An example of log report OLS307 follows:

```
OLS307 OCT21 13:24:05 0012 FAIL OLS(10032)
Failed to create storage file STORAGE001, erno=13
Init Fail
LOG:FAILED
1
Expert data:dcilogp.c(264)
```

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field  | Value    | Description  |
|--|----------|--|
| FAIL OLS                                       | Constant | Indicates a problem on OPC OLS.                      |
| Failed to create<br>storage file<br>STORAGE001 | Constant | Indicates that the OLS cannot create a storage file. |

#### OLS307 (end)

(Sheet 2 of 2)

| Field       | Value    | Description   |
|-------------|----------|---|
| Init Fail   | Constant | Indicates that initialization fails.                              |
| Expert data | String   | Indicates the procedure name written in C++ programming language. |

### Action

Check the permission of the storage directory. The storage directory and the storage files must have permission to read and write for the group.

### **Associated OM registers**

The system generates log report OLS308. The system generates this report when OPC log storage (OLS) cannot perform a file operation on the log directory during initialization. Some 7-6 operations are: open, read and write. The configuration file contains invalid information.

A failure to read or write to the directory file, during initialization, causes the log store to generate a log a self-destruct. The directory file allows communication between log store and log retrieval. The directory file allows the log store to determine the files to access. The OLS cannot proceed without the directory file. The error number is in the errnor.h file.

### Format

The log report format for OLS308 is as follows:

OLS308 mmmdd hh:mm:ss FAIL OLS<SeqNo><EventType> Failed to read directory file, <ProcessName>(<ProcessId>) Init Fail LOG:<Faulty mnemonic> 1 Expert data:<ProcedureName>(<LineNo>)

# Example

An example of log report OLS308 follows:

```
OLS308 OCT21 13:24:05 0012 FAIL OLS(10032)
Failed to read directory file, errno=2
Init Fail
LOG:FAILED
1
Expert data:dcilogp.c(264)
```

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                         | Value    | Description   |
|-------------------------------|----------|---|
| FAIL OLS                      | Constant | Indicates a problem on OPC OLS.   |
| Failed to read directory file | Constant | Indicates a failure occurs in a directory file during log store initialization. |

#### OLS308 (end)

(Sheet 2 of 2)

| Field       | Value    | Description   |
|-------------|----------|---|
| Init Fail   | Constant | Indicates that initialization fails.                              |
| Expert data | String   | Indicates the procedure name written in C++ programming language. |

### Action

Investigate the contents and the permission of the directory file. Delete the directory file and restart log store.

# Associated OM registers

The log store maintains a directory file. The directory file has the time stamp of the first log in the storage files listed near the file name. The system generates log report OLS310 when the system receives a log with an invalid time-stamp.

### Format

The log report format for OLS310 is as follows:

OLS310 mmmdd hh:mm:ss FAIL OLS<SeqNo><EventType> Invalid time-stamp-dropping <ProcessName>(<ProcessId>) <Description> LOG:<Faulty mnemonic> 1 Expert data:<ProcedureName>(<LineNo>)

# Example

An example of log report OLS310 follows:

```
OLS310 OCT21 13:24:05 0012 FAIL OLS(10032)
Invalid time-stamp-dropping log.
Error
LOG:FAILED
1
Expert data:dcilogp.c(264)
```

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                               | Value    | Description                                     |
|-------------------------------------|----------|---|
| FAIL OLS                            | Constant | Indicates a problem on OPC OLS.                 |
| Time-stamp-dropping log not correct | Constant | Indicates that a log has an invalid time-stamp. |

# OLS310 (end)

#### (Sheet 2 of 2)

| Field       | Value    | Description   |
|-------------|----------|---|
| Error       | Constant | Indicates that an error occurs.                                   |
| Expert data | String   | Indicates the procedure name written in C++ programming language. |

### Action

There are no required actions.

# Associated OM registers

The system generates log report OLS311 when OPC log storage (OLS) cannot open a storage file. When OLS cannot open a storage file, the file is not in the file rotation. The log store sends requests to the data synchronization process. The log store sends requests to maintain a current set of storage files on the inactive OPC processor. The log store sends requests for data synchronization to copy the most recently entered file and directory. The log store sends the requests when the log store switches storage files.

### Format

The log report format for OLS311 is as follows:

OLS311 mmmdd hh:mm:ss FAIL OLS<SeqNo><EventType> Failed to open storage file <ProcessName>(<ProcessId>) <Description> LOG:<Faulty mnemonic> 1 Expert data:<ProcedureName>(<LineNo>)

# Example

An example of log report OLS311 follows:

```
OLS311 OCT21 13:24:05 0012 FAIL OLS(10032)
Failed to open storage file STORAGE001, errno=2,
switching files.
Error
LOG:FAILED
1
Expert data:dcilogp.c(264)
```

# **Field descriptions**

The following table describes each field in the log report:

| (Sheet | 1 | of | 2) |  |
|--------|---|----|----|--|
|--------|---|----|----|--|

| Field   | Value    | Description                                    |
|---|----------|--|
| FAIL OLS  | Constant | Indicates a problem on OPC OLS.                |
| Failed to open storage file STORAGE001,<br>errno=2, switching files | Constant | Indicates that OLS cannot open a storage file. |

### OLS311 (end)

(Sheet 2 of 2)

| Field       | Value    | Description   |
|-------------|----------|---|
| Error       | Constant | Indicates that an error occurred.                                       |
| Expert data | String   | Indicates the procedure name<br>written in C++ programming<br>language. |

# Action

The log store cannot delete the old files. When the log store restarts, the log store attempts to delete and create the files that are not in use again.

# **Associated OM registers**

# OLS312

#### **Explanation**

During normal operation, if a write failure to storage file occurs, the system increments a counter and drops the log. If three write failures occur in a row, Log Store generates a log and switches to the next storage file. The system generates this log when OPC Log Storage (OLS) fails to write three consecutive logs to log storage file.

#### Format

The log report format for OLS312 is as follows:

OLS312 mmmdd hh:mm:ss FAIL OLS<SeqNo><EventType> Failed to write 3 logs to storage file <FileName> switching files <Description> LOG:<Faulty mnemonic> 1 Expert data:<ProcedureName>(<LineNo>)

### Example

An example of log report OLS312 follows:

```
OLS312 OCT21 13:24:05 0012 FAIL OLS(10032)
Failed to write 3 logs to storage file STORAGE001,
switching files
Error
LOG:FAILED
1
Expert data:dcilogp.c(264)
```

#### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field   | Value    | Description   |
|---|----------|---|
| FAIL OLS  | Constant | Indicates a problem on OLS  |
| Failed to write 3 logs to<br>storage file<br>STORAGE001,<br>switching files | Constant | Indicates that OLS failed to write three consecutive logs into a storage file |

# OLS312 (end)

#### (Sheet 2 of 2)

| Field       | Value    | Description   |
|-------------|----------|---|
| Error       | Constant | Indicates an error.   |
| Expert data | String   | Indicates the procedure name in C++<br>programming language |

### Action

There is no action required.

# Associated OM registers

The system generates this log when OPC log storage (OLS) lets two consecutive logs pass without writing them to a storage file. This occurs because of a failure to read/write to the directory file, or a failure to write to a storage file.

#### Format

The log report format for OLS313 is as follows:

```
OLS313 mmmdd hh:mm:ss <SeqNo><EventType>
<ProcessName>(<ProcessId>)
<Description>
<Label>
LOG:<Faulty mnemonic>
1
Expert data:<ProcedureName>(<LineNo>)
```

# Example

An example of log report OLS313 follows:

```
OLS313 OCT21 13:24:05 0012 FAIL OLS(10032)
Failed to write 2 logs to storage file STORAGE001.
Error
LOG:FAILED
1
Expert data:dcilogp.c(264)
```

# **Field descriptions**

The following table describes each field in the log report:

| Field   | Value    | Description   |
|---|----------|---|
| FAIL OLS  | Constant | Indicates a problem on OLS                                    |
| Failed to write 2 logs to<br>storage file<br>STORAGE001 | Constant | Indicates a failure to write to the directory or storage file |
| Error   | Constant | Indicates an error  |
| Expert data   | String   | Indicates the procedure name in C++<br>programming language   |

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OLS313 (end)

# Action

There is no action required.

# **Associated OM registers**

## **OLS320**

#### **Explanation**

If an open or a write process fails on an OPC log storage (OLS) file, log store assigns the file a status of corrupt. Log store assigns the status of corrupt in the directory file. The system generates this log if more than 25% of the files have a status of corrupt.

#### Format

The log report format for OLS320 is as follows:

OLS320 mmmdd hh:mm:ss <SeqNo><EventType> <ProcessName>(<ProcessId>) <Description> <Label> LOG:<Faulty mnemonic> 1 Expert data:<ProcedureName>(<LineNo>)

# Example

An example of log report OLS320 follows:

```
OLS320 OCT21 13:24:05 0012 FAIL OLS(10032)
Too many corrupt storage files
Aborting
LOG:FAILED
1
Expert data:dcilogp.c(264)
```

# **Field descriptions**

The following table describes each field in the log report:

| Field                          | Value    | Description   |
|--------------------------------|----------|---|
| FAIL OLS                       | Constant | Indicates a problem on OLS  |
| Too many corrupt storage files | Constant | Indicates that more than 25% of the storage files have a status of corrupt                  |
| Aborting                       | Constant | Indicates the system cannot write the storage files any more. The system stops the process. |
| Expert data                    | String   | Indicates procedure name in C++ programming language  |

### OLS320 (end)

#### Action

Restart the OLS. The system restarts log store as part of initialization by the Distributed Resource Manager (DRM). The log store goes through the directory file and finds the files with a status of corrupt. The system preallocates these files again.

# **Associated OM registers**

The system generates OLS321 when OPC log storage (OLS) cannot read or write to the directory file.

#### Format

The log report format for OLS321 is as follows:

```
OLS321 mmmdd hh:mm:ss <SeqNo><Event Type>
<ProcessName>(<ProcessId>)
<Description>
<Label>
LOG:<Faulty mnemonic>
1
Expert data:<ProcedureName>(<LineNo>)
```

# Example

An example of log report OLS321 follows:

```
OLS321 OCT21 13:24:05 0012 FAIL OLS(10032)
Failed 3 read/write operations on the directory file.
Aborting
LOG:FAILED
1
Expert data:dcilogp.c(264)
```

# **Field descriptions**

The following table describes each field in the log report:

| Field  | Value    | Description   |
|--|----------|---|
| FAIL OLS   | Constant | Indicates a problem on OLS.   |
| Failed 3 read/write<br>operations on the<br>directory file | Constant | Indicates that OLS failed to read or write three consecutive logs into a directory file.            |
| Aborting   | Constant | Indicates the system cannot read or write the storage files any more. The system stops the process. |
| Expert data  | String   | Indicates the procedure name in the C++ programming language.                                       |

### OLS321 (end)

### Action

Investigate the contents and the permission of the directory file. If both the content and the permission fail, delete the directory file and reload the new file.

### **Associated OM registers**

The system generates OLS600 by OPC log storage (OLS) when OLS is initializing and preallocates new storage files. It is normal for this log to appear when the system starts OLS for the first time.

SuperNode (SN) Operations Controller (OPC) system provides log processing, collection and correlation of SN logs. The OPC browses and delivers logs to a local printer. Log store is a single process. The Distributed Resource Manager (DRM) starts log store when the system starts SN OPC.

#### Format

The log report format for OLS600 is as follows:

OLS600 mmmdd hh:mm:ss ssdd INFO OLS (10032) <description> <label> LOG: <Faulty mnemonic> 1 Expert data: <ProcedureName. (<LineNo>)

# Example

An example of log report OLS600 follows:

```
OLS600 JUL24 18:36:06 1800 INFO OLS
(10032)
Preallocated 10 storage file(s)
Init Info
LOG:
1
Expert data: dcilogp.c (264)
```

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field       | Value                          | Description                                   |
|-------------|--------------------------------|---|
| description | Preallocated n storage file(s) | Indicates new storage files are preallocated. |

# OLS600 (end)

#### (Sheet 2 of 2)

| Field                   | Value           | Description                                |
|-------------------------|-----------------|--|
| label                   | Init Info       | Indicates start of initialization process. |
| ProcedureName<br>LineNo | dcilogp.c (264) | Gives the running process name.            |

### Action

There is no action required.

# Associated OM registers

The OPC log storage (OLS) generates this log when OLS deletes old storage files during initialization. This log should only appear if the number of files value in ols.config. recently decreases.

SuperNode (SN) Operations Controller (OPC) system provides log processing, collection and correlation of SN logs. The OPC also browses logs and delivers logs to a local printer. Log Store is a single process. The Distributed Resource Manager (DRM) starts the log store when the SN OPC starts.

During initialization, the system reads the log storage configuration file. A configuration file with a default name (UNIX) ols.config is stored in /iws/opcfiles or with a different UNIX name. The path name and the number of files are read from the file ols.config by OLS.

#### Format

The log report format for OLS601 is as follows:

OLS601 mmmdd hh:mm:ss ssdd INFO OLS (10032) <description> <label> LOG: <Faulty mnemonic> 1 Expert data: <ProcedureName. (<LineNo>)

# Example

An example of log report OLS601 follows:

OLS601 JUL24 18:36:06 1800 INFO OLS (10032) Deleted 5 storage file(s) Init Info LOG: 1 Expert data: dcilogp.c (264) OLS601 (end)

# **Field descriptions**

The following table describes each field in the log report:

| Field                   | Value                     | Description                                |
|-------------------------|---------------------------|--|
| description             | Deleted n storage file(s) | Indicates old storage files are deleted.   |
| label                   | Init Info                 | Indicates start of initialization process. |
| ProcedureName<br>LineNo | dcilogp.c (264)           | Gives the running process name.            |

# Action

There is no action required.

# **Associated OM registers**

OPC log storage (OLS) generates this log when OLS is initializes and preallocates storage files with a previous status of corrupt.

SuperNode (SN) Operations Controller (OPC) system provides log processing, collection and correlation of SN logs. It also browses logs and delivers logs to a local printer. Log Store is a single process. The Distributed Resource Manager (DRM) starts when the SN OPC starts up.

During initialization, the system reads the log storage configuration file. A configuration file with a default name (UNIX) ols.config is stored in /iws/opcfiles or with a different UNIX name. The path name and the number of files are read from the file ols.config by OLS.

# Format

The log report format for OLS602 is as follows:

OLS602 mmmdd hh:mm:ss ssdd INFO OLS (10032) <description> <label> LOG: <Faulty mnemonic> 1 Expert data: <ProcedureName. (<LineNo>)

# Example

An example of log report OLS602 follows:

OLS602 JUL24 18:36:06 1800 INFO OLS (10032) Rebuilt storage file STORAGE001 Init Info LOG: 1 Expert data: dcilogp.c (264) OLS602 (end)

# **Field descriptions**

The following table describes each field in the log report:

| Field                   | Value   | Description   |
|-------------------------|---|---|
| description             | Rebuilt storage file<br><filename></filename> | Indicates that old corrupted storage files are built again. |
| label                   | Init Info                                     | Indicates initialization process started.                   |
| ProcedureName<br>LineNo | dcilogp.c (264)                               | Gives the running process name.                             |

# Action

There is no action is required.

# **Associated OM registers**

The Operational Measurement 2 (OM2) subsystem generates this report when the OM recording process is inactive (the write session is over). This delay of writing to the storage device occurs after every transfer period (5, 15, or 30 m). Parameter OMXFR in Table OFCENG (refer to the *Office Parameters Reference Manual*) determines the transfer period.

This log indicates the interval during which maintenance personnel can change the magnetic tape without loss of data. The difference between reactivation time and the time when the system generates the log is the inactive period. After reactivation time, you must not change the magnetic tape until the system generates the next log.

# Format

The log report format for OM2113 is as follows:

#### OM2113 mmmdd hh:mm:ss ssdd INFO OMTAPE OMRECORDING INACTIVE UNTIL: reactivation\_time

# Example

An example of log report OM2113 follows:

OM2113 NOV17 19:31:11 1842 INFO OMTAPE OMRECORDING INACTIVE UNTIL: 1981/11/17 20:00:00 TUE

# **Field descriptions**

The following table describes each field in the log report:

| Field                         | Value    | Description  |
|-------------------------------|----------|--|
| INFO OMTAPE                   | Constant | Indicates an information-only log and refers<br>to Table OMTAPE. Table OMTAPE<br>controls the transfer of OM data to recording<br>devices by the Device Independent<br>Recording Package (DIRP) feature. (refer to<br><i>Translations Guide</i> ). |
| OMRECORDING INACTIVE<br>UNTIL | Integers | Gives the year/month/day hour/minute/<br>second day-of-the-week, before which a<br>tape change can be made with no loss of<br>data.  |

# OM2113 (end)

### Action

There is no action required. If you must change the tape, change it before the reactivation time.

### **Associated OM registers**

There are no associated OM registers.

# **Additional information**

There is no additional information.

### OM2115

### **Explanation**

The Operational Measurement 2 (OM2) subsystem generates OM2115. This event occurs when an error stops the output of a buffered OM report to a dedicated output device. The system generates OM2115 by stopping an OM output device with the STOP command. The STOP command is in the Operational Measurements Buffered Report (OMBR) level of the MAP (maintenance and administration position). The system also generates OM2115 by stopping an OM output device.

# Format

The log report format for OM2115 is as follows:

OM2115 mmmdd hh:mm:ss ssdd INFO OMBR STOPPED DEVICE = devtxt rsntxt

# Example

An example of log report OM2115 follows:

OM2115 DEC15 21:12:00 2112 INFO OMBR STOPPED DEVICE = LP121 Device not available.

# **Field descriptions**

The following table describes each of the field in the log report:

| Field                | Value         | Description   |
|----------------------|---------------|---|
| INFO OMBR<br>STOPPED | Constant      | Indicates why the output of a buffered OM report stopped.                   |
| DEVICE               | Symbolic text | Identifies the dedicated device on which the system generated the OM report |
| rsntxt               | Text          | Indicates why the output of a buffered OM report stopped.                   |

# Action

If a failure causes the buffered output to stop, check the dedicated output device. The dedicated output device must be online and ready. Make sure all applications, other than the OM2 subsystem, do not use the output device. Use

# OM2115 (end)

the REROUTE command of OMBR to restart the report at the fixed device. The fixed device must be online and ready.

### **Associated OM registers**

# OM2116\_M

### **Explanation**

The Operational Measurements 2 (OM2) subsystem generates OM2116. Generation occurs when a special condition arises while the system writes an Operational Measurement Buffered Report (OMPR) to the OMPR report buffer. The subsystem also generates OM2116 while the system reads an OMPR report from the OMPR report buffer. This condition may be an error condition that indicates a software error. It also can indicate that a special event happened (for example, the buffer became full or a restart happened).

### Format

The format for log report OM2116\_M is as follows:

OM2116 date time log# INFO OMBR ERROR OMBR-error-text

# Example

An example of log report OM2116\_M follows:

OM2116 DEC15 15:30:40 6265 INFO OMBR ERROR Data overwriting has occurred.

# **Field descriptions**

The following table describes each field in the log report:

| Field           | Value    | Description  |
|-----------------|----------|--|
| INFO OMBR ERROR | Constant | Indicates an error occurs during the writing of<br>an OMPR to the OMPR report buffer. The<br>error also can occur during the reading of an<br>OMPR report from the OMPR report buffer. |
| OMBR error text | Text     | Indicates which error occurs. Refer to Action Table on the next page.  |

# Action

If a message repeatedly occurs during the normal direction of events, report the problem. The system will produce a log for the following events but no problem needs reporting: a restart, output cutoff buffer overflow. If this problem occurs, allocate a larger volume. The following table lists actions for other error messages.

### OM2116\_M (continued)

The following table gives an explanation and lists the correct action to take for each ERRTXT message:

#### (Sheet 1 of 2)

| ERRTXT  | Explanation  | Action   |
|---|--|--|
|   |  |  |
| Premature termination of output               | Indicates the writing of<br>an OMPR to the OMBR<br>terminated too early. | If able to reproduce, contact the next level of maintenance. |
| Data overwriting has<br>occurred              | Indicates the switch<br>overloaded during the<br>report transfer.        | There is no action required.                                 |
| OMPR report terminated abnormally             | Indicates possible buffer<br>overload when a report<br>is written to it. | If able to reproduce, contact the next level of maintenance. |
| Restart caused cutoff of report               | Indicates a restart<br>caused report reading or<br>writing to cut off.   | There is no action required.                                 |
| A bad accumulation table was found.           | Indicates a bad<br>accumulation table<br>found.                          | If able to reproduce, contact the next level of maintenance. |
| An invalid data storage mode was encountered. | Indicates possible file<br>damage or software<br>error.                  | Contact the next level of maintenance.                       |
| Invalid tuple number<br>was used              | Indicates the use of an invalid tuple number.                            | If able to reproduce, contact the next level of maintenance. |
| Tuple data not found in this office           | Indicates the tuple data is not found in this office.                    | If able to reproduce, contact the next level of maintenance. |
| Error while recovering<br>from previous error | Indicates an error<br>occurred during error<br>recovery.                 | Contact the next level of maintenance.                       |
| Unexpected record type                        | Indicates possible file<br>damage or software<br>error.                  | Contact the next level of maintenance.                       |
| Attempt to write to full<br>disk buffer       | Indicates a software<br>error  | Contact the next level of maintenance.                       |

# OM2116\_M (end)

| (Sheet | 2 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| ERRTXT   | Explanation   | Action  |
|--|---|---|
| Could not write super record                       | Indicates problem with the file on disk                               | Probable hardware problem. If problem does not clear, recreate OMPR buffer. |
| Legal write on deleted buffer                      | Indicates the deletion of<br>the buffer when writing<br>an OMPR to it | There is no action required.  |
| Attempting to read<br>empty buffer                 | Indicates a software error  | Contact the next level of maintenance.                                      |
| Could not read super record                        | Indicates problem with the file on disk                               | If problem does not clear, recreate OMPR buffer.                            |
| OMBUFFP could not get<br>awakened or<br>suspended. | Indicates problem with<br>OMBUFFP                                     | If able to reproduce, contact the next level of maintenance                 |
| Attempt to open file for<br>reading failed         | Indicates possible<br>hardware problem                                | If problem does not clear, contact the next level of maintenance.           |
| Attempt to open file for writing failed            | Indicates possible<br>hardware problem                                | If problem does not clear, contact the next level of maintenance.           |
| Invalid data in super record                       | Indicates disk file<br>damage or software<br>error                    | If able to reproduce, contact the next level of maintenance                 |

# Associated OM registers

#### OM2117

#### Explanation

The Operational Measurement 2 (OM2) subsystem generates OM2117 when a given part of the OM system overload. In most occurrences, not appropriate entry of OM tables causes the overload. If the OM system seriously overloads, a number of logs can generate in a given transfer period. (Up to 30 classes can be entered in Table OMACC.)

#### Format

The format for log report OM2117 is as follows:

OM2117 mmmdd hh:mm:ss ssdd INFO OM overload Process procesnm Del mess. type: msgtype Class classnm not output.

#### Example

An example of log report OM2117 follows:

OM2117 OCT25 11:01:30 3327 INFO OM overload Process OMPRTP Del Mess. type: 11 Class OMTEST not output

#### **Field descriptions**

The following table describes each field in the log report:

| Field               | Value         | Description   |
|---------------------|---------------|---|
| INFO OM<br>overload | Constant      | Indicates the OM system is overloaded.  |
| Process             | Symbolic text | Identifies the process. Refer to table under action.  |
| Del Mess. type      | Integer       | Identifies the internal number that to<br>determines the type of work required.<br>Msgtype 11 indicates that work must<br>be performed on OM data.  |
| Class               | Text          | Indicates the name of the class that is<br>not generated or accumulated. The<br>class name is only correct when the<br>message type is 11. If the message<br>type is not 11, ignore the last line of<br>the log report. |

# Action

The following Process and Action table provides an explanation of each process and lists the correct action for each process:

| Process | Explanation  | Action   |
|---------|--|--|
| OMACCP  | Indicates that because the OM<br>system is congested, the<br>accumulation for a transfer<br>period will be skipped. The<br>msgtype for this process is<br>always 11 and the classnm is<br>always set to HOLDING.   | Reduce the size of the accumulation classes datafilled in table OMACC. |
| OMPRTP  | Two msgtypes for this process<br>are present. Msgtype 11<br>indicates the data for a given<br>class can not generate. The<br>classnm will be missing from<br>the OMPRs.  | Reduce the size of the<br>OMPRs entered in table<br>OMPRT.             |
|         | Msgtype 12 indicates the issue<br>of a DELETE or RESETBUF<br>command of the OMBR CI<br>increment. The OMPRT<br>subsystem is overloaded when<br>the command is issued.  | Reissue the command<br>when the system is not<br>overloaded.           |
| OMTAPEP | Two msgtypes for this process<br>are present. Msgtype 11<br>indicates the data for a given<br>class can not generate. The<br>classnm will be missing from<br>the reports produced by the<br>OMTAPE subsystem.      | Reduce the size of the classes the system generates.                   |
|         | Msgtype 133 indicates the<br>issue of a request for dumping<br>traffic separation data to disk<br>or tape. The request uses the<br>OMTAPE subsystem through<br>the TSNDMP CI. The request<br>can not be processed. | Reissue the request when<br>the OMTAPE subsystem is<br>not overloaded. |

# **OM2117** (end)

| (Sheet 2 of 2)  |   |  |
|---|---|--|
| Process   | Explanation   | Action   |
| OMREPP Two msgtypes for this process<br>are present. Msgtype 11<br>indicates the data required for<br>the given report can not<br>generate. The missing<br>classnm will be indicated. |   | Reduce the frequency at<br>which the system reports<br>generates.  |
|   | Msgtype 315 indicates the<br>issue of a request for an OM<br>report with the REQUEST<br>command of the OMREPORT<br>CI. The request can not be<br>processed. | Reissue the request when<br>the OMREPORT<br>subsystem is not<br>overloaded.  |
| SZDCANM   | Indicates the SEAS system is<br>overloaded. The process is set<br>to OMREPP and the msgtype<br>is always 11.  | Contact the Signaling<br>Engineering and<br>Administration System<br>(SEAS) system prime for<br>additional instructions. |

# **Associated OM registers**

### OM2200

### Explanation

The Operational Measurement 2 (OM2) subsystem generates OM2200 when the system exceeds a threshold condition. Entries in tables ALARMTAB (read only) and OMTHRESH (read/write) define thresholds. Register name and permit values entered for threshold, SCANTIME, and severity identify table entries. The number of events that the register counts during a period of minutes (SCANTIME) can exceed the value stored in threshold. If this error occurs, a log generates with the specified severity. Refer to *Operational Measurements Reference Manual* for commands to fill table OMTHRESH.

# Format

The format for log report OM2200 is as follows:

\*\*OM2200 mmmdd hh:mm:ss ssdd INFO THRESHOLD EXCEEDED ON omregtxt THRESHOLD = nnnnn, DELTA = nnnnn, SCANTIME = nnnnn

# Example

An example of log report OM2200 follows:

\*\*OM2200 JAN22 09:50:32 9842 INFO OM THRESHOLD EXCEEDED ON CCBSZ\$0 THRESHOLD = 1500, DELTA = 1627, SCANTIME = 8

# Field descriptions

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                         | Value         | Description   |
|-------------------------------|---------------|---|
| INFO THRESHOLD<br>EXCEEDED ON | Constant      | Indicates OM threshold is exceeded.   |
| omregtxt                      | Symbolic text | Gives the name of the register in table<br>OMTHRESH or ALARMTAB that has had its<br>threshold exceeded. Refer to <i>Operational</i><br><i>Measurements Reference Guide</i> for OM field<br>names. |
| THRESHOLD                     | 1-32767       | Gives the preset register threshold value stored in table OMTHRESH or ALARMTAB.   |

### OM2200 (end)

(Sheet 2 of 2)

| Field    | Value   | Description   |
|----------|---------|---|
| DELTA    | 1-32767 | Gives the number of events possible to<br>measure that occurred within the last scan<br>interval. The log generates because this value<br>meets or exceeds the threshold value. |
| SCANTIME | 1-32767 | Gives the time in minutes used to accumulate<br>the Delta count. This value is entered in table<br>OMTHRESH.  |

# Action

Clear alarm from the EXT level of the MAP (maintenance and administration position). The name of the alarm is OMCRITICAL, OMMAJOR, OMMINOR, or OMNOALARM, depending on the severity entered in the table. This data appears in the log report header.

# **Associated OM registers**

### OM2300

### Explanation

The Operational Measurement 2 (OM2) subsystem generates OM2300 under two conditions. The first condition is when the system fails to allocate store for an accumulator in response to an active table being extended. In this event, the OM group deletes automatically from the class and a the system generates log report. The report also occurs if an internal data structure error occurs. In this event, the system can disable the processing of that group and class and generate a log.

### Format

The format for log report OM2300 is as follows:

OM2300 mmmdd hh:mm:ss ssdd INFO OMACCUM STORE ERROR grptxt clastxt ACTION REQUIRED: TRY OMACCTAB CMD

# Example

An example of log report OM2300 follows:

OM2300 AUG21 10:14:59 4101 INFO OMACCUM STORE ERROR TRK HOURLY ACTION REQUIRED: TRY OMACCTAB CMD

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                       | Value         | Description  |
|-----------------------------|---------------|--|
| INFO OMACCUM<br>STORE ERROR | Constant      | Indicates that the report generates because a problem with the OM accumulator store occurs   |
| grptxt                      | Symbolic text | Indicates the name of the disabled OM group.<br>A group is a set of related measurements<br>identified by a common name. See<br><i>Operational Measurement Reference Manual</i><br>for possible group names. |

### OM2300 (end)

(Sheet 2 of 2)

| Field                                | Value         | Description   |
|--------------------------------------|---------------|---|
| clastxt                              | Symbolic text | Indicates the name of the affected OM accumulating class.   |
| ACTION REQUIRED:<br>TRY OMACCTAB CMD | Constant      | This is an instruction to type the command OMACCTAB, which is used to include a group in a class. |

# Action

Use the OMACCTAB command to allocate the group to the class again. Refer to *Operational Measurements Reference Manual*.

If the log report persists, contact the next level of maintenance.

# **Associated OM registers**

The Communication Server generates log OMO400 when the Communication Server disconnects from the CM node at SuperNode (SN) site. While this connection is down, the Operations Controller (OPC) system does not collect any logs or OM values.

The SN OPC system provides log processing as collecting of SN logs and SN OPC Unix Application Environment (UAE) logs by the Data Collector. The system provides correlating of SN logs by the Problem Manager and the browsing of logs and problems through the Problem Viewer. The system also provides the delivering of logs to a local printer. The Problem Manager is responsible for the log correlations according to the rules in a knowledge base. The log acquisition server and the communication server control the acquisition of SN logs. The log acquisition server, resident on the SN, collects logs, and sends them to the OPC. The communication server, resident on the OPC, receives the logs, and sends them to the Problem Manager. The Problem Solver formats the logs.

# Format

The format for log report OMA400 is as follows:

\*\*\* OMA400 mmmdd hh:mm:ss ssdd FAIL
<ProcessName><ProcessID>
 <Description>
 LOG: <Faulty mnemonic>
 1
 Expert data: omartx.c (437)

# Example

An example of log report OMA400 follows:

```
*** OMA400 OCT21 18:20:03 2 FAIL OMA (14876)
Lost connection to the CM
LOG: FAILED
1
Expert data: omartx.c (437)
```

OMA400 (end)

# **Field descriptions**

The following table describes each field in the log report:

| Field           | Value                     | Description                              |
|-----------------|---------------------------|--|
| ProcessName     | OMA                       | Indicates running process of OPC         |
| ProcessID       | nnnn                      | Indicates identification code of process |
| Description     | Lost connection to the CM | Indicates communication failure          |
| Faulty mnemonic | FAILED                    | Gives fault type                         |

# Action

Check the CM logs, check the status of the Ethernet Interface Unit (EIU) which connects the OPC system and the SN and check link sanity.

# **Associated OM registers**

The Communication Server log report OMA401. The communication server generates this report when the server loses connection to the CM node at the SuperNode (SN) site. The communication server generates this report each time the communication server attempts to connect to the CM. This log can occur about every five minutes. The server can generate this report for all the possible causes of the OMA400 log. The server can generate this log if data entered on the Operations Controller (OPC) or the CM is not correct.

The SN OPC system provides the following log processing tasks as:

- the Data Collector collects SN logs and SN OPC Unix Application Environment (UAE) logs
- the Problem Manager correlates SN logs
- the Problem Viewer allows you to browse logs and
- the system delivers logs to a local printer

The Problem Manager is responsible for the log correlations according to the rules in a knowledge base. The log acquisition server and the communication server control the acquisition of SN logs. The log acquisition server, resident on the SN, collects logs and sends the logs to the OPC. The communication server, resident on the OPC, receives the logs and sends the logs so that the Problem Manager formats the logs.

#### Format

The log report format for OMA401 is as follows:

\*\*\* OMA401 mmmdd hh:mm:ss ssdd FAIL <ProcessName><ProcessID> <Description> LOG: <Faulty mnemonic> 1 Expert data: omartx.c (442)

### Example

An example of log report OMA401 follows:

\*\*\* OMA401 OCT21 18:20:03 2 FAIL OMA (14876) Unable to establish a connection to the CM LOG: FAILED 1 Expert data: omartx.c (442)

OMA401 (end)

# **Field descriptions**

The following table describes each field in the log report.

| Field           | Value                                      | Description   |
|-----------------|--|---|
| ProcessName     | OMA  | Indicates process of OPC that runs                        |
| ProcessID       | nnnn                                       | Indicates identification code of process                  |
| Description     | Unable to establish a connection to the CM | Indicates that the system cannot establish communication. |
| Faulty mnemonic | FAILED                                     | Gives fault type.   |

### Action

Check the CM logs. Check the state of the Ethernet Interface Unit (EIU) that connects the OPC system and the SN. Check link sanity. Verify the CM entry in the file /etc/osihosts. Verify entries in the CM table OSIROUTE.

# **Associated OM registers**

The system log OMA402. Log OMA402 is an information log. The system generates OMA402 when the system establishes a connection between Communication Server and CM. The production of this log indicates that previous OMA400 or OMA401 logs are not active problems.

The SuperNode (SN) Operations Controller (OPC) system provides the following log processing tasks:

- the Data Collector collects SN logs and SN OPC Unix Application Environment (UAE) logs
- the Problem Manager correlates SN logs
- the Problem Viewer allows you to browse logs and problems
- the system delivers logs to a local printer

The Problem Manager is responsible for the log correlations according to the rules in a knowledge base. The log acquisition server and the communication server control the acquisition of SN logs. The log acquisition server, resident on the SN, collects logs and sends the logs to the OPC. The communication server is resident on the OPC. The communication server receives the logs and sends the logs to the Problem Manager. The Problem Manager formats the logs.

#### Format

The log report format for OMA402 is as follows:

OMA402 mmmdd hh:mm:ss ssdd INFO <ProcessName><ProcessID> <Description> LOG: 1 Expert data: omartx.c (487)

### Example

An example of log report OMA402 follows:

```
OMA402 OCT21 18:20:03 2 INFO OMA (14876)
Established connection with CM.
LOG:
1
Expert data: omartx.c (487)
```

OMA402 (end)

# **Field descriptions**

The following table describes each field in the log report.

| Field       | Value                          | Description                                    |
|-------------|--------------------------------|--|
| ProcessName | OMA                            | Indicates process of OPC that runs             |
| ProcessID   | nnnn                           | Indicates identification code of process       |
| Description | Established connection with CM | Indicates the system established communication |

# Action

There is no action required.

# **Associated OM registers**

The Communication Server log report OMA403. The communication server generates OMA403 when the server meets a condition that is not planned. The condition occurs when the server tries to initialize the communication environment. One possible cause of this error can be invalid data entered in the /etc/osihosts file for the CM entry.

The SuperNode (SN) Operations Controller (OPC) system provides the following log processing tasks:

- the Data Collector collects SN logs and SN OPC Unix Application Environment (UAE) logs
- the Problem Manager correlates SN logs
- the Problem Viewer allows you to browse logs and problems
- the system delivers logs to a local printer

The Problem Manager is responsible for the log correlations according to the rules in a knowledge base. The log acquisition server and the communication server control the acquisition of SN logs. The log acquisition server, resident on the SN, collects logs, and sends the logs to the OPC. The communication server, resident on the OPC, receives the logs, and sends the logs to the Problem Manager. The Problem Manager formats the logs.

### Format

The log report format for OMA403 is as follows:

OMA403 mmmdd hh:mm:ss ssdd FAIL <ProcessName><ProcessID> <Description> LOG: <Faulty mnemonic> 1 Expert data: omartx.c (1362)

### Example

An example of log report OMA403 follows:

OMA403 OCT21 18:20:03 2 FAIL OMA (14876) Unable to create communication stack LOG: FAILED 1 Expert data: omartx.c (1362) OMA403 (end)

# **Field descriptions**

The following table describes each field in the log report:

| Field           | Value                                   | Description                              |
|-----------------|---|--|
| ProcessName     | OMA                                     | Indicates process of OPC that runs       |
| ProcessID       | nnnn                                    | Indicates identification code of process |
| Description     | Unable to create<br>communication stack | Indicates communication failure          |
| Faulty mnemonic | FAILED                                  | Gives fault type                         |

# Action

This report indicates that a serious error occurs when the system tries to establish the communication software. You must check the file /etc/osihosts to make sure that an entry for the CM is present and is correct.

# **Associated OM registers**

The Communication Server log report OMA404. The communication server generates OMA404 when a communication protocol violation occurs that is not planned. The communication protocol violation is associated with the CM.

The SuperNode (SN) Operations Controller (OPC) system provides the following log processing tasks:

- the Data Collector collects SN logs and SN OPC Unix Application Environment (UAE) logs
- the Problem Manager correlates SN logs
- the Problem Viewer allows you to browse logs and problems
- The system delivers logs to a local printer

The Problem Manager is responsible for the log correlations according to the rules in a knowledge base. The log acquisition server and the communication server control the acquisition of SN logs. The log acquisition server, resident on the SN, collects logs, and sends them to the OPC. The communication server, resident on the OPC, receives the logs, and sends them to be formatted by the Problem Manager.

#### Format

The log report format for OMA404 is as follows:

OMA404 mmmdd hh:mm:ss ssdd FAIL
<ProcessName><ProcessID> <Description> LOG: <Faulty
mnemonic> 1 Expert data: omartx.c (1362)

#### Example

An example of log report OMA404 follows:

FP503 SEP05 18:14:33 4827 INFO Device State Change Location: FP 2 DEVICE 1 (DK) SCSI BUS 0 REASON: Change of state of associated entity FROM: InSv ( Isolated ) DRIVE STATE: Unknown TO: InSv DRIVE STATE: On Line OMA404 (end)

# **Field descriptions**

The following table describes each field in the log report:

| Field           | Value                  | Description                              |
|-----------------|------------------------|--|
| ProcessName     | OMA                    | Indicates process of OPC that runs       |
| ProcessID       | nnnn                   | Indicates identification code of process |
| Description     | Error in ROSE protocol | Indicates protocol error                 |
| Faulty mnemonic | FAILED                 | Gives fault type                         |

# Action

Check the CM and OPC load to make sure that the loads have compatible releases.

# **Associated OM registers**

The system log report OMA500. The system generates OMA500 when the system discards a log received from the CM because the Data Collector is not ready.

The SuperNode (SN) Operations Controller (OPC) system provides the following log processing tasks:

- the Data Collector collects SN logs and SN OPC Unix Application Environment (UAE) logs
- the Problem Manager correlates SN logs by the Problem Manager
- the Problem Viewer allows you to browse logs and problems
- the system delivers logs to a local printer

Data Collector is a central component that collects both SN and UAE logs. When the system receives the logs, the Data Collector:

- Formats the UAE logs to the SN log format. The log formats are the same. The switch name and node name are part of the component name in UAE logs.
- Parses and tokenizes the log header. The Problem Manager can read the header.
- Designs a component name and a set of attributes from the log according to a set of user-predefined parse rules. The parse rules appear in an ASCII file that the Data Collector reads at start up.
- Distributes the tokenized logs over Interprocess Connectivity (IPC) link to client processes. These processes are problem manager and log storage.
- Buffers the tokenized logs to minimize the risk of lost logs when the connection to the client process is down.

### Format

The log report format for OMA500 is as follows:

OMA500 mmmdd hh:mm:ss ssdd FAIL <ProcessName><ProcessID> <Description> LOG: <Faulty mnemonic> 1 Expert data: omalogaq.c (252)

### OMA500 (end)

#### Example

An example of log report OMA500 follows:

```
OMA500 OCT21 18:20:03 2 FAIL OMA (14876) 5 CM
originated log(s) lost during last 10 minutes. LOG:
FAILED 1 Expert data: omalogaq.c (252)
```

### **Field descriptions**

The following table describes each field in the log report:

| Field           | Value   | Description                               |
|-----------------|---|---|
| ProcessName     | OMA   | Indicates process of OPC that runs.       |
| ProcessID       | nnnn  | Indicates identification code of process. |
| Description     | 5 CM originated log(s)<br>lost during last 10 min | Indicates lost log condition.             |
| Faulty mnemonic | FAILED  | Gives fault type.                         |

# Action

Check the Data Collector if the system generates OMA500 several times.

### **Associated OM registers**

The system log report OMA501. The system generates OMA501 when the system parses the log configuration file (/iws/opcfiles/snlogsp.text) and meets a syntax error. Log collection continues. The log format or log suppression can be different from the normal format and suppression.

The SuperNode (SN) Operations Controller (OPC) system provides the following log processing tasks:

- the Data Collector collects SN logs and SN OPC Unix Application Environment (UAE) logs
- the Problem Manager correlates SN logs
- the Problem Viewer allows you to browse logs and problems
- the system delivers logs to a local printer

Data Collector is a central component that collects both SN and UAE logs. When the system receives logs, the Data Collector:

- Formats the UAE logs to the SN log format. The log formats are the same. The switch name and node name are part of the component name in UAE logs.
- Parses and tokenizes the log header. The Problem Manager can read the log header.
- Designs a component name and a set of attributes from the log according to a set of user-predefined parse rules. The parse rules appear in an ASCII file the Data Collector reads at start up.
- Distributes the tokenized logs over Interprocess Connectivity (IPC) link to client processes. These processes are problem manager and log storage.
- Buffers the tokenized logs to minimize the risk of logs lost when the connection to the client process is down.

### Format

The log report format for OMA501 is as follows:

OMA501 mmmdd hh:mm:ss ssdd FAIL <ProcessName><ProcessID> <Description> LOG: <Faulty mnemonic> 1 Expert data: omalogaq.c (292)

### OMA501 (end)

### Example

An example of log report OMA501 follows:

```
OMA501 OCT21 18:20:03 2 FAIL OMA (14876)
Error in log configuration file, line 12
LOG: FAILED
1
Expert data: omalogaq.c (292)
```

# **Field descriptions**

The following table describes each field in the log report:

| Field           | Value                                    | Description                              |
|-----------------|--|--|
| ProcessName     | OMA                                      | Indicates process of OPC that runs       |
| ProcessID       | nnnn                                     | Indicates identification code of process |
| Description     | Error in log configuration file, line 12 | Indicates syntax error                   |
| Faulty mnemonic | FAILED                                   | Gives fault type                         |

# Action

Correct the log configuration file according to the defective line that the log indicates. Save the configuration file. Restart OMA process.

# **Associated OM registers**

Information for all log reports under Operational Measurements Print Report (OMPR) subsystem (OMPR200K OMPR201 . . .) is considered to be part of Basic Administration Procedures, 297-1001-300 and Service Problem Analysis Administration Guide, 297-1001-318.

*Note:* Only the last occurrence of a specified OMRS log in the logutil buffer contains correct data. The system allocates one buffer section for each report number. Any previous occurrence of the log found in the buffer contains the same information as the current log report. Route the logs to a device if you need to compare the current log to previous OMRS log reports.

### Format

The log report format for OMPR200 is as follows:

OMPR200 mmmdd hh:mm:ss ssdd INFO OM\_REPORT

### **Example**

An example of log report OMPR200 follows:

OMPR200 OCT11 10:18:00 212 INFO OM\_REPORT

# **Field descriptions**

There are no field descriptions.

### Action

There is no action required.

### **Associated OM registers**

There are no associated OM registers.

### **Additional information**

There is no additional information.

## **OMRS0XX**

### Explanation

Information for all log reports under Operational Measurements Print Report (OMPR) subsystem (OMPR200K OMPR201 . . .) is considered to be part of Basic Administration Procedures, 297-1001-300 and Service Problem Analysis Administration Guide, 297-1001-318.

*Note:* Only the last occurrence of a particular OMRS log in the logutil buffer contains valid data. Only one buffer section is allocated for each report number; therefore, any previous occurrence of the log found in the buffer actually contains the same information of the current log report. Route the logs to a device if historical comparisons of an OMRS log report are needed.

### Format

The format for log report OMRS0XX follows:

OMRS0XX mmmdd hh:mm:ss ssdd INFO OM PERIODIC REPORT

### Example

An example of log report OMRS0XX follows:

OMRS OCT11 10:18:00 212 INFO OM PERIODIC REPORT

### **Field descriptions**

The following table explains each of the fields in the log report:

| Field                      | Value    | Description                                 |
|----------------------------|----------|---|
| INFO OM PERIODIC<br>REPORT | Constant | Identifies the last occurrence of OMRS log. |

# Action

No action is required.

### **Associated OM registers**

None

### **Additional information**

None

The system log report OMX101. The system generates OMX101 when the UNIX Operational Measurement (OM) transfer process on the Computing Module (CM) receives an OM data message. The OM transfer process receives this message from a central OM receiver. The message contains bad data.

# Format

The log report format for OMX101 is as follows:

OMX100 mmmdd hh:mm:ss ssdd INFO OMX\_SUMMARY\_ERROR OM Summary message group <groupname> invalid.

# Example

An example of log report OMX101 follows:

OMX100 SEP14 15:08:39 1313INFO OMX\_SUMMARY\_ERROR OM Summary message group ADASDSGN invalid.

## Field descriptions

The following table describes each field in the log report:

| Field  | Value    | Description   |
|--|----------|---|
| INFO OMX<br>SUMMARY_ERROR                                      | Constant | Indicates the UNIX OM transfer process on the CM received an OM data message. The OM transfer process received the message from a Central OM Receiver. The message contains bad data. |
| OM Summary<br>message group<br><groupname> invalid</groupname> | Constant | Indicates an OM Summary message group<br>ADASSGN is invalid.  |

# Action

If the problem persists, contact the next level of maintenance.

# Associated OM registers

### OMX102

#### Explanation

The system log report OMX102. The system generates OMX102 when the UNIX Operational Measurement (OM) transfer process on the computing module (CM) attempts to allocate memory. The OM transfer process attempts to allocate memory to store OM group data. The system generates OMX102 when the attempt to allocate memory fails.

### Format

The log report format for OMX102 is as follows:

OMX102 mmmdd hh:mm:ss ssdd INFO OMX\_ALLOC\_ERROR Cannot allocate memory for OM group <groupname>.

### Example

An example of log report OMX102 follows:

OMX102 SEP14 15:08:39 1313INFO OM\_ALLOC\_ERROR Cannot allocate memory for OM group <groupname>.

### Field descriptions

The following table describes each field in the log report:

| Field   | Value    | Description  |
|---|----------|--|
| INFO<br>OMX_ALLOC_ERRO<br>R                                       | Constant | Indicates the UNIX OM transfer process on the CM attempts to allocate memory to store OM group data and fails. |
| Cannot allocate<br>memory for OM group<br><groupname></groupname> | Constant | Indicates the OM groupname that memory cannot allocate.  |

### Action

If no memory is available for the OM group, contact the next level of maintenance.

# **Associated OM registers**

The system log OMX302. The system generates OMX302 when the system cannot establish or lose communication with a communication entity computing module (CM). The system also generates OMX302 when the same condition occurs with a voice processing unit (VPU) or any other communication entity.

# Format

The format for log report OMX302 is as follows:

OMX302 mmmdd hh:mm:ss INFO UAE Log <Cannot establish /Lost connection> with the <Communication Entity><header> <Cannot establish /Lost connection> with the <Communication Entity>

# Example

An example of log report OMX302 follows:

OMX001 MAR02 19:20:21 INFO UAE Log Cannot Establish Connection with CM.

# **Field descriptions**

The following table describes each field in the log report:

| Field  | Value    | Description   |
|--|----------|---|
| INFO UAE Log   | Constant | Indicates when system cannot establish<br>communication with a communication entity<br>(CM, VPU, etc) |
| <cannont establish="" lost<br="">connection&gt; with the<br/><communication entity=""><br/><header></header></communication></cannont> | Constant | Indicates state of communication entity   |

# Action

Check the state of the communication entity in question.

# **Associated OM registers**

# **OPP100**

#### Explanation

This log is generated when an error is detected in the open position protocol (OPP). Errors deal with message format and field ranges, not content.

### Format

The format for log report OPP100 follows:

OPP100 mmmdd hh:mm:ss ssdd INFO OPP PROTOCOL ERROR Application = <application name> Error = <error reason> MSG Header = <message header in hex> MSG Body = <message body in hex>

# Example

An example of log report OPP100 follows:

```
OPP100 SEP14 10:25:12 0988 INFO OPP PROTOCOL ERROR
Application = TOPS
Error = Invalid ActID <error reason>
MSG Header = 000101073801FFFFFFFF
MSG Body = 03110100
```

# **Field descriptions**

The following table explains each of the fields in the log report:

| (Sheet | 1 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field                      | Value              | Description  |
|----------------------------|--------------------|--|
| INFO OPP<br>PROTOCOL ERROR | Constant           | Indicates an OPP protocol error has been detected  |
| APPLICATION                | Character string   | Application name with message (if known)   |
| ERROR                      | Invalid MSG        | Message format is completely wrong, message cannot be deciphered                                   |
| ERROR                      | Invalid MSG Header | Indicates the message header length is incorrect, or it contains a field with a value out of range |
| ERROR                      | Invalid ActID      | ActID in the message body has an incorrect length, or contains a field with a value out of range   |

# OPP100 (end)

#### (Sheet 2 of 2)

| Field      | Value     | Description  |
|------------|-----------|--|
| MSG Header | 0000-FFFF | Header of the message containing the error.<br>The bytes are in order.   |
| MSG Body   | 0000-FFFF | The body of the message containing the error.<br>The bytes are in order. |

## Action

Notify Northern Telecom field support.

### **Associated OM registers**

### Explanation

The Operator Services Systems Advanced Intelligent Network Centralization (OSAC) subsystem generates this log when it receives an OSAC session request with an invalid Function ID. The function id may be either not datafilled in Table OAFUNDEF or not datafilled as an Operator Services System Advanced Intelligent Network (OSSAIN) function.

### Format

The format for log report OSAC200 follows:

OSAC200 mmmdd hh:mm:ss ssdd INFO BAD OAFUNDEF DATAFILL Requesting Node: <node name> Requesting Nodeid: <node id> FUNCID: <FUNCID> <log text>

### Example

An example of log report OSAC200 follows:

OSAC200 DEC06 07:46:17 8701 INFO BAD OAFUNDEF DATAFILL Requesting Node: Remote 1 Requesting Nodeid: 2 FUNCID: 23 TEXT: Function ID not datafilled in Table OAFUNDEF

### **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field  | Value   | Description                    |
|--|---|--------------------------------|
| Requesting Node: <node<br>name&gt;</node<br> | Table OANODINV,<br>field NODENAME,<br>alphanumeric (up<br>to 12 characters) | OSSAIN service node name       |
| Requesting Nodeid: <node id=""></node>       | Table OANODINV,<br>field NODEID<br>(0 to 767)                               | OSSAIN service node identifier |

## OSAC200 (end)

#### (Sheet 2 of 2)

| Field                     | Value   | Description                     |
|---------------------------|---|---------------------------------|
| FUNCID: <funcid></funcid> | Table<br>OAFUNDEF, field<br>FUNCID (0 to<br>1022)                               | Function ID                     |
| TEXT: <log text=""></log> | Function ID not<br>datafilled.<br>Function datafill<br>mismatch with<br>Remote. | Invalid Function ID description |

## Action

The craftsperson should datafill the function id as an OSSAIN function in Table OAFUNDEF as part of the OSAC Host switch datafill. The CAM for the function id should be provided by the OSAC Host.

### **Associated OM registers**

### Explanation

The Operator Services Systems Advanced Intelligent Network Centralization (OSAC) subsystem generates this log when it receives an invalid session pool id or session id from the OSAC Host. The session pool id may be either not datafilled in Table OASESNPL or not datafilled as a subscriber origination session pool. The session id may exceed the max sessions datafilled in Table OASESNPL.

This log is also generated at the OSAC Host when it receives a session verification for a session pool not datafilled or not datafilled as a Service Node (SN) initiation session pool.

#### Format

The format for log report OSAC201 follows:

OSAC201 mmmdd hh:mm:ss ssdd INFO BAD OASESNPL DATAFILL SESNPL: <SESN PL ID> SESN: <SESN ID> FUNCID: <Function ID> TEXT: <log text>

### Example

An example of log report OSAC201 follows:

OSAC200 DEC06 07:46:17 8701 INFO BAD OASESNPL DATAFILL SESNPL: 14 SESN: 20 FUNCID: 3 TEXT: Session Pool ID not datafilled in Table OASESNPL

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field                             | Value   | Description   |
|-----------------------------------|---|---|
| SESNPL: <sesn id="" pl=""></sesn> | Table OASESNPL,<br>field SESNPLID<br>(0 to 4094)  | Session Pool ID   |
| SESN: <sesn id=""></sesn>         | Digits  | Session ID provided by DMS switch. Table OASESNPL, field MAXSESN, indicates the maximum number of sessions allowed (0 to 1023). |
| FUNCID: <func id=""></func>       | numeric   | Function ID Table OAFUNDEF  |
| TEXT: <log text=""></log>         | Session Pool not datafilled,                      | Invalid Session Pool ID or Session ID description   |
|                                   | Session Pool<br>datafill mismatch<br>with host,   |   |
|                                   | Session Pool<br>datafill mismatch<br>with Remote, |   |
|                                   | Session Pool not in service,                      |   |
|                                   | Session ID not datafilled,                        |   |
|                                   | Session ID not available for this call.           |   |

## Action

The craftsperson should check the datafill for the session pool at the OSAC Remote and Host.

## **Associated OM registers**

#### Explanation

The Operator Services Systems Advanced Intelligent Network Centralization (OSAC) subsystem generates this log at the OSAC Remote when it receives an error response from the Host indicating there was a function datafill mismatch between the Host and the Remote.

#### Format

The format for log report OSAC202 follows:

OSAC202 mmmdd hh:mm:ss ssdd INFO BAD DATAFILL NODE: <NODE NAME> NODEID: <NODE ID> SESNPL: <SESN PL NAME> <SESN PL ID> FUNCID: <Function ID> TEXT: <log text>

### Example

In the following example, the OSAC Remote received a session request response with session pool ID 14 which is not datafilled in Table OASESNPL in the Remote.

OSAC202 DEC06 07:46:17 8701 INFO BAD DATAFILL NODE: TEST\_SN NODEID: 20 SESNPL: TEST\_SP 4 FUNCID: 35 TEXT: Function datafill mismatch with Host

## **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                       | Value             | Description |
|-----------------------------|-------------------|-------------|
| NODE: <node name=""></node> | Table<br>OANODNAM | Node Name   |
| NODEID: <node id=""></node> | Table OANODINV    | Node ID     |

# OSAC202 (end)

#### (Sheet 2 of 2)

| Field                       | Value   | Description  |
|-----------------------------|---|--|
| SESNPL:                     | <sesnpl id=""><br/>Table OASESNPL</sesnpl>          | Session Pool ID  |
|                             | <pre><sesnpl name=""> Table OASESNPL</sesnpl></pre> | Session Pool Name  |
| FUNCID: <func id=""></func> | Table<br>OAFUNDEF, field<br>FUNCID (0<br>to 1022)   | Function ID  |
| TEXT: <log text=""></log>   | Function datafill<br>mismatch with<br>Host          | Function ID datafill does not match between host and remote. |

## Action

The craftsperson should check the datafill for the function at the OSAC Remote and Host.

## **Associated OM registers**

#### Explanation

The Operator Services Systems Advanced Intelligent Network Centralization (OSAC) subsystem generates this log at the OSAC Host when it receives a voice connect request from the OSAC Remote with missing datafill in Table OSCVLGRP.

#### Format

The format for log report OSAC203 follows:

OSAC203 mmmdd hh:mm:ss ssdd INFO BAD OSCVLGRP DATAFILL DATAFILL TABLE OSCVLGRP WITH NODE ID: <NODE NAME>

### Example

In the following example, the OSAC Host received a voice connect request from REMOTE\_21, but OSAC datafill is missing from Table OAVLMAP.

OSAC203 DEC06 07:46:17 8701 INFO BAD OSCVLGRP DATAFILL DATAFILL TABLE OSCVLGRP WITH NODEID: AABS\_SN

### **Field descriptions**

The following table explains each of the fields in the log report:

| Field                         | Value             | Description |
|-------------------------------|-------------------|-------------|
| NODEID: <node name=""></node> | Table<br>OANODNAM | Node Name   |

### Action

The craftsperson should check the datafill for Table OSCVLGRP at the OSAC Host.

### **Associated OM registers**

### Explanation

The Operator Services Systems Advanced Intelligent Network Centralization (OSAC) subsystem generates this log at the OSAC Host when it receives a voice connect request, but OSAC datafill is missing from Table OAVLMAP.

### Format

The format for log report OSAC204 follows:

OSAC204 mmmdd hh:mm:ss ssdd INFO BAD DATAFILL DATAFILL TABLE OAVLMAP WITH NODEID: <NODE ID> TRUNK MEMBER: <TRUNK ID>

## Example

In the following example, the OSAC Host received a voice connect request from REMOTE\_21, but OSAC datafill is missing from Table OAVLMAP.

OSAC204 DEC06 07:46:17 8701 INFO BAD OAVLMAP DATAFILL DATAFILL TABLE OAVLMAP WITH NODEID: REMOTE\_21 TRUNK MEMBER: 4

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field                                     | Value             | Description     |
|---|-------------------|-----------------|
| NODEID: <node id=""></node>               | Table<br>OANODNAM | Node ID         |
| TRUNK MEMBER: <trunk<br>ID&gt;</trunk<br> | Table TRKMEM      | TRUNK MEMBER ID |

## Action

The craftsperson should check the datafill in Table OAVLMAP.

# **Associated OM registers**

#### Explanation

The Operator Services Systems Advanced Intelligent Network Centralization (OSAC) subsystem generates this log at the OSAC Host or OSAC Remote if it receives an unexpected message.

### Format

The format for log report OSAC300 follows:

OSAC300 mmmdd hh:mm:ss: ssdd INFO UNEXPECTED MESSAGE CALLID: <callid> SN: <node name> FN: <function name> OSAC\_SWITCH: <OSAC switch id> OSAC\_SP: <osac pool id> <pool name> oSAC\_SWITCH: <osAC switch id> OSAC\_SP: <osac pool id> <osac pool name> SNVL: <sn vl ckt id> TEXT: <log text>

### Example

An example of log report OSAC300 follows:

```
OSAC300 DEC06 07:46:17 8701 INFO UNEXPECTED MESSAGE
CALLID: 0023 0011
SN: AABS_SN SNID: OSNM 6
FN: AABS SESNPL: 6 AABS_SP
OSAC_SWITCH: Remote_2 OSAC_SP: 20 REMOTE_2
SNVL: CKT OSSAINVL 22 OSACVL: CKT OSACVL 22
TEXT: UNKNOWN MESSAGE
```

## **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                     | Value                              | Description                    |
|---------------------------|------------------------------------|--------------------------------|
| CALLID: <callid></callid> | 0000 0000 to<br>FFFF FFFF          | DMS call identifier            |
| SN: <node name=""></node> | Table<br>OANODNAM,<br>alphanumeric | OSSAIN service node identifier |

## OSAC300 (end)

| (Sheet | 2 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field                                    | Value   | Description  |
|--|---|--|
| SNID:                                    | <pm type="">Table<br/>OANODINV<br/>(osnm, osn, osac)</pm> | OSSAIN service node pm type  |
| SNID: (continued)                        | <node id="">Table<br/>OANODNAM</node>                     | OSSAIN service node identifier   |
| FN: <function name=""></function>        | Table OAFUNDEF  | Function name currently associated with the call   |
| SESNPL:                                  | <pool id="">Table<br/>OASESNPL</pool>                     | Session pool identifier  |
|  | <pool name=""><br/>Table OASESNPL</pool>                  | Session pool name  |
| OSAC_SWITCH: <osac id="" node=""></osac> | Table<br>OANODNAM   | OSAC switch node identifier  |
| OSAC_SP:                                 | <osac id="" pool=""><br/>Table OASESNPL</osac>            | OSAC Session pool identifier   |
|  | <osac pool<br="">name&gt;Table<br/>OASESNPL</osac>        | OSAC Session pool name   |
| SNVL: <sn ckt="" id="" vl=""></sn>       | Table TRKMEM  | OSSAIN service node voice link   |
| OSACVL: <osac ckt="" id="" vi=""></osac> | Table TRKMEM  | OSSAIN OSAC voice link   |
| TEXT: <log text=""></log>                | TERMINAL<br>FORCE<br>RELEASED                             | Identifies the reason why a call is being taken down, if possible.Identifies the reason why a call is being taken down, if possible. |
|  | UNEXPECTED<br>MESSAGE                                     |  |

## Action

The craftsperson should check if the service node is holding the connection for this call. Check logs at the other OSAC switch associated with the callid.

## **Associated OM registers**

#### Explanation

The Operator Services Systems Advanced Intelligent Network Centralization (OSAC) subsystem generates this log when the OSAC Host takes a call down for any reason.

#### Format

The format for log report OSAC600 follows:

OSAC600 mmmdd hh:mm:ss: ssdd INFO CALL TAKE DOWN CALLID: <callid> SN: <node name> SNID: <pm type> <node id> FN: <function name> SESNPL: <pool id> <pool name> OSAC\_Remote: <OSAC switch id> OSAC\_SP: <osac pool id> <osac pool name> SNVL: <sn vl ckt id> OSACVL: <osac vl ckt id> TEXT: <log text>

### Example

An example of log report OSAC600 follows:

OSAC600 DEC06 07:46:17 8701 INFO CALL TAKE DOWN CALLID: 0023 0011 SN: AABS\_SN SNID: OSNM 6 FN: AABS SESNPL: 6 AABS\_SP OSAC\_Remote: Remote\_2 OSAC\_SP: 20 REMOTE\_2 SNVL: CKT OSSAINVL 22 OSACVL: CKT OSACVL 22 TEXT: TERMINAL FORCE RELEASED

### **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                     | Value  | Description                    |
|---------------------------|--|--------------------------------|
| CALLID: <callid></callid> | 0000 0000toFFFF<br>FFFF  | DMS call identifier            |
| SN: <node name=""></node> | Table OANODINV,<br>field NODENAME,<br>alphanumeric<br>(up to 12<br>characters) | OSSAIN service node identifier |
| SNID: <pm type=""></pm>   | Table OANODINV,<br>(osnm, osn, osac)   | OSSAIN service node pm type    |

## OSAC600 (continued)

| Field   | Value  | Description  |
|---|--|--|
| <node id=""></node>                             | Table OANODINV,<br>field NODEID<br>(0 to 767)                | OSSAIN service node identifier                                     |
| FN: <function name=""></function>               | Table<br>OAFUNDEF, field<br>FUNCNAME (1<br>to 16 characters) | Function name currently associated with the call                   |
| SESNPL: <pool id=""></pool>                     | Table OASESNPL,<br>field SESNPLID<br>(0 to 4094)             | Session pool identifier  |
| <pool name=""></pool>                           | Table OASESNPL,<br>field SESNPLNM<br>(1 to 16<br>characters) | Session pool name  |
| OSAC_Remote: <remote node<br="">id&gt;</remote> | Table OANODINV,<br>field NODEID (0 to<br>31)                 | OSAC switch node identifier  |
| OSAC_SP: <osac id="" pool=""></osac>            | Table OASESNPL,<br>field SESNPLID<br>(0 to 4094)             | OSAC Session pool identifier                                       |
| <osac name="" pool=""></osac>                   | Table OASESNPL,<br>field SESNPLNM<br>(1 to 16<br>characters) | OSAC Session pool name   |
| SNVL: <sn ckt="" id="" vl=""></sn>              | Table TRKMEM   | OSSAIN service node voice link                                     |
| OSACVL: <osac ckt="" id="" vi=""></osac>        | Table TRKMEM   | OSSAIN OSAC voice link   |
| TEXT: <log text=""></log>                       | TERMINAL<br>FORCE<br>RELEASED                                | Identifies the reason why a call is being taken down, if possible. |
|   | UNEXPECTED<br>MESSAGE  |  |

# Action

Check if the service node is holding the connection for this call. Check logs in the OSAC Remote associated with the callid.

## OSAC600 (end)

## **Associated OM registers**

This log is associated with OM register OSCCLERR in OM group OASVNDCP.

### Explanation

The Operator Services Systems Advanced Intelligent Network Centralization (OSAC) subsystem generates this log when a parallel datafill check fails. Parallel datafill is checked on OSAC nodes and session pools and Operator Services Nodes (OSN) and session pools during RTS, audits, and tests.

### Format

The format for log report OSAC601 follows:

OSAC601 DEC06 07:46:17 8701 INFO DATAFILL MISMATCH SN\_NAME:<node name> SNID: <node id> SP\_NAME:<pool name> SPID: <pool id> OSAC\_NODE\_NAME: <OSAC node name> OSAC\_SNID: <OSAC node id> OSAC\_SP\_NAME: <OSAC pool name> OSAC\_SPID: <OSAC pool id> TABLE:

## Example

In the following example, the OSAC Host received an OSN parallel datafill verification request. The OASESNPL datafill, provided in the request for one of the session pools supported by the service node, did not match the datafill in Table OASESNPL in the OSAC Host.

OSAC601 DEC06 07:46:17 8701 INFO DATAFILL MISMATCH SN\_NAME:AABS\_SN SNID: 6 SP\_NAME:AABSSP SPID: 12 OSAC\_NODE\_NAME: Remote\_2 OSAC\_SNID: 20 OSAC\_SP\_NAME: OSAC\_SPID: TABLE: OASESNPL

## OSAC601 (continued)

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field  | Value   | Description  |
|--|---|--|
| SN_NAME: <node name=""></node>                   | Table<br>OANODNAM, field<br>NODENAME,<br>alphanumeric<br>(up to 12<br>characters) | OSSAIN service node name   |
| SNID: <node id=""></node>                        | Table<br>OANODNAM, field<br>NODEID (0 to<br>767)                                  | OSSAIN service node identifier   |
| SP_NAME: <pool name=""></pool>                   | Table OASESNPL,<br>field SESNPLNM<br>(1 to 16<br>characters)                      | Session pool name  |
| SPID: <pool id=""></pool>                        | Table OASESNPL,<br>field SESNPLID<br>(0 to 4094)                                  | Session pool identifier  |
| OSAC_NODE_NAME: <osac<br>node name&gt;</osac<br> | Table<br>OANODNAM   | Node name of OSAC switch requesting<br>parallel datafill check                       |
| OSAC_SNID: <osac id="" node=""></osac>           | Table<br>OANODNAM<br>(0 to 767)   | OSSAIN service node identifier of OSAC switch requesting the parallel datafill check |
| OSAC_SP_NAME: <osac<br>pool name&gt;</osac<br>   | Table OASESNPL,<br>field SESNPLID<br>(0 to 4094)                                  | OSAC session pool name of OSAC session pool requesting the parallel datafill check   |
| OSAC_SPID: <osac id="" pool=""></osac>           | Table OASESNPL,<br>field SESNPLID<br>(0 to 4094)                                  | Session pool identifier of OSAC session pool requesting the parallel datafill check  |
| TABLE:   | Table OANODINV<br>and OASESNPL  | Name of the table containing the datafill mismatch                                   |

## OSAC601 (end)

## Action

Examine the datafill for the node or session pool specified on the OSAC Host and the specified OSAC Remote. Verify that the datafill for the specified table matches on the two switches.

*Note:* Depending on the type of parallel datafill check being performed, not all fields will contain data. Refer to the following table:

| Type of Parallel<br>Datafill Check | Node<br>Name | Node<br>ID | Pool<br>Name | Pool<br>ID | OSAC<br>Node<br>Name | OSAC<br>Node<br>ID | OSAC<br>Pool<br>Name | OSAC<br>Pool<br>ID |
|------------------------------------|--------------|------------|--------------|------------|----------------------|--------------------|----------------------|--------------------|
| OSN Node                           | Y            | Y          |              |            | Y                    | Y                  |                      |                    |
| OSN Session Pool                   | Y            | Y          | Y            | Y          | Y                    | Y                  |                      |                    |
| OSAC Node                          |              |            |              |            | Y                    | Y                  |                      |                    |
| OSAC Session Pool                  |              |            |              |            | Y                    | Y                  | Y                    | Y                  |

## **Associated OM registers**

#### Explanation

The operation system interface (OSF) system log report OSF301. The OSF system generates OSF301 when the system cannot open the required configuration file in the log brackets.

The SuperNode operation controller (OPC) system provides the following log processing tasks:

- The data collector gathers SuperNode (SN) and SN OPC UNIX application environment (UAE) logs.
- The problem manager correlates SN logs.
- The problem viewer browses logs and problems.
- The operation system (OS) interface (IF) delivers logs to a local printer.

The OS IF formats the logs in STD or SCC2 format. The OS IF:

- reads the configuration files
- allocates required resources at start-up
- requests logs from the problem manager
- receives logs from the problem manager

The OS IF reads configuration files in ASCII at start-up. The OS IF uses these files to specify the following parameters:

- the format of logs (STD or SCC2)
- the categories of logs to deliver
- the port identification for printer connection
- IP address of the OS remote host
- log parameters to customize log format over transmission control protocol (TCP)/Internet protocol (IP)

Northern Telecom personnel receive configuration files that are not complete. OS IF requires some files. Other files are optional.

#### Format

The log report format for OSF301 is as follows:

```
*** OSF301 mmmdd hh:mm:ss ssdd FAIL
<ProcessName>(<ProcessID>)
        <Description>
        Config file
        LOG: <Faulty mnemonic>
        1
        Expert data: dcilogp.c(264)
```

## Example

An example of log report OSF301 follows:

```
*** OSF301 JAN20 08:00:00 4200 FAIL OSF(1032)
Cannot open configuration file </iws/opcfiles/osf.config>
Config file
LOG: FAILED
1
Expert data: dcilogp.c(264)
```

## **Field descriptions**

The following table describes each field in the log report:

| Field           | Value  | Description   |
|-----------------|--------|---|
| ProcessName     | OSF    | Name of SN OPC process that runs  |
| ProcessID       | nnnn   | Identification code of OS IF process  |
| Description     | Text   | Provides reason for failure with required configuration file name and directory |
| Faulty mnemonic | FAILED | Provides the fault type   |

# Action

Make sure the configuration file is in directory /iws/opcfiles. Refer to SN OPC administrator.

# **Associated OM registers**

There are no associated OM registers

#### Explanation

The operation system interface (OSF) system log report OSF302. The OSF system generates OSF302 when the system detects an interprocess connectivity (IPC) error.

The SuperNode operation controller (OPC) provides the following log processing tasks:

- The data collector gathers SuperNode (SN) and SN OPC UNIX application environment (UAE) logs.
- The problem manager correlates SN logs.
- The problem viewer browses logs and problems.
- The OSF delivers logs to a local printer.

The OSF formats the logs in STD or SCC2 format. The OSF:

- reads the configuration files
- allocates required resources at start-up
- requests logs from the problem manager
- receives logs from the problem manager

### Format

The log report format for OSF302 is as follows:

```
*** OSF302 mmmdd hh:mm:ss ssdd FAIL
<ProcessName>(<ProcessID>)
        <Description>
        IPC Error
        LOG: <Faulty mnemonic>
        1
        Expert data: dcilogp.c (264)
```

### Example

An example of log report OSF302 follows:

```
*** OSF302 JAN30 09:20:00 4200 FAIL OSF(1032)
    IPC call failed; error = -4
    IPC Error
    LOG: INVALID
    1
    Expert data: dcilogp.c(264)
```

## **Field descriptions**

The following table describes each field in the log report:

| Field           | Value   | Description   |
|-----------------|---------|---|
| ProcessName     | OSF     | Provides the name of the process that runs in SN OPC system |
| ProcessID       | nnnn    | Indicates identification code of OS IF process              |
| Description     | Text    | Indicates the IPC call failure with error code              |
| Faulty mnemonic | INVALID | Provides the fault type                                     |

## Action

Refer to the OPC system administration practices document to determine how to solve the problem.

If the error occurs several times, check interprocess connectivity (IPC) and SN OPC state. Distributed resource manager (DRM) must automatically restart OSF.

## **Associated OM registers**

There are no associated OM registers

#### Explanation

The operation system interface (OSF) system log report OSF303. The system generates OSF303 when the required configuration file does not have a parameter. The system generates OSF303 when the required configuration file contains an invalid parameter. This event stops the OSF process.

The SuperNode operation controller (OPC) provides the following log processing tasks:

- The data collector gathers SuperNode (SN) and SN OPC UNIX Application Environment (UAE) logs.
- The problem manager correlates SN logs.
- The problem manager browses logs and problems.
- The OSF delivers logs to a local printer.

The OSF requests and receives the logs from the problem manager. The OSF formats the logs according to the configuration files. The OSF application reads the configuration files in ASCII at start-up. The OSF uses the configuration files to specify the following parameters:

- the format of logs (STD or SCC2)
- the categories of logs to deliver
- the port identification for printer connection
- IP address of the OS remote host
- log parameters to customize format of logs delivered over transmission control protocol (TCP)/Internet protocol (IP).

### Format

The log report format for OSF303 is as follows:

\*\*\* OSF303 mmmdd hh:mm:ss ssdd FAIL <ProcessName>
(<ProcessID>)
 <Description>
 Config file
 LOG: <Faulty mnemonic>
 1
 Expert data: dcilogp.c (264)

## Example

An example of log report OSF303 follows:

### OSF303 (end)

```
*** OSF303 JAN20 08:23:00 4000 FAIL OSF(1032)
Error reading</iws/opcfiles/osf.config>;parameter#2
missing
Config file
LOG: MISSING
1
Expert data: dcilogp.c (264)
```

## **Field descriptions**

The following table describes each field in the log report:

| Field       | Value   | Description                          |
|-------------|---------|--------------------------------------|
| ProcessName | OSF     | Name of SN OPC process that runs     |
| ProcessID   | nnnn    | Identification code of OS IF process |
| Description | Text    | Indicates missing parameter          |
| LOG         | MISSING | Provides the fault type              |

### Action

Refer to the OPC administration practices document to check the content of the configuration file. Restart the OSF process.

## **Associated OM registers**

There are no associated OM registers.

#### Explanation

The operation system interface (OSF) system log report OSF304. The system generates OSF304 when the configuration file osf.base.cnf specifies a printer address more than one time. The OSF process runs. The OSF process ignores this error condition.

The SuperNode (SN) operation controller (OPC) system provides the following log processing tasks:

- The data collector gathers data collector SuperNode and SN OPC UNIX application environment (UAE) logs
- The problem manager correlates SN logs.
- The problem viewer browses logs and problems.
- The OSF delivers logs to a local printer.

The OSF formats the logs in STD or SCC2 format. The OSF:

- reads the configuration files
- allocates required resources at start-up
- requests logs from the problem manager
- receives logs from the problem manager

The OSF application reads the configuration files at start-up. The configuration files appear in ASCII and specify the log parameters. The OSF uses three configuration files to control the levels of functionality. The first configuration file controls base functionality. Base functionality is the delivery of logs to the printers. The second file controls delivery through transmission control protocol (TCP). The third file controls the customization of log parameters. These parameters are start, end of line, and end of log.

### Format

The log report format for OSF304 is as follows:

OSF304 mmmdd hh:mm:ss ssdd INFO <ProcessName> (<ProcessID>) <Description> Config file LOG: 1 Expert data: dcilogp.c (264)

### OSF304 (end)

### Example

An example of log report OSF304 follows:

```
OSF304 MAY05 12:00:00 3200 INFO OSF(1032)
  Printer address </dev/ttydp01> specified twice in
  </iws/opcfiles/osf.base.conf>
  Config file
  LOG:
    1
  Expert data: dcilogp.c (264)
```

## **Field descriptions**

The following table describes each field in the log report:

| Field       | Value | Description   |
|-------------|-------|---|
| ProcessName | OSF   | Indicates the name of the process that runs in SN OPC system                  |
| ProcessID   | nnnn  | Indicates the identification code of the OS IF process                        |
| Description | Text  | Indicates that the configuration file specifies the printer address two times |

### Action

Check the file osf.base.conf to prevent repeated log generation when the OSF process restarts.

## **Associated OM registers**

There are no associated OM registers.

#### Explanation

The operation system interface (OSF) system log report OSF306. The system generates OSF306 when the system detects an invalid parameter in the configuration file osf.TCP.conf or in the file osf.cust.conf. The OSF system does not deliver customized logs over TCP if the error is in file osf.TCP.conf. The OSF can deliver logs that are not customized if the error is in osf.cust.conf.

The SuperNode (SN) operation controller (OPC) system provides the following log processing tasks:

- The data collector gathers SuperNode and SN OPC UNIX application environment (UAE) logs.
- The problem manager correlates SN logs.
- The problem viewer browses logs and problems.
- The OSF system delivers logs to a local printer.

The OSF formats the logs in STD or SCC2 format. The OSF:

- reads the configuration files
- allocates required resources at start-up
- requests logs from the problem manager
- receives logs from the problem manager

The OSF application reads configuration files in ASCII at start-up. The configuration files specify the log parameters. The OSF uses three configuration files to control levels of functionality. The first file controls base functionality. Base functionality is the delivery of logs to printers. The second file controls delivery through transmission control protocol (TCP). The third file controls log parameters. The log parameters include start of log, end of line, end of log.

### Format

The log report format for OSF306 is as follows:

\* OSF306 mmmdd hh:mm:ss ssdd FAIL <ProcessName> (<ProcessID>) <Description> Config file LOG: <Faulty mnemonic> 1 Expert data: dcilogp.c (264)

### OSF306 (end)

### Example

An example of log report OSF306 follows:

```
* OSF306 OCT21 08:23:12 4200 FAIL OSF(1032)
Error reading custom configuration
    </iws/opcfiles/osf.cust.conf>; invalid parameter
    Config file
    LOG: INVALID
    1
    Expert data: dcilogp.c (264)
```

## **Field descriptions**

The following table describes each field in the log report:

| Field           | Value   | Description   |
|-----------------|---|---|
| ProcessName     | OSF   | Provides the name of the process that runs in the SN OPC system |
| ProcessID       | nnnn  | Indicates identification code of OS IF process                  |
| Description     | Error reading custom<br>configuration<br>nf>; invalid parameter | Indicates configuration file failure                            |
| Description     | Error reading TCP<br>configuration<br>onf>; invalid parameter   | Indicates configuration file failure                            |
| Faulty mnemonic | INVALID   | Indicates the fault type  |

## Action

Correct the content of the configuration file that has faults according to the OPC system administration practices document. Restart the OSF process.

## **Associated OM registers**

There are no associated OM registers.

#### Explanation

The Operation System Interface (OSF) generates log report OSF307 when an internal error occurs that is not planned. One example of an error occurs when the OSF process stops because of a system out-of-memory problem.

The SuperNode (SN) Operations Controller (OPC) processes logs as follows:

- the data collector collects SN and SN OPC UNIX application environment (UAE) logs
- the problem manager correlates SN logs
- the problem viewer browses logs and problems
- the OS interface (IF) delivers logs to a local printer

The OS IF requests logs from the problem manager of SN OPC. The OS IF receives logs from the problem manager and formats the logs with configuration files. The system sends logs to a remote client with transmission control protocol (TCP) and Internet protocol (IP).

#### Format

The log report format for OSF307 is as follows:

\*\*\* OSF307 mmmdd hh:mm:ss ssdd FAIL <ProcessName>
(<ProcessID>)
 <Description>
 Memory Error
 LOG: <Faulty mnemonic>
 1
 Expert data: dcilogp.c (264)

#### Example

An example of log report OSF307 follows:

\*\*\* OSF307 MAY25 07:30:00 4200 FAIL OSF (1032)
Memory allocation error
Memory Error
LOG: INVALID
1
Expert data: dcilogp.c (264)

## **Field descriptions**

The following table describes each field in the log report:

| Field           | Value                   | Description                          |
|-----------------|-------------------------|--------------------------------------|
| ProcessName     | OSF                     | Name of SN OPC process that runs     |
| ProcessID       | nnnn                    | Identification code of OS IF process |
| Description     | Memory allocation error | Indicates that OSF has memory fault  |
| Faulty mnemonic | INVALID                 | Provides the fault type              |

# Action

Check state of SN OPC from PM MAP. If necessary, reload SN OPC that refers to SN OPC system administration guide.

## **Associated OM registers**

There are no associated OM registers.

#### Explanation

The Operation System Interface (OSF) generates this log when it cannot open or configure the device (printer) for TTY delivery. The OSF runs but does not deliver logs to the device given in brackets in description data field.

The SuperNode (SN) Operations Controller (OPC) processes logs with the following tasks :

- the data collector collects SN and SN OPC UNIX application environment (UAE) logs
- the problem manager correlates SN logs
- the problem viewer browses logs and problems
- the OS interface (IF) delivers logs to a local printer

The OSF formats the logs in STD or SCC2 format. The OSF has the following responsibilities:

- to read the configuration files
- to allocate required resources at start-up
- to request logs from the problem manager
- to receive logs from the problem manager

Printer delivery supports log delivery for one or two printers. Printers connect to SN OPC through the modem rack and dedicated modem links. The OSF has two circular buffers. Each printers has a buffer for logs not delivered because of lost modem connections or a received XOFF printer signal. In OSF, printer delivery unit buffers these logs and delivers them through TTY port to the printers. This unit also opens and configures the port and checks that the modem connection is up.

### Format

The log report format for OSF308 is as follows:

\*\*\* OSF308 mmmdd hh:mm:ss ssdd FAIL <ProcessName>
(<ProcessID>)
 <Description>
 Open device
 LOG: <Faulty mnemonic>
 1
 Expert data; dcilogp.c (264)

### OSF308 (end)

## Example

An example of log report OSF308 follows:

```
*** OSF308 JAN20 09:30:00 4020 FAIL OSF (1032)
Could not open device </dev/ttyd01>: errno=6
Open device
LOG: <Faulty mnemonic>
1
Expert data; dcilogp.c (264)
```

### **Field descriptions**

The following table describes each field in the log report:

| Field           | Value                              | Description                                 |
|-----------------|------------------------------------|---|
| ProcessName     | OSF                                | Name of SN OPC process that runs            |
| ProcessID       | nnnn                               | Identification code of OS IF process        |
| Description     | Device cannot open<br>:<br>errno=n | Indicates device failure for TTY connection |
| Faulty mnemonic | FAILED                             | Gives the fault type                        |

### Action

Check if the device file is present and check the file type. When the device file corrects an OSF, start again according to OPC system administration practices document.

### **Associated OM registers**

There are no associated OM registers.

#### Explanation

The operation system interface (OSF) generates OSF309 when the OSF cannot establish transmission control protocol (TCP) with the remote host. The configuration file <osf.TCP.conf contains the TCP address of the remote host. The following problems can cause a TCP connection failure:

- the address format is invalid
- a networking subsystem that is not started
- socket not created, operating system out of file specifications or buffers

The OSF will run log delivery does not occur over TCP. The OSF application reads configuration files at start up. The files specify different parameters. The files are ASCII files. The OSF must use three configuration files. The first file controls base functionality. Base functionality is delivery of logs to the printers. The second file controls delivery through TCP. The third file customizes log limits. Start of log, end of line and end of log are log limits.

The SuperNode (SN) operations controller (OPC) processes, collects and correlates SN logs. The SN explores logs, and delivers the logs to a local printer through the OSF.

The OSF formats the logs in STD or SCC2 format. The OSF has the following responsibilities:

- to read the configuration files
- to allocate required resources at start-up
- to request logs from the problem manager
- to receive logs from the problem manager

### Format

The log report format for OSF309 follows:

OSF309 mmmdd hh:mm:ss ssdd FAIL <ProcessName> (<ProcessID>) <Description> Address Error LOG: <Faulty mnemonic> 1 Expert data: dcilogp.c (264)

### Example

An example of log report OSF309 follows:

### OSF309 (end)

```
OSF309 MAY24 12:00:20 4100 FAIL OSF (1032)
Invalid TCP host address: string too long
Address Error
LOG: FAILED
1
Expert data: dcilogp.c (264)
```

### **Field descriptions**

The following table describes each field in the log report:

| Field           | Value   | Description                          |
|-----------------|---|--------------------------------------|
| ProcessName     | OSF   | Name of SN OPC process that runs     |
| ProcessID       | nnnn  | Identification code of OS IF process |
| Description     | Invalid TCP host<br>address: string too<br>long | Indicates configuration file error   |
| Faulty mnemonic | FAILED  | Indicates the fault type             |

### Action

Check TCP address and port number in configuration file. Start the OSF again according to SN OPC administration guide.

### **Associated OM registers**

There are no associated OM registers.

#### Explanation

The operation system interface (OSF) generates OSF313 when the problem manager sends an invalid message to the OSF. The system drops the log when the message contains log data.

The SuperNode (SN) operations controller (OPC) system processes logs. To process the logs, the SN OPD:

- collects SuperNode (SN) and SN OPC UNIX application environment (UAE) logs by the data collector
- correlates SN logs by the problem manager
- browses and logs problems through the problem viewer
- delivers logs to a local printer through the OSF

The OSF formats the logs in STD or SCC2 format and:

- reads the configuration files
- allocates required resources at start-up
- requests logs from the problem manager
- receives logs from the problem manager

The OSF reads the Configuration files in ASCII when the system starts. The Configuration files specify the following parameters:

- format of logs (STD or SCC2)
- the categories of logs the system delivers
- the port identification for printer connection
- the IP address of the OS remote host
- log delimiters to customize formatting of logs over transmission control protocol (TCP)/Internet protocol (IP)

### Format

The log report format for OSF313 is as follows:

\* OSF313 mmmdd hh:mm:ss ssdd WARN <ProcessName> (<ProcessID>) <Description> Invalid data LOG: <Faulty mnemonic> 1 Expert data: dcilogp.c (264)

## Example

An example of log report OSF313 follows:

```
OSF313 MAY24 12:00:00 4100 WARN OSF(1032)
Invalid message from ProbMgr:received unexpected
extradata
Invalid data
LOG: INVALID
1
Expert data: dcilogp.c (264)
```

## **Field descriptions**

The following table explains each field in the log report:

| Field           | Value  | Description                                    |
|-----------------|--|--|
| ProcessName     | OSF  | Gives the name of the SN OPC system that runs. |
| ProcessID       | nnnn   | Identification code of the OS IF process.      |
| Description     | Invalid message from<br>ProbMgr:received extra<br>data that is not planned | Problem manager failure.                       |
| Faulty mnemonic | INVALID  | Indicates the fault type.                      |

## Action

If this condition occurs often, examine sanity of the problem manager according to the SN OPC administration practices document.

# **Associated OM registers**

There are no associated OM registers.

#### Explanation

The operation system interface (OSF) generates OSF314 when the following events occur:

- the problem manager sends a log with an invalid message to the OSF
- the system drops the log

The SuperNode (SN) operations controller (OPC) system processes the logs. To process the logs, the SN OPC does:

- collects the SN logs and SN OPC UNIX application environment (UAE) logs by the data collector
- correlates SN logs by the problem manager
- browses the logs and problems through the problem viewer
- delivers the logs to a local printer through the OSF

The OSF formats logs in STD or SCC2 format and:

- reads the configuration files
- allocates required resources at start-up
- requests logs from the problem manager
- receives logs from the problem manager

The OSF application reads the files in ASCII configuration when the system starts. The files specify the following parameters:

- format of logs (STD or SCC2)
- the categories of logs the system delivers
- the port identification for printer connection
- the IP address of the OS remote host
- log delimiters used to customize formatting of the logs the system delivers over transmission control protocol (TCP)/Internet protocol (IP)

#### Format

The log report format for OSF314 is as follows:

\* OSF314 mmdd hh:mm:ss ssdd WARN <ProcessName> (<ProcessID>) <Description> Invalid message LOG: <Faulty mnemonic> 1 Expert data: dcilogp.c (264)

# Example

An example of log report OSF314 follows:

```
* OSF314 MAY24 12:00:00 4100 WARN OSF(1032)
Received invalid log data from Problem Manager
Invalid message
LOG: INVALID
1
Expert data: dcilogp.c (264)
```

# **Field descriptions**

The following table explains each field in the log report:

| Field           | Value  | Description                               |
|-----------------|--|---|
| ProcessName     | OSF  | Gives the name of the SN OPC that runs.   |
| ProcessID       | nnnn   | Identification code of the OS IF process. |
| Description     | Received invalid log data from problem manager | Indicates Problem Manager failure.        |
| Faulty mnemonic | INVALID  | Indicates the fault type.                 |

# Action

If this condition occurs several times, examine the sanity of the problem manager according to SN OPC administration practices document.

# **Associated OM registers**

## OSF317

### Explanation

The operation system interface (OSF) system generates OSF317 when the transmission control protocol (TCP) connection with the remote host is lost. The OSF tries to establish the connection again at constant intervals.

The SuperNode (SN) operations controller (OPC) processess logs. To process the logs, the SN OPC does:

- collects SN logs and SN OPC UNIX application environment (UAE) logs by the data collector
- correlates SN logs by the problem manager
- browses logs and problems through the problem viewer
- delivers logs to a local printer through the OSF

The OSF formats the logs in STD or SCC2 format and:

- reads the configuration files
- allocates required resources when the system starts
- requests logs from the problem manager
- receives logs from the problem manager

Logs go to a remote client where the system runs TCP at start up on an Internet protocol (IP). The IP is an internetworking protocol with connectionless service. The service exchanges datagrams between two host computers over a minimum of one network.

### Format

The log report format for OSF317 is as follows:

\* OSF317 mmmdd hh:mm:ss ssdd FAIL <ProcessName> (<ProcessID>) <Description> Lost connection LOG: <Faulty mnemonic> 1 Expert data: dcilogp.c (264)

## Example

An example of log report OSF317 follows:

# OSF317 (end)

```
* OSF317 MAY24 20:00:00 4220 FAIL OSF (1032)
Lost connection with TCP server; errno=255
Lost connection
LOG: FAILED
1
Expert data: dcilogp.c (264)
```

## **Field descriptions**

The following table explains each field in the log report:

| Field           | Value   | Description                               |
|-----------------|---|---|
| ProcessName     | OSF   | Name of the SN OPC that runs.             |
| ProcessID       | nnnn  | Identification code of the OS IF process. |
| Description     | Lost connection with<br>TCP server; errno=255 | Indicates TCP connection failure.         |
| Faulty mnemonic | FAILED  | Indicates the fault type.                 |

## Action

Check the remote TCP application runs. Check if the remote host is active, and if the network functions correctly.

## **Associated OM registers**

## OSF318

#### Explanation

The operation system interface (OSF) generates OSF318 when it receives data from the TCP server. The TCP server should not be sending data. The system ignores the data and OSF use is not affected.

The SuperNode (SN) operations controller (OPC) system processes logs. To process the logs the SN OPC does:

- collects the SN logs and SN OPC UNIX application environment (UAE) logs by the data collector
- correlates SN logs by the problem manager
- browses the logs and problems through the problem viewer
- delivers the logs to a local printer through the OSF

The OSF formats the logs in STD or SCC2 format and:

- reads the configuration files
- allocates required resources at start-up
- requests logs from the problem manager
- receives logs from the problem manager

A remote client uses TCP and Internet protocol (IP) to send logs. The TCP runs over IP which is an internetworking protocol with connectionless service. The service exchanges datagrams between two host computers on a minimum of one network.

### Format

The log report format for OSF318 is as follows:

.\* OSF318 mmmdd hh:mm:ss ssdd INFO <ProcessName> (<ProcessID>) <Description> Received data LOG: 1 Expert data: dcilogp.c (264)

## Example

An example of log report OSF318 follows:

```
* OSF318 MAY24 07:30:20 4100 INFO OSF (1032)
Received data from TCP server
Received data
LOG:
1
Expert data: dcilogp.c (264)
```

# **Field descriptions**

The following table explains each field in the log report:

| Field       | Value                         | Description                               |
|-------------|-------------------------------|---|
| ProcessName | OSF                           | Name of the SN OPC that runs.             |
| ProcessID   | nnnn                          | Identification code of the OS IF process. |
| Description | Received data from TCP server | Indicates that the TCP server sends data. |

# Action

Check why remote TCP application is sending data. If OSF318 appears several times, this can indicate OSF connects with the wrong TCP server. If the OSF connects with the wrong TCP server, change the port number. Start the OSF again if necessary.

# **Associated OM registers**

## OSF319

#### Explanation

The operation system interface (OSF) generates OSF319 when the OSF system loses connection with the remote transmission control protocol (TCP). The system loses connection caused by an error condition that is not planned, and not established again.

The SuperNode (SN) operations controller (OPC) system processes logs. To process the logs, the SN OPC does:

- collects the SN logs and SN OPC UNIX application environment (UAE) logs by the data collector
- correlates SN logs by the problem manager
- browses the logs and problems through the problem viewer
- delivers the logs to a local printer through the OSF

The OSF formats the logs in STD or SCC2 format and:

- reads the configuration files
- allocates required resources at start-up
- requests logs from the problem manager
- receives logs from the problem manager

A remote client uses TCP and Internet protocol (IP) to send logs. The TCP runs over IP which is an internetworking protocol with connectionless service. The service exchanges datagrams between two host computers on a minimum of one network.

### Format

The log report OSF319 is as follows:

OSF319 mmmdd hh:mm:ss ssdd FAIL <ProcessName> (<ProcessID>) <Description> Closing connection LOG: <Faulty mnemonic> 1 Expert data: dcilogp.c (264)

#### **Example**

An example of log report OSF319 follows:

## OSF319 (end)

```
OSF319 MAY24 07:30:20 4200 FAIL OSF (1032)
Lost TCP connection due to an unexpected status -4;
errno=0
Closing connection
LOG: INVALID
1
Expert data: dcilogp.c (264)
```

# **Field descriptions**

The following table explains each field in the log report:

| Field           | Value  | Description                               |
|-----------------|--|---|
| ProcessName     | OSF  | Name of SN OPC process that runs.         |
| ProcessID       | nnnn   | Identification code of the OS IF process. |
| Description     | Lost TCP connection<br>because of an<br>unexpected status -4;<br>errno=0 | Indicates TCP connection failure.         |
| Faulty mnemonic | INVALID  | Indicates the fault type.                 |

# Action

In order to establish TCP connection again, bring down and start the OSF again.

## **Associated OM registers**

## OSF401

#### Explanation

The operation system interface (OSF) generates OSF401 when OSF loses excessive logs delivered to the device in 15 minutes. The system describes the device in brackets in the description data field.

The SuperNode (SN) operations controller (OPC) system processes logs. To process the logs, the SN OPC does:

- collects the SN logs and SN OPC UNIX application environment (UAE) logs by the data collector
- correlates SN logs by the problem manager
- browses the logs and problems through the problem viewer
- delivers the logs to a local printer through the OSF

The OSF formats the logs in STD or SCC2 format and:

- reads the configuration files
- allocates required resources at start-up
- requests logs from the problem manager
- receives logs from the problem manager

Printer delivery supports log delivery to a maximum of two printers. Printers connect to SN OPC through the modem rack and dedicated modem links. The OSF has two circular buffers. Each printer has a buffer for logs that OSF cannot deliver. The OSF cannot deliver these logs because of a lost modem connection or reception of an XOFF signal from the printer. The buffers in each printer can accommodate conditions where delivery rate quickly exceeds printer capacity caused by bursty arrival of logs. The buffers do not prevent data loss when a sustained high rate of logs occurs. The buffers do not prevent data loss if the printer is not available (for example, printer out of paper). If the buffer fills, OSF discards the logs. The OSF discards the oldest logs first.

### Format

The log report format for OSF401 is as follows:

.\* OSF401 mmmdd hh:mm:ss ssdd FAIL <ProcessName> (<ProcessID>) <Description> Lost logs LOG: <Faulty mnemonic> 1 Expert data: dcilogp.c (264)

# Example

An example of log report OSF401 follows:

```
* OSF401 MAY24 04:02:03 4100 FAIL OSF (1032)
Lost 8 logs intended for </dev/ttyd01/> in the last 15
minutes
Lost logs
LOG: FAILED
1
Expert data: dcilogp.c (264)
```

# **Field descriptions**

The following table explains each field in the log report:

| Field           | Value  | Description                               |
|-----------------|--------|---|
| ProcessName     | OSF    | Name of SN OPC process that runs.         |
| ProcessID       | nnnn   | Identification code of the OS IF process. |
| Description     | Text   | Logs lost for special printer or device.  |
| Faulty mnemonic | FAILED | Indicates the fault type.                 |

# Action

Check connection between the OSF and the device. When the OSF delivers logs to the device, the log flow exceeds printer capacity. There is no way to retrieve the logs when the log flow exceeds printer capacity.

# **Associated OM registers**

## **OSTR100**

### Explanation

The operator services trouble report (OSTR) subsystem generates this log in response to a trouble code by an operator.

### Format

The format for log report OSTR100 follows:

OSTR100 mmmdd hh:mm:ss ssdd TBL nn opid OPERATOR POS = trkid INCOMING TRK = trkid OUTGOING TRK = trkid CONFERENCE TRK = trkid CLGNO = dn CLDNO = dn

## Example

An example of log report OSTR100 follows:

```
OSTR100 APR30 14:06:27 4503 TBL 32 2413

OPERATOR POS = ACDFX 10

INCOMING TRK = CKT TESTTRK 2

OUTGOING TRK = CKT TESTTRK 3

CONFERENCE TRK = CKT DUMMYTRK 4

CLGNO = 613-722-5630

CLDNO = 214-354-7726
```

# **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field        | Value         | Description  |
|--------------|---------------|--|
| TRBL         | Constant      | Trouble in the OSTR subsystem                              |
| nn           | 0-99          | Operator entered trouble code                              |
| opid         | 0-9999        | Automatic call distribution (ACD) agent login ID           |
| OPERATOR POS | Symbolic text | Trunk circuit ID of the operator position in the ACD group |
| INCOMING TRK | Symbolic text | Incoming trunk circuit ID                                  |

# OSTR100 (end)

#### (Sheet 2 of 2)

| Field          | Value         | Description   |
|----------------|---------------|---|
| OUTGOING TRK   | Symbolic text | Outgoing trunk circuit ID   |
| CONFERENCE TRK | Symbolic text | Trunk circuit ID of the first leg of a conference circuit. Dashes indicate no conference circuit is in use. |
| CLGNO          | Integers      | Directory number of call originator   |
| CLDNO          | Integers      | Directory number dialed by call originator (operator or subscriber)   |

# Action

Determine and correct the cause of the trouble code.

# **Associated OM registers**

None

## **PADN300**

## Explanation

The Patch Administrator generates the PADN300 log indicating the patch administrator (PADN) has received an error when attempting to write a file to a device.

### Format

The format for the PADN300 log report is as follows:

PADN300 mmmdd hh:mm:ss ssdd FAIL PADN File System Error infotext Filename: filename Volume: volume

# Example

An example of the PADN300 log report is as follows:

```
PADN300 MAR33 14:12:29 7700 FAIL PADN File System Error
File cannot be closed as requested
Filename: SGW12CB3$PATCH
Volume: SLM: S00DTEST
```

## **Field description**

The following table contains descriptions of each field in the PADN300 log report.

| Field                          | Value            | Description   |
|--------------------------------|------------------|---|
| FAIL PADN file system<br>error | Constant         | Indicates that PADN has<br>received an error when<br>trying to write a file to a<br>device. |
| Infotext                       | Character string | Provides additional<br>information about the<br>reason for the log.                         |
| Filename                       | Character string | Identifies the file<br>downloaded during the<br>PADN session.                               |
| Volume                         | Character string | Indicates the device<br>where the system<br>downloads the file.                             |

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## PADN300 (end)

# Action

The file may be unusable, contact the next of support.

# Associated OM registers

There are no associated operational measurements.

# **Additional information**

There is no additional information.

# **Revision history**

In accordance with CSR Q00106193, the PADN300 log is added to this document.

## **PADN301**

### **Explanation**

The Patch Administrator generates the PADN301 log when the DMS does not receive data from the service provider after 30 minutes.

#### Format

The format for the PADN301 log report is as follows:

PADN301 mmmdd hh:mm:ss ssdd FAIL PADN timeout infotext

### Example

An example of the PADN301 log report is as follows:

```
PADN301 MAR22 14:12:29 7700 FAIL PADN timeout PADN has terminated due to timeout
```

# **Field description**

The following table contains descriptions of each field in the PADN301 log report.

| Field             | Value            | Description  |
|-------------------|------------------|--|
| FAIL PADN timeout | Constant         | Indicates that PADN has<br>timed-out, it has not<br>received data after 30<br>minutes. |
| Infotext          | Character string | Provides additional information about the reason for the log.                          |

### Action

If PADN301 logs persist, contact the next of support.

## Associated OM registers

There are no associated operational measurements.

## **Additional information**

There is no additional information.

# PADN301 (end)

# **Revision history**

In accordance with CSR Q00106193, the PADN301 log is added to this document.

## **PADN600**

### **Explanation**

The Patch Administrator generates the PADN600 log each time nine post release software updates (PRSUs) are validated during a patch administration (PADN) session. The PADN600 log is also generated when a PADN session terminates and there are PRSUs validated since the last PADN600 log.

## Format

The format for the PADN600 log report is as follows:

PADN600 mmmdd hh:mm:ss ssdd INFO PRSU VALIDATE SESSION n PRSUs VALIDATED

| prsuid | validate result |
|--------|-----------------|
| prsuid | validate result |

\_\_\_\_\_

## **Example**

An example of the PADN600 log report is as follows:

PADN600 MAR33 14:12:29 7700 INFO PRSU VALIDATE SESSION 3 PRSU(s) VALIDATED DSR27B35 NOT NEEDED MCN05B35 NOT NEEDED CDK28B35 NOT NEEDED JJM27B35 NEEDED DOG04B35 NOT NEEDED CPP55B35 NOT NEEDED FSI38B35 NEEDED EXC10B35 NEEDED CPP56B35 NOT NEEDED

# PADN600 (end)

## **Field description**

The following table contains descriptions of each field in the PADN600 log report.

| Field              | Value            | Description   |
|--------------------|------------------|---|
| INFO PRSU validate | Constant         | Indicates PADN has validated PRSUs.   |
| Session n          | Integer          | One character interger,<br>that Identifies the PADN<br>session number that<br>produced the log. |
| PRSUs validated    | Character string | Indicates the column<br>heading for PRSU<br>identifiers.  |
| Prsuid             | Variable         | Identifies the name of the prsuid, 1-32 characters.   |
| Validate result    | Needed           | Indicates the specified PRSU is required.   |
|                    | Not needed       | Indicates the specified PRSU in not required.   |

# Action

There are no required actions.

# **Associated OM registers**

There are no associated operational measurements.

### **Additional information**

There is no additional information.

## **Revision history**

In accordance with CSR Q00106193, the PADN600 log is added to this document.

## **PADN601**

### **Explanation**

The Patch Administrator generates the PADN601 log each time nine files are downloaded during a patch administration (PADN) session. The PADN601 log is also generated when a PADN session terminates and PRSUs are downloaded since the last PADN601 log.

### Format

The format for the PADN601 log report is as follows:

PADN601 mmmdd hh:mm:ss ssdd INFO PRSU DOWNLOAD SESSION n DEVICE: device name FILES DOWNLOADED

file name file name

### Example

An example of the PADN601 log report is as follows:

PADN601 MAR33 14:12:29 7700 INFO PRSU DOWNLOAD SESSION 3 DEVICE: SFDEV PRSU(s) DOWNLOADED -------EXC10B35\$DF EXC10B35\$PATCH CPP56B35\$DF TOM00B35\$DF TOM00B35\$PATCH JWA29B35\$DF JWA29B35\$DF JWA29B35\$DF JWA29B35\$DF 2-26 Logs

## PADN601 (end)

## **Field description**

The following table contains descriptions of each field in the PADN601 log report.

| Field              | Value            | Description  |
|--------------------|------------------|--|
| INFO PRSU download | Constant         | Indicates PADN has<br>downloaded at least nine<br>files.                                       |
| Session n          | Integer          | One character integer,<br>that identifies the PADN<br>session number that<br>produced the log. |
| Device             | Character string | Indicates the device<br>where the system<br>downloads the files.                               |
| Files downloaded   | Constant         | Identifies the column<br>heading for any files<br>downloaded.                                  |
| Filename           | Variable         | Identifies the files<br>downloaded, 1-24<br>characters.  |

# Action

There are no required actions.

# **Associated OM registers**

There are no associated operational measurements.

## **Additional information**

There is no additional information.

## **Revision history**

In accordance with CSR Q00106193, the PADN601 log is added to this document.

## PCH100

### Explanation

The PATCH (PCH) subsystem generates log report PCH100 when the system checks a group of patches. The system checks patches to determine if a remote office requires a patch. The DMS PATCHER facility uses the DLCHECK (download check) command through remote operations. The subsystem can generate more than one PCH100 log. The number of logs depends on the number of patches checked in one session.

### Format

The log report format for PCH100 is as follows:

PCH100 mmmdd hh:mm:ss ssdd INFO DLCHECK SESSION nn PATCHES DLCHECKED pchnm needtxt pchnm needtxt pchnm needtxt

## Example

An example of log report PCH100 follows:

PCH100 JAN22 09:12:23 3656 PATCH DLCHECK SESSION 3 PATCHES DLCHECKED ASD00A25 NEEDED PJK56A25 NEEDED SRC23A25 NOT NEEDED

# **Field descriptions**

The following table explains each field in the log report:

#### (Sheet 1 of 2)

| Field        | Value    | Description  |
|--------------|----------|--|
| INFO DLCHECK | Constant | Indicates the system used the<br>DLCHECK command                                       |
| SESSION nn   | Integer  | Identifies the remote operations session in which the system used the DLCHECK command. |

# PCH100 (end)

#### (Sheet 2 of 2)

| Field             | Value         | Description  |
|-------------------|---------------|--|
| PATCHES DLCHECKED | Constant      | Indicates that the system<br>DLCHECKED some patches.                 |
| pchnm             | Symbolic text | Identifies the patch checked.  |
| needtxt           | NEEDED        | Indicates that the remote office needs the identified patch.         |
|                   | NOT NEEDED    | Indicates that the remote office does not need the identified patch. |

# Action

There is no action required.

# **Associated OM registers**

There are no associated OM registers.

## **Additional information**

There is no additional information.

### PCH101

### Explanation

The PATCH (PCH) subsystem generates report PCH101 when the system downloads a group of files to a DMS from a remote node. The system downloads the files through the use of remote operations. The subsystem generates more than one PCH101 log. The number of logs depends on the number of files downloaded in one remote operations session.

### Format

The log report format for PCH101 is as follows:

PCH101 mmmdd hh:mm:ss ssdd INFO FILE DOWNLOAD SESSION nn FILES DOWNLOADED DEVICE devname pchnm pchnm pchnm pchnm

### Example

An example of log report PCH101 follows:

PCH101 JAN22 09:13:43 4566 INFO FILE DOWNLOAD SESSION 3 FILES DOWNLOADED DEVICE : SFDEV ASD00A25\$PATCH PKL34A25\$PATCH ZRW67A25\$PATCH THY32A25\$DF

### **Field descriptions**

The following table explains each field in the log report:

#### (Sheet 1 of 2)

| Field                 | Value    | Description   |
|-----------------------|----------|---|
| INFO FILE<br>DOWNLOAD | Constant | Indicates the system downloaded a group of files.   |
| SESSION nn            | Integer  | Identifies the remote operations session from which the system issued the DOWNLOAD command. |
| FILES DOWNLOADED      | Constant | Indicates the system downloaded the files to a remote DMS.                                  |

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# PCH101 (end)

#### (Sheet 2 of 2)

| Field          | Value         | Description   |
|----------------|---------------|---|
| DEVICE devname | Symbolic text | Indicates the device to which the system downloaded the group of files. For example, a disk volume. |
| pchnm          | Symbolic text | Identifies the file(s) downloaded. Each line lists two files.                                       |

# Action

There is no action required.

# Associated OM registers

# PCH102

### Explanation

The PATCH (PCH) subsystem generates log report PCH102. The subsystem generates this report when the DMS PATCHER facility checks a group of patches through remote operations. The CHECK command determines if patches apply without problems. The subsystem generates more than one PCH102 log. The number of logs depends on the number of patches checked in a single remote operations session.

## Format

The log report format for PCH102 is as follows:

PCH102 mmmdd hh:mm:ss ssdd INFO CHECK SESSION nn PATCHES CHECKED pchnm chktxt pchnm chktxt pchnm chktxt

# Example

An example of log report PCH102 follows:

PCH102 JAN22 09:16:43 5476 PATCH CHECK SESSION 3 PATCHES CHECKED ASD00A25 CHECKED PKL34A25 CHECKED ZRW67A25 CHECKED THY32A25 CHECKED PJK56A25 DID NOT CHECK

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field            | Value    | Description   |
|------------------|----------|---|
| INFO PATCH CHECK | Constant | Indicates a patch check.  |
| SESSION nn       | Integer  | Identifies the remote operations session that issued the CHECK command. |
| PATCHES CHECKED  | Constant | Indicates that the system checked patches.                              |

# PCH102 (end)

(Sheet 2 of 2)

| Field  | Value         | Description   |
|--------|---------------|---|
| pchnm  | Symbolic text | Identifies the patch that the system checked.                     |
| chktxt | CHECKED       | Indicates that the identified patch will apply without problems.  |
|        | DID NOT CHECK | Indicates an error with the patch file. This file will not apply. |

# Action

There is no action required.

# Associated OM registers

# PCH103

## **Explanation**

The PATCH (PCH) subsystem generates log report PCH103. The subsystem generates this report when conditions occur as follows:

- Office parameter APPLY\_PATCHES\_BY\_SEQUENCE is ON.
- A user applies a patch that is out of sequence with the command APPLY patchid FORCE.

## Format

The log report format for PCH103 is as follows:

PCH103 <date> <time> <logseq> INFO PATCH FORCE The following patch has been force applied: <patchid> USER: userid DEVICE: deviceid Node Date Time <Node> <Date> <Time>

## Example

An example of log report PCH103 follows:

PCH103 FEB01 16:21:37 7789 INFO PATCH FORCEThe following patch has been force applied: VET00I93USER: VETRANO DEVICE: PLEX4NodeDateLTC 0 002/01/199016:21:37

## **Field descriptions**

There are no field descriptions.

## Action

The log report PCH103 is for information only.

## **Associated OM registers**

There are no associated OM registers.

# **Additional information**

There is no additional information.

## Explanation

The PATCH (PCH) subsystem generates log report PCH105 when a patch FAILS to dlcheck, apply, remove, or reclaim. The subsystem immediately generates this report after a failure, including when failure occurs during loadbuild.

## Format

The log report format for PCH105 is as follows:

PCH105 mmmmdd hh ss ssdd INFO PATCH ACTION FAILED USER: userid DEVICE: deviceid Patch Name Action Node Date Time

# Example

An example of log report PCH105 follows:

<pchnm> <pchact> <node> <date> <time>
 <patch failure reason>

# Field descriptions

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                       | Value  | Description  |
|-----------------------------|--|--|
| INFO PATCH ACTION<br>FAILED | Constant                                     | Indicates patch failure.                             |
| User                        | Symbolic text                                | Indicates the name of the user that requests action. |
| Device                      | Symbolic text                                | Indicates the device that requires patch.            |
| Patch name                  | Symbolic text                                | Indicates name of patch.                             |
| Action                      | dlcheck, check, apply,<br>remove, or reclaim | Indicates the action for which patch fails.          |
| Node                        | XPM node, ISN node,<br>CM node, or CC node   | Indicates the node of the applied patch.             |
| Date                        | Integers                                     | Indicates date of action failure.                    |

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# PCH105 (end)

### (Sheet 2 of 2)

| Field                | Value    | Description                                    |
|----------------------|----------|--|
| Time                 | Integers | Displays the time of the patch action failure. |
| patch failure reason | Text     | Indicates the reason for the patch failure.    |

# Action

Note the reason for patch failure and contact the next level of support.

# **Associated OM registers**

## Explanation

The Patch (PCH) subsystem generates log report PCH107 for the ISN/XPM node/unit. The subsystem generates PCH107 when the audit cannot run as a result of a discrepancy. Initial design cancels the audit if a REX test or a loadbuild is in progress. If the audit does not receive instructions to UPDATE the patch status, the node/unit is marked ISTb. If the update fails, the node/unit is marked ISTb.

The subsystem also generates log report PCH107 if an ACT Patch (Host or ISN) is in the OFF condition. The PATCHOPT tuple ON determines the OFF condition. Settings of the PATCHAUD entry in table PATCHOPT control the patch audit. If this PATCHOPT tuple is set to Y, an audit of the ACT patches in the OFF state occurs. If this tuple is set to N, an audit of the ACT patches in the OFF state does not occur.

The ACTPATCH is an external alarm that activates in addition to this report. The ACTPATCH indicates that patches that apply to the switch can activate. Operating company personnel must deactivate this external alarm manually.

*Note:* The PATCHOPT tuple START controls the time of the audit. The feature NODEREEXCONTROL in table OFCVAR schedules REX tests. The time of audit must not overlap the time of REX tests. A schedule conflict causes the cancellation of the patch audit.

# Format

The log report format for PCH107 is as follows:

PCH107 mmmdd hh:mm:ss ssdd INFO PATCH AUDIT FAILED <failure reason> <failure details> where <failure reason> is PATCH AUDIT FOUND MISMATCH or PATCH AUDIT CANCELLED.

The log report format for PCH107 is as follows:

PCH107 mmmdd hh:mm:ss ssdd INFO PATCH AUDIT FAILED <target info> Corrective ACT patch is not ON or NA: <patchid>

# Example

An example of log report PCH107 follows:

## PCH107 (continued)

```
PCH107 JAN27 05:06:07 1234 INFO PATCH AUDIT FAILED
PATCH AUDIT FOUND MISMATCH
Patches in the CM that are NOT in LIM 0 0 :
HCB50I31
MCD80I31
DBG01I31
Patch statuses updated
LOADBUILD IN PROGRESS or
REX TEST ACTIVE.
```

An example of log report PCH107 follows:

RTPD PCH107 FEB05 17:24:45 2300 INFO PATCH AUDIT FAILED MS 0 Corrective ACT Patch is not ON or NA: CHC00192

## **Field descriptions**

The following table describes each field in the log report:

| Field                      | Value   | Description   |
|----------------------------|---|---|
| INFO PATCH AUDIT<br>FAILED | Constant  | Identifies patch audit failure.   |
| failure reason             | PATCH AUDIT FOUND<br>MISMATCH, PATCH<br>AUDIT CANCELLED | A mismatch description indicates a<br>discrepancy. For example, a patch that shows<br>as applied in the CM but not applied in the<br>node is a discrepancy. A list of a maximum of<br>nine patches follows this field. The list<br>indicates if the patches update. |
|                            |   | If more than nine patches on an ISN/XPM<br>node/unit mismatch, the subsystem generates<br>log PCH107. The subsystem continues to<br>generate this log until all mismatched patches<br>list.   |

# Action

The node/unit is marked ISTb in the occurrence of a patch status mismatch. An image of an ISN node load can fail. Check patches in the CC/CM and the ISN/XPM node/unit to determine if failure occurred. If the problem persists, contact Technical Assistance Service (TAS).

## **PCH107** (end)

The patch for the target specified in the PCH107 can require an ACT setting of ON. Operating company personnel must use the PATCHEDIT command to modify the setting to ON.

A patch can require an ACT setting of OFF and require additional audits. Operating company personnel must use the PATCHEDIT command to modify the setting value to NA. The operating company personnel must read the patch description to determine if the ACTPATCH is necessary for the switch. If the ACTPATCH is necessary, operating company personnel must obtain permission and a password from TAS to activate the patch. If the ACTPATCH is not necessary, operating company personnel does not require a password to set patch status to NA.

## **Associated OM registers**

## PCH111

### Explanation

The Patch (PCH) subsystem generates log report PCH111. The subsystem generates this report if the switch sanity is questionable after the application of the autopatch process. The subsystem checks the system sanity against an acceptable threshold level in Table PATSET. If the system sanity exceeds the threshold, the subsystem generates log report PCH111.

### Format

The log report format for PCH111 is as follows:

PCH111 mmmdd hh:mm:ss ssdd INFO Autopatch Switch Sanity REASON<reason> <text reason>

## Example

An example of log report PCH111 follows:

PCH111 AUG07 09:15:00 7840 INFO Autopatch Switch Sanity REASON = MPCS.101: 28 Switch sanity threshold exceeded after applying patches.

## **Field descriptions**

The following table describes each field in the log report:

| Field                           | Value   | Description  |
|---------------------------------|---|--|
| INFO AUTOPATCH<br>SWITCH SANITY | Constant  | Indicates an autopatch switch sanity check.                    |
| REASON                          | Symbolic text   | Indicates the log report and count that exceeds the threshold. |
| text reason                     | Switch Sanity threshold<br>exceeded before patch<br>application; Switch<br>Sanity threshold<br>exceeded after patch<br>application. | Indicates the time of the threshold breach.                    |

## Action

Go to table PATSET and change the value of the field THRSHOLD to 100. This change in value instructs AUTOPATCH to bypass a check of switch sanity. Or, from CI, type:

>AUTOPATCH DEBUG >LISTST >PRINT AUTOPDIR >HELP INHIBIT

Use the inhibit command to inhibit logs that do not require consideration during the sanity check. The user can inhibit log groups or single log reports as follows:

For log groups:

#### >INHIBIT TRK ON

For single log reports:

>INHIBIT TRK 101 ON >QUIT

To uninhibit logs inhibited earlier:

>INHIBIT TRK 101 OFF >QUIT

Analyze the logs to determine possible software or hardware problems.

# **Associated OM registers**

### **PCH201**

#### Explanation

The PATCH (PCH) subsystem generates log report PCH102 after every issue of the GETPAT command. The log report summarizes activities that occur during the execution of the GETPAT command.

There are no changes to the report, except for sections that relate to removed patches. When the GETPAT command issues with the REMOVED parameter, the PCH201 log report can contain the following information:

- removed patches found
- removed necessary patches
- confirmed removed patches

#### Format

The log report format PCH201 is as follows:

PCH201 mmmdd hh:mm:ss ssdd INFO Getpat Summary USER: userid DEVICE:deviceid Removed patches found:<nnn> Removed need patches:<nnn> <patchid> needs <patchid> <patchid> <patchid> needs <patchid> Removed patches (have/have not) been confirmed Apply manually: <nnn> <patchid>

<patchid> Pending: <nnn>

#### Example

An example of log report PCH201 follows:

PCH201 MAY24 12:24:21 3900 INFO Getpat Summary USER: TERM1 DEVICE:CONSOLE:TERM1 Removed patches found:5 Removed need patches:1 DFB90C36 needs DFB89C36 Removed patches have been confirmed Apply manually: 1 EGJ17C36 Pending: 2

# **Field descriptions**

The following table describes each variable field in the log report:

| Field    | Value         | Description  |
|----------|---------------|--|
| userid   | Text          | Identifies the MAP user.                           |
| deviceid | Text          | Indicates the MAP device name.                     |
| patchid  | Symbolic Text | Indicates the name of the removed patches applied. |

# Action

Refer to the log report text and perform the action specified.

# **Associated OM registers**

There are no associated OM registers.

# **Additional information**

There is no additional information.

### PCH203

### Explanation

The Patch (PCH) subsystem generates log report PCH203 when the system sanity exceeds the threshold level in table PATSET. The subsystem checks system sanity against an acceptable threshold level in table PATSET.

### Format

The log report format for PCH203 is as follows:

PCH203 mmmdd hh:mm:ss ssdd INFO Autopatch Switch Sanity REASON=<reason> <text reason>

## Example

An example of log report PCH203 follows:

PCH203 MAY24 12:24:21 7840 INFO Autopatch Switch Sanity REASON= MPCS.101:28 Switch sanity threshold exceeded after applying patches.

## Field descriptions

The following table describes each field in the log report:

| Field       | Value         | Description   |
|-------------|---------------|---|
| reason      | Symbolic Text | Indicates the log report and count that exceed the threshold. |
| text reason | Symbolic Text | Indicates the reason why switch sanity is not known.          |

# Action

There is no action required.

## **Associated OM registers**

#### Explanation

The log report PCH204 generates each time a user executes the START, STOP, CANCEL or DELAY commands in the Autopatcher Command Increment.

#### Format

The log report format for PCH204 is as follows:

PCH204 mmmdd hh:mm:ss ssdd INFO AUTOPATCH COMMAND USED USER: userid DEVICE:deviceid <text reason> Delayed From: <day, mmmdd hh:mm> To: <day,mmmdd hh:mm>

## Example

An example of log report PCH204 follows:

PCH204 MAY25 11:48:14 6100 INFO AUTOPATCH COMMAND USED USER: TERM1 DEVICE:CONSOLE:TERM1 Autopatch process DELAYED by command Delayed From:09:30 on Wed,05/27 To: 09:30 on Fri,05/29

## **Field descriptions**

The following table describes each variable field in the log report:

| Field       | Value                                       | Description                                      |
|-------------|---|--|
| deviceid    | Text  | Indicates the MAP device name.                   |
| text reason | Autopatch processed<br>CANCELLED by command | Indicates the command for the autopatch process. |
|             | Autopatch processed<br>SCHEDULED by command | Indicates the command for the autopatch process. |
|             | Autopatch processed<br>STOPPED by command   | Indicates the command for the autopatch process. |
|             | Autopatch processed<br>STARTED by command   | Indicates the command for the autopatch process. |

## PCH204 (end)

## Action

There is no action required.

# **Associated OM registers**

There are no associated OM registers.

## **Additional information**

There is no additional information.

#### **Explanation**

The system generates report PCH350 when XPM loadfile patching fails. Loadfile patching helps XPM maintenance reduce recovery time for XPMs. Loadfile patching prevents the need to compile XPM loads and provides automatic XPM loadfile patching. The PCH350 log report records data that associates with the failure of XPM loadfile patching. The PCH350 also contains the name of the XPM load and records if the system or the operating company personnel initiate the loadfile.

## Format

The log report format for PCH350 is as follows:

PCH350 mmmdd hh:mm:ss ssdd FAIL Loadfile Patch failure Start Time:<date time> End Time:<date time> Pmload: <loadname> Reason: <initiation reason> <failure text> <failure text> <failure text>

## Example

An example of log report PCH350 follows:

PCH350 OCT31 11:59:59 0013 FAIL Loadfile Patch Failure Start Time:1993/05/30 09:30:05 End Time:1993/05/30 09:31:05 Pmload: NLG36BD Reason: System Patch file not found for: XAT09X36 XCH66X36 XKN83X36

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                          | Value    | Description   |
|--------------------------------|----------|---|
| FAIL Loadfile Patch<br>Failure | Constant | Indicates the process failure.                                    |
| Start Time:                    | Numeric  | Patching listed by year, month, day, hour, minute, second format. |

#### PCH350 (end)

(Sheet 2 of 2)

| Field        | Value            | Description  |
|--------------|------------------|--|
| End Time     | Numeric          | Indicates end date and time of patching.   |
| Pmload       | Symbolic name    | Indicates the XPM load that the system will patch.                                     |
| Reason       | Manual or system | Indicates if the system or the operating company personnel initiate loadfile patching. |
| Failure text | Text             | Identifies the reason that the loadfile patching aborts.                               |

## Action

The XPM loadfile patching stops if devices in table XPMLFP do not have disk space. Make sure that space is available for the devices in table XPMLFP. To correct loadfile creation errors, repeat the download process, or find the missing patch files.

### **Associated OM registers**

#### Explanation

The system generates report PCH650 when XPM loadfile patching is complete. Loadfile patching helps XPM maintenance reduce recovery time for XPMs. Loadfile patching also provides automatic XPM loadfile patching and prevents the need to compile XPM loads. The PCH650 contains information about the patched loadfile. The PCH650 also includes:

- the names of the patches applied during the loadfile session
- the name of the pmload
- the name of the loadfile that the loadfile session created
- the device used to store the new load file
- the reason that the loadfile starts (manual or system)

#### Format

The log report format for PCH650 is as follows:

PCH650 mmdd hh:mm:ss ssdd INFO Loadfile Patch Successful Start Time: <date time> End Time: <date time> Pmload: <loadname> Loadfile: <loadfilename> Loadfile Device: <deviceid> Reason: <initiation reason> <text line 1> <text line 2> <text line 3> <text line 4> <text line 5> <text line 6>

### Example

An example of log report PCH650 follows:

## PCH650 (end)

PCH650 JUL24 18:36:06 1800 INFO Loadfile Patch Successful Start Time:1993/09/06 17:30:00 End Time:1993/09/06 18:00:00
Pmload: NLT36BD
Loadfile: NLT36BD\_930906
Loadfile Device: SOODXPMLF
Reason: Manual
Patches added to loadfile:
XDF30X36 XLD09X36 XNF34X36
Patches that could not be removed from the loadfile:
XVB94X36

## **Field descriptions**

The following table describes each field in the log report:

| Field        | Value            | Description   |
|--------------|------------------|---|
| loadname     | String           | Indicates the name of the tuple in table PMLOADS.                         |
| loadfilename | String           | Indicates the name of the loadfile created during loadfile patch session. |
| deviceid     | Symbolic Text    | Indicates the name of the device. The name includes loadfile.             |
| reason       | Manual or System | Indicates the type of initialization.                                     |

## Action

There are no required actions.

# **Associated OM registers**

## PEND100

#### Explanation

The pending order system (PEND) generates report PEND100 at 0000 h and 1200 h. The PEND system generates PEND100 if one or more service orders are past due or due in the next 12 h. Refer to the *Basic Translations Tools Guide*.

#### Format

The log report format for PEND100 is as follows:

PEND100 mmmdd hh:mm:ss ssdd INFO PENDING ORDER AUDIT: nnnn PENDING ORDERS ARE DUE IN THE NEXT 12 HOURS

## Example

An example of log report PEND100 follows:

PEND100 JUL31 00:00:01 2880 INFO PENDING ORDER AUDIT: 4 PENDING ORDERS ARE DUE IN THE NEXT 12 HOURS

#### Field descriptions

The following table explains each field in the log report:

| Field   | Value    | Description  |
|---|----------|--|
| INFO PENDING<br>ORDER AUDIT                       | Constant | Indicates that an audit of pending service orders occurs.            |
| nnnn  | 0 - 9999 | Indicates number of pending orders past due or due in the next 12 h. |
| PENDING ORDERS<br>ARE DUE IN THE NEXT<br>12 HOURS | Constant | Indicates pending orders past due.                                   |

## Action

Enter the PENDING CI increment and use the DISPLAY DUE command to see the pending orders past due, or due in the next 12 hours. Verify the validity of the orders. You can use the ACTIVATE command.

## **Associated OM registers**

#### **PEND101**

#### Explanation

The pending service order (PEND) subsystem generates report PEND101 at 0000 h and 1200 h. The subsystem generates PEND101 if one or more service orders are in prompting range.

#### Format

The log report format for PEND101 is as follows:

PEND101 mmmdd hh:mm:ss ssdd INFO PENDING ORDER AUDIT: nnnn

PENDING ORDERS ARE WITHIN PROMPTING RANGE

#### Example

An example of log report PEND101 follows:

PEND101 JUL20 12:00:01 1163 INFO PENDING ORDER AUDIT: 2 PENDING ORDERS ARE WITHIN PROMPTING RANGE

#### **Field descriptions**

The following table describes each field in the log report:

| Field   | Value    | Description  |
|---|----------|--|
| INFO PENDING<br>ORDER AUDIT                     | Constant | Indicates that an audit of pending orders occurs.          |
| nnnn  | 0—9999   | Indicates the number of pending orders in prompting range. |
| PENDING ORDERS<br>ARE WITHIN<br>PROMPTING RANGE | Constant | Indicates that service orders are in prompting range.      |

#### Action

Enter the PENDING CI increment and use the DISPLAY PROMPTING command to view pending orders in prompting range. Verify that the pending orders are are ready for the due date.

#### **Associated OM registers**

## Explanation

The power and environment system (PES) generates report PES100. The PES system generates PES100 when a change occurs from ok or closed to fail or open. The change occurs in one or more outside plant module power and environment system (OPMPES) components.

#### Format

The log report format for PES100 is as follows:

\*\*PES100 mmmdd hh:mm:ss ssdd INFO PES OPMPES nnn pmtxt infotxt

## Example

An example of log report PES100 follows:

| **PES100 APR01 | 12:00:00 2112 IN | IFO PES     |
|----------------|------------------|-------------|
| OPMPES 33      | REM1 03 0 RMM 3  | 3           |
| High Temp.     | Fail             | from OK     |
| Front door     | Open             | from Closed |

## **Field descriptions**

The following table explains each field in the log report:

| Field    | Value        | Description   |
|----------|--------------|---|
| INFO PES | Constant     | Information on the PES follows.   |
| OPMPES   | 0—198        | OPMPES key in table OPMINV  |
| pmtxt    | Alphanumeric | RLCM and associated trunk module type.<br>Refer to table OPMINV for values.   |
| pmtxt    | Alphanumeric | RLCM appears as: site (for example REM1),<br>frame (0-99), and unit (always 0); see pmid<br>description in table I. |
| pmtxt    | Alphanumeric | Trunk module type is RMM; TM number between ranges from 0-2047; see pmid description in table I.                    |
| infotxt  | Text         | OPMPESS component status. See additional information section below.   |

## PES100 (end)

### Action

See additional information section of this log report.

# **Associated OM registers**

There are no associated OM registers.

## **Additional information**

| Event        | State            | Explanation  |
|--------------|------------------|--|
| High Temp.   | Fail from OK     | Cabinet temperature too high; system attempts to correct temperature                     |
| Low Temp.    | Fail from OK     | Cabinet temperature too low; system attempts to correct temperature                      |
| Rectifier 0  | Fail from OK     | Repair rectifier or AC   |
| Rectifier 1  | Fail from OK     | Repair rectifier or AC   |
| Cur. Limit 0 | Fail from OK     | Overload on rectifier; investigate and correct problem before you replace the rectifier. |
| Cur. Limit 1 | Fail from OK     | Overload on rectifier; investigate and correct problem before you replace the rectifier. |
| Front Door   | Open from Closed | Cabinet opens  |
| Side Door    | Open from Closed | Cabinet opens  |
| Common AC    | Fail from OK     | AC power failure; investigate and correct problem.                                       |
| FSP State    | Fail from OK     | Frame supervisory panel fuse failed; replace fuse.                                       |

#### Explanation

The power and environment system (PES) generates report PES101. The PES system generates PES101 when the system does not perform a requested operation. The system does not perform a requested operation because the operation fails or the system receives a higher priority request.

### Format

The log report format for PES101 is as follows:

\*\*PES101 APR01 12:00:00 2112 INFO PES OPMPES 33 REM1 03 0 RMM 3 OPERATION Aborted: higher priority request ON BCCCDVR

## Example

An example of log report PES101 follows:

\*\*PES101 mmmdd hh:mm:ss ssdd INFO PES OPMPES nnn rlcmnm RMM nnnn OPERATION: opertxt

### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field     | Value                            | Description  |
|-----------|----------------------------------|--|
| INFO PES  | Constant                         | Indicates a PES log report   |
| OPMPES    | Symbolic text                    | OPMPES key; see table OPMINV.  |
| rlcmnm    | Symbolic text                    | Remote line concentrating module (RLCM) number; see table OPMINV.  |
| RMM       | Symbolic text                    | Remote maintenance module (RMM) number; see table OPMINV.  |
| OPERATION | Aborted: higher priority request | Higher order request preempts operation. If this happens often, contact next level of maintenance level. |
| OPERATION | BCCDVR card failure              | Battery charger controller driver (BCCDVR) card fails. Replace card.                                     |

# PES101 (continued)

(Sheet 2 of 2)

| Field     | Value   | Description   |
|-----------|---|---|
| OPERATION | Communication failure:<br>Invalid data received | Invalid data. Check and test the OPMPES circuit(s) again.   |
| OPERATION | Fail to get pathend                             | Indicates a software messaging error. Check RMM, LCM, LTC.  |
| OPERATION | Fail to get route to node                       | Software messaging error. Error occurs during high traffic. If error occurs often, contact next level of maintenance.   |
| OPERATION | Invalid message<br>received                     | Test RMM.   |
| OPERATION | Invalid Tid                                     | Indicates that the system receives invalid<br>terminal identification (TID). If possible, repeat<br>the action that causes the operation to fail. If the<br>error occurs again, contact next level of<br>maintenance. |
| OPERATION | Message wait failed.                            | Indicates timeout waiting on reply. Repeat the task.  |
| OPERATION | MTCBASE failed                                  | Software error. If this error occurs often, contact next level of maintenance.  |
| OPERATION | MTCBASE wait time out                           | Indicates timeout waiting for a task reply. If this happens often, contact next level of maintenance.   |
| OPERATION | No reply received from<br>OPM                   | State of OPMPES is not known. Check LTC, RMM, LCM links.  |
| OPERATION | PM is system busy                               | State of OPMPES is not known. Check LCM, RMM, LTC.  |
| OPERATION | PM not in service                               | OPMPES state not known; PM is offline. Make<br>sure LCM and RMM have correct software<br>load. If necessary, manual busy and return PM<br>to service.   |
| OPERATION | Task aborted from<br>MTCBASE                    | Software aborts request because of internal problems. If this happens often, contact next level of maintenance.   |
| ON        | BCCDVR  | Indicates BCCDVR card affected.   |
| ON        | PESALRM   | PES alarm detector card affected.   |

## Action

Refer to the description supplied with each field.

# **Associated OM registers**

#### Explanation

The power and environment system (PES) generates report PES102. The PES system generates PES102 when an outside plant module power and environmental system (OPMPES) audit finds a mismatch between the software and hardware. A return to service (RTS) updates the hardware to the condition in the software.

#### Format

The log report format for PES102 is as follows:

\*\*PES102 mmmdd hh:mm:ss ssdd INFO PES OPMPES nnn rlcmnm RMM nnnn AUDIT: evntnm cardnm State newnm from oldnm

## Example

An example of log report PES102 follows:

\*\*PES100 APR01 12:00:00 2112 INFO PES OPMPES 33 REM1 03 0 RMM 3 AUDIT Mismatch in reply data BCCDVR State Sysb from Ok

### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 3)

| Field    | Value                            | Description   |
|----------|----------------------------------|---|
| INFO PES | Constant                         | Indicates a PES log report.   |
| OPMPES   | Symbolic text                    | OPMPES key. See table OPMINV.   |
| rlcmnm   | Symbolic text                    | Identifies the remote line concentrating module (RLCM) number. See table OPMINV.                              |
| RMM      | Symbolic text                    | Identifies the remote maintenance module (RMM) number. See table OPMINV.                                      |
| AUDIT    | Aborted: higher priority request | Indicates that the system finds a higher order request and preempts operation. There are no required actions. |

# PES102 (continued)

| Field | Value   | Description  |
|-------|---|--|
| AUDIT | BCCDVR card failure                             | Battery charger controller driver (BCCDVR) card failed. Replace the card.  |
| AUDIT | Communication failure:<br>Invalid data received | Indicates invalid data received. Check and test OPMPES circuit(s) again.   |
| AUDIT | Fail to get pathend                             | Indicates software messaging error. Check RMM, LCM and LTC.  |
| AUDIT | Fail to get route to node                       | Indicates software messaging error. Check RMM, LCM and LTC.  |
| AUDIT | Invalid message received                        | Indicates that the system receives an invalid message. Test RMM.   |
| AUDIT | Invalid Tid                                     | Indicates invalid terminal identification (TID).<br>Repeat the action that causes failure. If the<br>error occurs again, contact next level of<br>maintenance. |
| AUDIT | Message wait fails.                             | Timeout waits on reply. Repeat.  |
| AUDIT | MTCBASE fails                                   | Software error. If this error happens often, contact next level of maintenance.  |
| AUDIT | MTCBASE wait time out                           | Timeout waiting for task reply. If this timeout happens often, contact next level of maintenance.  |
| AUDIT | No reply received from<br>OPM                   | State of OPMPES not known. Check LCM, RMM and LTC links.   |
| AUDIT | PM is manual busy                               | OPMPES state not known. Verify if you must<br>return OPM to service. If necessary, return<br>peripheral module (PM) to service to perform<br>desired actions.  |
| AUDIT | PM is system busy                               | State of OPMPES not known. Check LCM, RMM and LTC.   |
| AUDIT | PM not in service                               | OPMPES state not known; PM offline. Make<br>sure LCM and RMM have correct software<br>load. If necessary, manual busy and return PM<br>to service.             |
| AUDIT | Software aborts task from MTCBASE               | Software aborts request because of internal problems. There are no required actions.   |

(Sheet 2 of 3)

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### PES102 (end)

#### (Sheet 3 of 3)

| Field  | Value         | Description                                 |
|--------|---------------|---|
| cardnm | BCCDVR        | Indicates BCCDVR card affected.             |
| cardnm | PESALRM       | PES alarm (PESALRM) detector card affected. |
| State  | Symbolic text | Indicates new state of card.                |
| from   | Symbolic text | Indicates previous state of card.           |

## Action

See the action supplied with each field.

## **Associated OM registers**

#### Explanation

The power and environment system (PES) subsystem generates report PES103. The subsystem generates PES103 when the state of the outside plant module power and environment system (OPMPES) changes to RED. The system generates the PES100, PES101, or PES102 log report after report PES103.

### Format

The log report format for PES103 is as follows:

\*\*PES103 mmmdd hh:mm:ss ssdd INFO PES nnn Condition: infotxt

### Example

An example of log report PES103 follows:

\*\*PES103 APR01 12:00:00 2112 INFO PES 33 Condition: RED from GREEN

### **Field descriptions**

The following table describes each field in the log report:

| Field     | Value          | Description   |
|-----------|----------------|---|
| INFO PES  | Constant       | Information about an OPMPES follows. See table OMPINV for values. |
| Condition | RED from GREEN | A failure occurs.   |
|           | RED from AMBER | A failure occurs.   |

### Action

Refer to log report PES100, PES101, or PES102 for failure reasons. Follow the instructions in the log.

### **Associated OM registers**

#### Explanation

The power environment system (PES) generates report PES104 when an AC power failure occurs. During an AC power failure, the load bus test registers a voltage of 47V or less. The batteries provide power for approximately two h after the system generates this report, . The PES system generates a PES107 report when the system recovers.

#### Format

The log report format for PES104 is as follows:

\*\*PES104 mmmdd hh:mm:ss ssdd FAIL PES OPMPES nnn site nn n RMM nn LOAD BUS LOW VOLTAGE ALARM

### Example

An example of log report PES104 follows:

\*\*PES104 JAN14 10:24:16 7650 FAIL PES OPMPES 2 REM1 01 0 RMM 3 LOAD BUS LOW VOLTAGE ALARM

### **Field descriptions**

The following table describes each field in the log report:

| Field                         | Value    | Description  |
|-------------------------------|----------|--|
| FAIL PES                      | Constant | Indicates that information about a PES failure follows.  |
| OPMPES                        | Integers | Provides OPMPES key. See table OPMINV for values.  |
| site                          | Integers | Identifies the remote line concentrating module (RLCM) identification (site, frame and number). See tables SITE and LCMINV for values. |
| RMM                           | Integers | Identifies the remote maintenance module (RMM) number. See table OPMINV for values.  |
| LOAD BUS LOW<br>VOLTAGE ALARM | Constant | Indicates the battery voltage is low.  |

## Action

Prepare to lose system. Install emergency generators on the site immediately. The system recovers when the AC failure alarm condition is cleared.

## **Associated OM registers**

#### Explanation

The power and environment system (PES) subsystem generates report PES105 during the normal battery rotation mode. The subsystem generates PES105 when the charge bus test runs and fails. The system also generates PES105 if the operating company personnel requests a test of the charge bus from the MAP terminal.

#### Format

The log report format for PES105 is as follows:

\*PES105 mmmdd hh:mm:ss ssdd FAIL PES OPMPES nnn site nn n RMM nn CHARGE BUS LOW VOLTAGE ALARM: BCC n Site Flr RPOS Bay\_id Shf Description Slot EqPEC site 00 A01 OPE n 32 BCC n n 8X02AA

#### Example

An example of log report PES105 follows:

\*PES105 JAN15 08:10:10 3450 FAIL PES OPMPES 2 REM1 01 0 RMM 3 CHARGE BUS LOW VOLTAGE ALARM: BCC1 Site Flr RPOS Bay\_id Shf Description Slot EqPEC REM1 00 A01 OPE 2 32 BCC 1 4 8X02AA

#### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field    | Value    | Description   |
|----------|----------|---|
| FAIL PES | Constant | Provides information about PES failure  |
| OPMPES   | Integers | OPMPES key. See table OPMINV for values.  |
| site     | Integers | Indicates the Remote Line Concentrating<br>Module (RLCM) number. See tables SITE and<br>LCMINV. |
| RMM      | Integers | Indicates the remote maintenance module (RMM) number. See table OPMINV for values.              |

## PES105 (end)

| (Sheet | 2 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field                           | Value         | Description   |
|---------------------------------|---------------|---|
| CHARGE BUS LOW<br>VOLTAGE ALARM | Constant      | Indicates the charge bus test discovers a fault.  |
| BCC                             | 0,1           | Indicates that the battery charger controller is defective.                               |
| Site                            | Alphanumeric  | Location of OPMPES. See table SITE for values.  |
| Flr 00                          | Constant      | Indicates the floor   |
| RPOS A01                        | Constant      | Indicates the position  |
| Bay_id                          | OPE, Integers | Indicates the bay. See customer data table OPMINV for values.                             |
| Shf 32                          | Constant      | Provides the shelf number.  |
| Description                     | BCC, Integers | Identifies the battery charger controller (BCC) affected (0 or 1).                        |
| Slot                            | 2,4           | Provides the slot. If BCC0 is involved, $slot = 2$ .<br>If BCC1 is involved, $slot = 4$ . |
| EqPEC                           | Alphanumeric  | Product engineering code (PEC)  |

## Action

Replace the defective battery charger controller (BCC) immediately. Issue the TST CHARGEBUS, CI command to run the charge bus test again. If the charge bus test succeeds, the alarm clears.

## Associated OM registers

#### Explanation

The Power and Environment System (PES) subsystem generates report PES106. The subsystem generates PES106 when the system reports a charge bus alarm and the audit runs a successful charge bus test.

The PES subsystem also generates PES106 when the user requests a charge bus test from the MAP terminal.

#### Format

The log report format for PES106 is as follows:

PES106 mmmdd hh:mm:ss ssdd INFO PES OPMPES nnn site nn n RMM nn CHARGE BUS BCC n OK

### **Example**

An example of log report PES106 follows:

PES106 JAN15 08:10:10 3450 INFO PES OPMPES 2 REM1 01 0 RMM 3 CHARGE BUS BCC1 OK

### **Field descriptions**

The following table describes each field in the log report:

| Field               | Value   | Description  |
|---------------------|---|--|
| INFO PES            | Constant  | Indicates that information about the PES system follows.             |
| OPMPES nnn          | Refer to customer data Table<br>OPMINV for values.                | Provides OPMPES key. Refer to customer data Table OPMINV for values. |
| site nn n           | Refer to customer data Table<br>SITE and Table LCMINV for values. | Identifies the remote line concentrating module (RLCM) number.       |
| RMM nn              | Refer to customer data Table<br>OPMINV for values.                | Identifies the remote maintenance module (RMM) number.               |
| CHARGE BUS<br>BCC n | 0,1   | Indicates which battery charger controller is now OK.                |

## Action

There is no action required.

# **Associated OM registers**

#### Explanation

The Power and Environment System (PES) subsystem generates report PES 107. The subsystem generates PES107 when a change occurs in the state of one or more components of the outside plant module power and environment system (OPMPES). The subsystem generates PES107 if one or more OPMPES component changes state to OK from Fail or to Closed from Open .

#### Format

The log report format for PES107 is as follows:

PES107 mmmdd hh:mm:ss ssdd INFO PES OPMPES nnn pmtxt infotxt

#### Example

An example of log report PES107 follows:

PES107 SEP25 01:41:23 5413 INFO PES OPMPES 33 REMI 03 0 RMM 3 High Temp. Ok from Fail Front Door Closed from Open

### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field      | Value  | Description   |
|------------|--|---|
| PES        | Constant   | Indicates that information on the OPMPES subsystem follows.   |
| OPMPES nnn | 0-198  | Provides OPMPES key in customer data Table OPMINV.  |
| pmtxt      | Refer to customer data Table<br>OPMINV for values. | Identifies the RLCM and the associated trunk module type.   |
|            |  | The RLCM appears as the site,<br>like frame (0-99) and unit<br>(always 0). Refer to PMID<br>description in Table I. |

## PES107 (continued)

#### (Sheet 2 of 2)

| Field   | Value  | Description   |
|---------|--|---|
|         |  | Indicates the trunk module type<br>in RMM, and that the TM<br>number is between 0 and 2047.<br>Refer to PMID description in<br>Table I. |
| infotxt | Refer to Table EVENTS at the end of this log report. | Provides information on the status of one or more components of the OPMPES.   |

## Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

# **Additional information**

#### Events (Sheet 1 of 2)

| Events          | State            | Explanation  |
|-----------------|------------------|--|
| High Temp       | OK from Fail     | System corrects High temperature.                    |
| Low Temp        | OK from Fail     | System corrects Low temperature.                     |
| Rectifier 0     | OK from Fail     | System corrects Rectifier 0 failure.                 |
| Rectifier 1     | OK from Fail     | System corrects Rectifier 1 failure.                 |
| Current Limit 1 | OK from Fail     | System corrects overload on rectifier 1.             |
| Current Limit 0 | OK from Fail     | System corrects overload on rectifier 0.             |
| Front Door      | Closed from Open | Cabinet is shut.                                     |
| Side Door       | Closed from Open | Cabinet is shut.                                     |
| Common AC       | OK from Fail     | System corrects Common AC failure.                   |
| FSP State       | OK from Fail     | System corrects From supervisory panel fuse failure. |

## PES107 (end)

#### Events (Sheet 2 of 2)

| Events     | State           | Explanation   |
|------------|-----------------|---|
| BCC Fuse 0 | OK from Fail    | System corrects Battery Charge Controller 0 fuse failure.               |
| BCC Fuse 1 | OK from Fail    | Battery charger controller 1 fuse failure corrected.                    |
| ECU State  | OK from Fail    |   |
|            |                 | <i>Note:</i> Fan failure in environmental control unit (ECU) corrected. |
| BCC Unit 0 | OK From Warning | Battery charger controller 0 strings are on load bus.                   |
| BCC Unit 1 | OK from Warning | Battery charger controller 1 strings are on load bus.                   |

## Explanation

The Power and Environment System (PES) subsystem generates report PES108. The subsystem generates report PES108 when the state of the outside plant module power and environment system (OPMPES) changes.

#### Format

The log report format for PES108 is as follows:

PES108 mmmdd hh:mm:ss ssdd INFO PES nnn Condition: infotxt

#### Example

An example of log report PES108 follows:

PES108 SEP25 01:41:23 5413 INFO PES 33 Condition: GREEN from RED

## **Field descriptions**

The following table describes each field in the log report:

| Field                 | Value  | Description  |
|-----------------------|--|--|
| PES nnn               | Refer to customer data Table<br>OPMINV for values. | Indicates that information about an OPMPES follows.  |
| Condition:<br>infotxt | GREEN from RED                                     | Indicates the system clears a problem.   |
|                       | OFFL from AMBER                                    | Indicates manual action. This action is necessary when the BATTINFO field of Table OPMINV must change or OPMPES must be deleted. |

## Action

There is no action required.

## **Associated OM registers**

#### Explanation

The power and environment system (PES) subsystem generates report PES109. The subsystem generates PES109 when one or more components of the outside plant module power and environment system (OPMPES)changes state from OK to system busy (SysB).

#### Format

The log report format for PES109 is as follows:

\*\*PES109 mmmdd hh:mm:ss ssdd SYSB PES OPMPES nnn pmtxt infotxt

## Example

An example of log report PES109 follows:

| **PES109 SEP | 25 01: | 41:23   | 5413 \$ | SYSB PES |
|--------------|--------|---------|---------|----------|
| OPMPES 3     | 3 REMI | 03 (    | ) RM    | /M 3     |
| BCCDVR S     | tate   | PMB     | from    | OK       |
| PESALRM S    | tate   | PMB     | from    | Ok       |
| BCC Unit     | 0      | Warning | from    | Ok       |
| BCC Unit     | 1      | Warning | from    | Ok       |

## Field descriptions

The following table describes each field in the log report:

| (Sheet | 1 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field    | Value        | Description   |
|----------|--------------|---|
| SYSB PES | Constant     | Indicates that information about a SysB state on the PES follows  |
| OPMPES   | 0-198        | Provides OPMPES key in customer data table<br>OPMINV  |
| pmtxt    | Alphanumeric | Identifies the remote line concentrating module (RLCM) and the trunk module type. Refer to customer data table OPMINV for values. |
| pmtxt    | Alphanumeric | The RLCM appear as: the site, for example, REM1, frame (0-99), and unit (always 0).   |

Log reports 1-413

## PES109 (end)

#### (Sheet 2 of 2)

| Field   | Value         | Description  |
|---------|---------------|--|
| pmtxt   | Alphanumeric  | Indicates that the trunk module (TM) type is remote maintenance module (RMM), and the TM number is between 0 and 2047.                 |
| infotxt | Symbolic text | Provides information on the status of one or<br>more components of the OPMPES. Refer to<br>Events table at the end of this log report. |

## Action

Refer to the Events table at the end of this log report.

### **Associated OM registers**

There are no associated OM registers.

## Additional information

| Event      | State              | Explanation                  |
|------------|--------------------|------------------------------|
| PESALRM    | State SysB from OK | There is no action required. |
| BCCDVR     | State SysB from OK | There is no action required. |
| BCCDVR     | State PMB from OK  | Check the RMM state.         |
| PESALRM    | State PMB from OK  | Check the RMM state.         |
| BCC Unit 0 | Warning from OK    | Not all on load bus.         |
| BCC Unit 1 | Warning from OK    | Not all on load bus.         |

*Note:* The automatic battery rotation/charging feature usually has one battery string on the charge bus. This alarm is important if more than one battery string is not on the load bus.

#### Explanation

The Power and Environment System (PES) subsystem generates report PES110. The subsystem generates PES110 when one or more components of the outside plant module power and environment system (OPMPES) changes to the manual busy (ManBusy) state.

#### Format

The log format for report PES110 is as follows:

\*\*PES110 mmmdd hh:mm:ss ssdd MANB PES OPMPES nnn pmtxt infotxt

## Example

An example of log report PES110 follows:

| **PES110 SI | EP25 01 | L:41:23 542 | 13 MANB PES |
|-------------|---------|-------------|-------------|
| OPMPES 3    | 33 REMI | 03 0 RMM    | 43          |
| BCCDVR      | State   | MANB        | from Ok     |
| PESALRM     | State   | MANB        | from Ok     |
| BCC Un:     | it O    | Warning     | from Ok     |
| BCC Un:     | it 1    | Warning     | from Ok     |

## Field descriptions

The following table describes each field in the log report:

(Sheet 1 of 2)

| Field      | Value  | Description  |
|------------|--|--|
| PES        | Constant   | Indicates that information on the power and environment system follows.  |
| OPMPES nnn | 0-198  | Provides OPMPES key in customer Data Table<br>OPMINV.  |
| pmtxt      | Refer to customer data Table<br>OPMINV for values. | Identifies the RLCM and the associated trunk module type.  |
|            |  | The RLCM appears as the site, for example, as REM1, frame (0-99), and unit (always 0). Refer to PMID description in Table I. |

Log reports 1-415

## PES110 (end)

#### (Sheet 2 of 2)

| Field   | Value  | Description  |
|---------|--|--|
|         |  | Indicates the trunk module type is RMM, and the TM number is between 0 and 2047. Refer to pmid description in Table I. |
| infotxt | Refer to Events table at the end of this log report. | Provides information on the status of one or more components of the OPMPES.  |

## Action

There is no action required.

# Associated OM registers

There are no associated OM registers.

## **Additional information**

#### **Events**

| Events     | State                |
|------------|----------------------|
| BCCDVR     | State ManB from OK   |
| PESALRM    | State ManB from OK   |
| BCCDVR     | State ManB from Offl |
| PESALRM    | State ManB from Offl |
| BCCDVR     | State ManB from PMB  |
| PESALRM    | State ManB from PMB  |
| BCC Unit 0 | Warning from OK      |
| BCC Unit 1 | Warning from OK      |
|            |                      |

*Note:* The appearance of the BCC units in the PES110 log indicates that the BCC driver goes MANb.

### Explanation

The Power and Environment System (PES) subsystem generates report PES111. The subsystem generates PES111 when one or more components of the outside plant module power and environment system (OPMPES) changes state from OK to offline.

#### Format

The log report format for PES111 is as follows:

\*\*PES111 mmmdd hh:mm:ss ssdd OFFL PES OPMPES nnn pmtxt infotxt

## Example

An example of log report PES111 follows:

| **PES111 S | EP25 01: | 41:23 5413 | 3 OFFL PES |
|------------|----------|------------|------------|
| OPMPES     | 33 REM1  | 03 0 RMM   | 3          |
| BCCDVR     | State    | Offl       | from Ok    |
| PESALRM    | State    | Offl       | from Ok    |

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field      | Value  | Description   |
|------------|--|---|
| OFFL PES   | Constant   | Indicates that information on the power and environment system follows.   |
| OPMPES nnn | 0-198  | Provides OPMPES key in customer data Table OPMINV.  |
| pmtxt      | Refer to customer data<br>Table OPMINV for values. | Identifies the RLCM and the associated trunk module type.   |
|            |  | The RLCM appears as: the site, for example REM1, frame (0-99), and unit (always 0). Refer to PMID description in Table I.   |
|            |  | Indicates the trunk module (TM) type is RMM, and the TM number is between 0 and 2047. Refer to PMID description in Table I. |

Log reports 1-417

# PES111 (end)

(Sheet 2 of 2)

| Field   | Value                         | Description  |
|---------|-------------------------------|--|
| infotxt | BCCDVR State Offl from<br>OK  | Indicates that the battery charger controller (BCC) driver card is offline or manbusy state. |
|         | PESALRM State Offl from<br>OK | Indicates that the PES alarm is in the offline or manbusy state.                             |

## Action

There is no action required.

## **Associated OM registers**

#### Explanation

The Power and Environment System (PES) subsystem generates report PES112. The subsystem generates PES112 when one or more components of the outside plant module power and environment system (OPMPES) changes state to the OK state.

#### Format

The log report format for PES112 is as follows:

PES112 mmmdd hh:mm:ss ssdd RTS PES OPMPES nnn pmtxt infotxt

## Example

An example of log report PES112 follows:

| PES112 S | EP25  | 01:41 | :23 54 | 413 F | RTS PES | 5       |
|----------|-------|-------|--------|-------|---------|---------|
| OPMPE:   | S 33  | REM1  | 03 0   | RMM   | 3       |         |
| BCCDVI   | R St  | ate   | Ok     |       | from    | MANB    |
| PESAL    | RM St | ate   | Ok     |       | from    | MANB    |
| BCC 1    | Unit  | 0     | Ok     |       | from    | Warning |
| BCC 1    | Unit  | 1     | Ok     |       | from    | Warning |

## Field descriptions

The following table describes each field in the log report:

| (Sheet | 1 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field      | Value         | Description   |
|------------|---------------|---|
| PES        | Constant      | Indicates that information about an OPMPES follows.   |
| OPMPES nnn | 0-198         | Provides OPMPES key in customer data Table OPMINV.  |
| pmtxt      | Symbolic text | Identifies the RLCM and the associated trunk module (TM) type. Refer to Customer Data Table OPMINV for values.                      |
|            |               | Indicates the RLCM appears as the site, for example, REM1, frame (0-99), and unit (always 0). Refer to PMID description in Table I. |

# PES112 (end)

#### (Sheet 2 of 2)

| Field   | Value         | Description  |
|---------|---------------|--|
|         |               | The TM type is RMM, and the TM number is between 0 and 2047. Refer to PMID description in Table I.                               |
| infotxt | Symbolic text | Provides information on the status of one or more components of the OPMPES. Refer to Table Events at the end of this log report. |

## Action

There is no action required.

# Associated OM registers

There are no associated OM registers.

## **Additional information**

#### **Events**

| Events     | State              |
|------------|--------------------|
| BCCDVR     | State OK from SysB |
| PESALRM    | State OK from SysB |
| BCCDVR     | State OK from ManB |
| PESALRM    | State OK from ManB |
| BCCDVR     | State OK from PMB  |
| PESALRM    | State OK from PMB  |
| BCC Unit 0 | OK from Warning    |
| BCC Unit 1 | OK from Warning    |

# Explanation

The following is the log report format for PES113:

## Format

The log report format for PES113 is as follows:

\*PES113 mmmdd hh:mm:ss ssdd INFO PES OPMPES nnn pmtxt infotxt

## Example

An example of log report PES113 follows:

| *PES113 SEP25 01:4 | 41:23 541 | 3 INFO PES |
|--------------------|-----------|------------|
| OPMPES 33 REM1     | 03 0 RM   | М 3        |
| BCC fuse 0         | Fail      | from Ok    |
| ECU State          | Fail      | from Ok    |

## **Field descriptions**

The following table describes each field in the log report:

| Field    | Value         | Description  |
|----------|---------------|--|
| INFO PES | Constant      | Contains information on the power and environment system   |
| OPMPES   | 0-198         | OPMPES key in data table OPMINV  |
| pmtxt    | Alphanumeric  | Identifies the remote line concentrating module (RLCM) and associated trunk module (TM). See data table OPMINV for values. |
| pmtxt    | Alphanumeric  | RLCM appears at site, for example REM1, frame (0-99) and unit (always 0).  |
| pmtxt    | Alphanumeric  | Indicates the trunk module type is remote maintenance module (RMM); TM number is between 0 and 2047.                       |
| infotxt  | Symbolic text | Gives the status of one or more OPMPES components. Refer to table of events below.   |

## Action

Refer to the table of events below.

## **Associated OM registers**

There are no associated OM registers.

# Table of events

| Events     | State           | Action  |
|------------|-----------------|---|
| BCC Fuse 0 | Fail from OK    | Battery charger controller 0 fuse fails. Replace fuse.                      |
| BCC Fuse 1 | Fail from OK    | Battery charger controller 1 fuse fails. Replace fuse.                      |
| ECU State  | Fail from OK    | Environmental control unit fan fails; investigate and correct.              |
| BCC Unit 0 | Warning from OK | Battery charger controller unit 0 strings does not connect to load bus.     |
| BCC Unit 1 | Warning from OK | Battery charger controller unit 1 strings does not connect to the load bus. |
|            |                 |   |

*Note:* Automatic battery rotation/charging normally keeps one battery string on the charge bus. Action is required if more than one battery string is not on the load bus. Enter the OPMPES level of the MAP display and place the strings on the load bus.

## PES114

### Explanation

The power and environment system (PES) subsystem generates report PES114. The subsystem generates PES114 when the state of the outside plant module power and environment system (OPMPES) changes to AMBER. When the system generates PES114, it also generates a PES101, PES102, or PES113 log report.

## Format

The log report format for PES114 is as follows:

\*PES114 mmmdd hh:mm:ss ssdd INFO PES nnn Condition :infotxt

## Example

An example of log report PES114 follows:

\*PES114 SEP25 01:41:23 5413 INFO PES 33 Condition:AMBER from GREEN

## Field descriptions

The following table describes each field in the log report:

| Field     | Value            | Description   |
|-----------|------------------|---|
| INFO PES  | Integers         | Indicates that information on OPMPES follows.   |
| Condition | AMBER from GREEN | Indicates a potentially serious problem. The system generates this connection after a command to BSY a battery charger controller driver card (BCCDVR) or PESALRM succeeds. |
| Condition | AMBER from OFFL  | This condition occurs when the user first enters data in OPMPES and OPMPES is manually busy. There is no action required.   |

## Action

Refer to the PES101, PES102, or PES113 log reports. Take action as directed.

## **Associated OM registers**

There are no associated registers.

### **Explanation**

Log report PES116 shows the measured voltage of the SRU battery string. This report also provides an error message there is no measurement. Only the voltage for STR 0 or STR 1 can be measured. Ignore the results that appear for other strings.

## Format

The log report format for PES116 is as follows:

PES116 mmmdd hh:mm:ss ssdd INFO PES OPMPES nnn site nn n RMM n SYSTEM VOLTAGE MEASUREMENT LOAD BUS = -vv.vVBCC 0 = -vv.vV BCC 1 = -vv.vVSTRG 0 = -vv.vV STRG 4 = -vv.vVSTRG 1 = -vv.vV STRG 5 = -vv.vVSTRG 2 = -vv.vV STRG 6 = -vv.vVSTRG 3 = -vv.vV STRG 7 = -vv.vV

## Example

An example of log report PES116 with an error message follows:

PES116 SEP05 18:14:33 4827 INFO PES OPMPES 12 F007 0 0 RMM 11 SYSTEM VOLTAGE MEASUREMENT No MTE available

An example of log report PES116 with a measured voltage follows:

```
PES116 SEP05 18:14:33 4827 INFO PES

OPMPES 40 REM1 40 0 RMM 40

SYSTEM VOLTAGE MEASUREMENT

LOAD BUS = -52.5V

BCC 0 = -58.1V BCC 1 = .0V

STRG 0 = -52.5V STRG 4 = .0V

STRG 1 = -52.5V STRG 5 = .0V

STRG 2 = -.0V STRG 6 = .0V

STRG 3 = -.0V STRG 7 = .0V
```

# PES116 (continued)

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field  | Value  | Description   |
|--|--|---|
| The first line is defined as for other PES logs such as PES113 |  |   |
| OPMPES nnn   | 0-198  | OPMPES key in Table OPMINV  |
| site nn n  | integers   | Provides RLCM identification. Refer to Table SITE and LCMINV for values.  |
| RMM n  | integers   | RMM number. Refer to Table OPMINV for values.   |
| Load Bus = -vv.vV  | voltage  | Load bus measured voltage.  |
| STRG n = -vv.vV  | voltage  | Measured voltage of battery string n  |
| Error_Condition  | No MTE available   | An LTU or MTU was not available.  |
|  | MTE reset fail   | An error occurs while MTE is being opened to take the measurements.   |
|  | MTE measurement<br>fail                                  | After connection of MTE, an error occurs during the measurement of voltage.   |
|  | MTE tests need<br>OPM line 0<br>equipped                 | Line 0 of the OPM must be equipped in<br>Table LNINV with 6X17 card to locate test<br>equipment.  |
|  | Aborted: higher priority request                         | A higher order request preempts operation.<br>Examples of higher priority requests are:<br>AC or rectifier failure, disable the audit, RTS<br>BCCDVR from PMB, and MANB BCCDVR. |
|  | BCCDVR card failure                                      | Battery Charger Controller Driver Card (BCCDVR) card fails.   |
|  | Fail to get pathend                                      | Software messaging error.   |
|  | Invalid string state.<br>String must be<br>open circuit. | A manual action causes this condition.<br>Battery string must be in a different state.  |
|  | Fail to get route to node                                | Software messaging error.   |

# PES116 (continued)

| Field | Value  | Description   |
|-------|--|---|
|       | Invalid message received   | A message from the RMM has a message type not for use with OPMPES data.         |
|       | Invalid TID  | Invalid Terminal Identification (TID) was received.                             |
|       | Message wait<br>failed   | Time-out occurs to wait for reply from mtc.                                     |
|       | MTCBASE failed   | Software error.   |
|       | MTCBASE wait<br>time-out   | Time-out occurs to wait for a task reply.                                       |
|       | No reply received<br>from RMM for<br>OPMPES                      | The RMM did not reply to request for OPMPES data.                               |
|       | PM is manual busy  | The state of OPMPES is not available because the RMM is MANB.                   |
|       | PM is system busy  | The state of OPMPES is not known because the RMM is SYSB.                       |
|       | PM not in service  | The state of OPMPES is not known because the RMM is down (probably CBSY).       |
|       | PM is offline  | The state of the OPMPES is not known because the RMM is offline.                |
|       | Task aborted from<br>MTCBASE                                     | Software aborts a request because of internal problems.                         |
|       | Overall condition<br>too unsafe to<br>permit requested<br>action | An AC or rectifier fails.   |
|       | BCCDVR must be<br>on line  | BCCDVR not InSv during attempt to open circuit battery pair before measurement. |
|       | No battery pair on LDB   | To test the Load Bus (LDB), at least one battery pair must connect to the LDB.  |
|       | MTE connection fail  | Error connection of LTU/MTU, to take the measurements.                          |

## PES116 (continued)

## Action

The following table describes the correct action to take for each error condition.

#### Actions (Sheet 1 of 2)

| Error Condition                                    | Action   |
|--|--|
| No MTE available                                   | Repeat request. If error persists, check entry in OPMINV, RMMINV, MTAHORIZ, TRKMEM, TRKGRP, and MTAMDRVE.            |
| MTE reset fail                                     | Repeat request. If error persists, check RMM. If MTU is in use, check the load.                                      |
| MTE measurement fail                               | Repeat request. If error persists, check RMM. If MTE is an MTU, check the load in the MTU.                           |
| MTE tests need OPM line 0 equipped                 | Enter line 0 in Table LNINV and repeat request.  |
| Aborted: higher priority request                   | Repeat the task when conditions allow.   |
| BCCDVR card failure                                | Replace card.  |
| Fail to get pathend                                | Check RMM, RLCM, LTC.  |
| Invalid string state. String must be open circuit. | Put the battery string into a different state. Enter the original command again.                                     |
| Fail to get route to node                          | Check RMM, RLCM, LTC.  |
| Invalid message received                           | Test RMM.  |
| Invalid TID  | If possible, repeat the original cause of the failure. If the error occurs again, contact the next level of support. |
| Message wait failed                                | Repeat the task. If this error condition occurs often, the time-out value for the task can be low. Contact TAS.      |
| MTCBASE failed                                     | If this error condition occurs often, contact the next level of support.   |
| MTCBASE wait time-out                              | If this error condition occurs often, contact the next level of support.   |
| No reply received from RMM for OPMPES              | Check RLCM, RMM, LTC links. If you cannot find<br>a problem and the RMM is InSv, then warmswact<br>LTC/LGC.          |

# PES116 (end)

#### Actions (Sheet 2 of 2)

| Error Condition   | Action   |
|---|--|
| PM is manual busy                                       | RTS RMM to restore control and monitoring of OPMPES.   |
| PM is system busy                                       | Check RLCM, RMM, LTC, and all important links.<br>Return RMM to service and restore OPMPES<br>monitoring and control.                                |
| PM not in service                                       | Check RLCM, RMM, LTC, and all important links.<br>Return RMM to service and restore OPMPES<br>monitoring and control.                                |
| PM is offline   | Make sure RLCM and RMM have correct<br>software load. If necessary, manbsy and return<br>RMM to service to restore OPMPES monitoring<br>and control. |
| Task aborted from MTCBASE                               | There is no action required.   |
| Overall condition too unsafe to permit requested action | There is no action required.   |
| BCCDVR must be on line                                  | Check BCCDVR, RMM, RLCM, LTC, and all links. Restore BCCDVR to service to take measurements.   |
| No battery pair on LDB                                  | Return a pair to the LDB and repeat the request.   |
| MTE connection fail                                     | Repeat request. If error persists, check RMM.  |

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

There is no additional information.

### **PES117**

### Explanation

The log report PES117 indicates the SRU battery string that has low voltage. This report indicates the battery pair failed for the discharge, open circuit, or post charge test. A failed battery pair returns to the Load Bus.

### Format

The log report format for PES117 is as follows:

PES117 mmmdd hh:mm:ss ssdd INFO PES OMPES nnn site nn n RMM nn BATT PAIR n Fail from OK Low battery string voltage STR n xxxxxxxxx = -vv.vV STR m xxxxxxxxx = -vv.vV

## Example

An example of log report PES117 follows. The example does not match the format. For the SRU, a measured voltage applies only to STR 0 or STR 1. Ignore results that appear for any other string.

PES117 SEP05 18:14:33 4827 INFO PES OPMPES 24 C015 0 0 RMM 24 BATT PAIR 1 Fail From OK Low battery string voltage STR 1 DISCHARGE TEST VOLTAGE = -48.7V STR -32092 VOLTAGE=

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field   | Value | Description             |
|---|-------|-------------------------|
| The first two lines are defined as<br>for the other PES logs such as<br>PES113. |       |                         |
| BATT PAIR n Fail from OK  | 0-3   | Indicates pair n fails. |

# PES117 (end)

#### (Sheet 2 of 2)

| Field | Value     | Description   |
|-------|-----------|---|
| STR n | 0-1       | Indicates the string of the measured voltage that appears.  |
| xx    | test name | OPEN-CIRCUIT test or DISCHARGE test or<br>POST CHARGE test. |

# Action

Replace battery string, check voltage, and recharge if necessary.

## **Associated OM registers**

There are no associated registers.

## **Additional information**

There is no additional information.

### **PES200**

### Explanation

The log report PES200 indicates an event has occurred on one or more alarms for the remote line drawer (RLD) Power and Environmental System (PES). This report also indicates a battery test failure.

### Format

The format for log report PES200 follows:

<severity>PES200 mmmdd hh:mm:ss ssdd INFO PES RLDSITE <HUB Name> <RLD site name> RLD <RLD number> <alarm name> <alarm state> <from <old\_state></a>

## Example

An example of log report PES200 follows:

CMP2A \*\*\*PES200 FEB04 01:41:23 1604 INFO PES RLDPES STAR REM1 02 0 02 SITE1 RLD5 DC fail Ok from Fail PWRTYP Ok from Fail AC fail Ok from Fail DOOR Closed from Open

## **Field descriptions**

The following table explains each of the fields in the log report.

#### (Sheet 1 of 2)

| Field  | Value                       | Description                                    |
|--|-----------------------------|--|
| The first two lines are defined as for other PES logs, such as PES113. |                             |  |
| HUB name   | Site name, frame,<br>or bay | The Star Hub where the RLD belongs.            |
| RLD site name  | Any site name               | The name of the site where the RLD is located. |
| RLD number   | 0-999                       | The RLD number in the Star Hub.                |

## PES200 (end)

#### (Sheet 2 of 2)

| Field                | Value                    | Description   |
|----------------------|--------------------------|---|
| Alarm name           | Cabinet alarm<br>name    | The name of the specific alarm that was raised in the cabinet.  |
| New state, old state | OK, fail, open,<br>close | The new state and old state of the alarm.<br>Most alarms state is OK or fail. In the case<br>of the door alarm, the states are open and<br>close. |

# Action

This log is for information. In most cases the cabinet environmental system is operated to balance the conditions.

## **Associated OM registers**

There are no associated registers.

## **Additional information**

There is no additional information.

### **PES201**

### Explanation

The log report PES201 indicates the audit of the remote line drawer (RLD) Power and Environmental System (PES) has found a mismatch between the software state and the hardware state.

### Format

The format for log report PES201 follows:

<severity>PES201 mmmdd hh:mm:ss ssdd INFO PES RLDSITE <HUB Name> <RLD site name> RLD <RLD number> AUDIT: Mismatch in reply data <alarm name> <new\_state> from <old\_state>

## Example

An example of log report PES201 follows:

CPM2A \*\*\* PES201 FEB04 09:12:37 1604 INFO PES RLDPES STAR REM1 02 0 02 SITE1 RLD 5 AUDIT: Mismatch in reply data DC fail Ok from Fail PWRTYP Ok from Fail AC fail Ok from Fail DOOR Closed from Open

## **Field descriptions**

The following table explains each of the fields in the log report.

#### (Sheet 1 of 2)

| Field  | Value                    | Description                                    |
|--|--------------------------|--|
| The first two lines are defined as for other PES logs, such as PES113. |                          |  |
| HUB name   | Site name, frame,<br>bay | The Star Hub where the RLD belongs.            |
| RLD site name  | Any site name            | The name of the site where the RLD is located. |

# PES201 (end)

#### (Sheet 2 of 2)

| Field                | Value                    | Description   |
|----------------------|--------------------------|---|
| RLD number           | 0-999                    | The RLD number in the Star Hub.   |
| Alarm name           | Cabinet alarm<br>name    | The name of the specific alarm that was raised in the cabinet.  |
| New state, old state | OK, fail, open,<br>close | The new state and old state of the alarm.<br>Most alarms state is OK or fail. In the case<br>of the door alarm, the states are open and<br>close. |

# Action

This log is for information. In most cases the cabinet environmental system is operated to balance the conditions.

# **Associated OM registers**

There are no associated registers.

## **Additional information**

There is no additional information.

### **PES202**

### Explanation

The log report PES202 indicates the overall condition of the remote line drawer (RLD) Power and Environmental System (PES) has changed.

#### Format

The format for log report PES202 follows:

<severity>FP503 mmmdd hh:mm:ss ssdd INFO PES RLDPES <HUB Name> <RLD site name> RLD <RLD number> Condition <new condition> from <old condition>

## Example

An example of log report PES202 follows:

CPM2A PES202 FEB04 09:12:37 1705 INFO PES RLDPES STAR REM1 02 0 02 SITE1 RLD 5 Condition: GREEN from RED

## **Field descriptions**

The following table explains each of the fields in the log report.

| Field  | Value                    | Description  |
|--|--------------------------|--|
| The first two lines are defined as for other PES logs, such as PES113. |                          |  |
| HUB name   | Site name, frame,<br>bay | The Star Hub where the RLD belongs.  |
| RLD site name  | Any site name            | The name of the site where the RLD is located.                                     |
| RLD number   | 0-999                    | The RLD number in the Star Hub.  |
| New condition, old condition   | RED, GREEN               | The new and old condition of the whole RLD cabinet Power and Environmental System. |

## Action

This log is for information. In most cases the RLD cabinet Power and Environmental System is operated to balance the conditions.

# **Associated OM registers**

There are no associated registers.

## **Additional information**

There is no additional information.

### PM100

### **Explanation**

The Peripheral Module (PM) subsystem generates log report PM100 when a peripheral module fails a diagnostic (DIAG) test. The subsystem generates this report when an out-of-service test fails on an Operator Services Node Maintained (OSNM).

### Format

The log report format for PM100 is as follows:

PM100 mmmdd hh:mm:ss ssdd FAIL DIAG pmid REASON: reastxt CKSM: n, TONE: hhhhhhhh, TEST: 00hh

## Example

An example of log report PM100 follows:

PM100 APR01 12:00:00 2112 FAIL DIAG TM8 1
 REASON: TONE TEST FAILED
 CKSM: 0, TONE: 00000400, TEST: 0010

### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field     | Value         | Description   |
|-----------|---------------|---|
| FAIL DIAG | Symbolic text | Indicates diagnostic test fails.  |
| pmid      | Symbolic text | Identifies the affected PM.   |
| REASON    | Symbolic text | Identifies reason the system generates the log report.  |
| CKSM      | 0 or 1        | Indicates checksum value and result. 0<br>indicates correct checksum test complete. 1<br>means checksum is not correct. The<br>checksum test identifies table differences<br>between the central controller and a PM. |

| ( | Sh       | eet | 2 | of | 2) |  |
|---|----------|-----|---|----|----|--|
|   | <b>U</b> |     | _ | •  | ~, |  |

| Field | Value     | Description  |
|-------|-----------|--|
| TONE  | 0000-FFFF | Provides 8 hex digits that correspond to 32 bits<br>which represent tones on the read only<br>memory (ROM). Value is 00000000 if tone test<br>passes.  |
| TEST  | 0000-00FF | Provides 2 hex digits that correspond to 8 bits<br>which represent the test. Bits are 0,1,2,3 for<br>network interface test. Each bit corresponds to<br>a link (only bit 0 applies to a trunk module<br>(TM)). Bits are 4,5,6 for ROM tone test. Each<br>bit corresponds to a ROM chip on the tone card<br>(only bit 5 applies to a TM). Bit number 7 is a<br>coder-decoder test that applies to the TM. |

### Action

Repeat diagnostic test. A circuit pack list appears on the terminal if a failure occurs.

If the test passes, but the PM does not return to service (RTS), contact the next level of support immediately.

If the test fails, change the first circuit pack on the list and run the test again. If the test fails again, change the second circuit pack on the list and run the test again. Continue until the test passes or there are no more circuit packs on the list. For additional information, refer to *Log Report Reference Manual*.

If the test passes, but the PM does not RTS, contact the next level maintenance.

Contact the next level of maintenance if all of the following events occur:

- there are no more circuit packs on the list
- the test does not pass
- the PM does not RTS

#### **Operator Services Node Maintained actions**

Repeat diagnostic test. If the test passes, but the PM does not RTS, contact the next level of maintenance.

If the PM generates the log with "IP ping failed" then:

• The DMS switch cannot communicate with the service node. Make sure that all DMS EIUs are in-service. Make sure the DMS LAN-BAY is

### **PM100** (end)

operational. Make sure that all cabling is in good condition. If these components are in-service, check for service node faults.

If the PM generates the log "Fail message received," then:

- The DMS switch can communicate with the service node. The problem is local to the service node. Refer to service node documentation for additional diagnostics to help correct the problem.
  - DIAG Fails
    - The DMS cannot process the TST or RTS command. Check for traps/Swerrs. Contact the next level of maintenance.
  - Node does not respond
    - The DMS can send the message, but times-out before the DMS receives a response. Execute the test. Use the TST Ping to check for connectivity. If the Ping passes, refer to service node documentation to run additional diagnostics.

### **Associated OM registers**

#### **Operator Services Node Maintained OM information**

The PM can generate a log when an out-of-service test failure occurs. Register TSTFAIL increases each time a test failure occurs on that node. The OM group EXNDINV contains register TSTFAIL.

## Explanation

The Peripheral Module (PM) subsystem generates log report PM101. The system generates this report when a peripheral module fails a checksum test (CHKSUM-TST). The PM fails a CHKSUM-TST because a checksum is not correct or not available. The checksum test identifies table differences between the central controller (CC) and PMs.

## Format

The log report format for PM101 is as follows:

PM101 mmmdd hh:mm:ss ssdd FAIL CHKSUM–TST pmid VALUE: nnnn, REASON: reastxt

# Example

An example of log report PM101 follows:

PM101 APR01 12:00:00 2112 FAIL CHKSUM-TST DCM 0
VALUE: 6, REASON: FAILED TO GET CHKSUM

## Field descriptions

The following table describes each field in the log report:

| Field           | Value         | Description                                     |
|-----------------|---------------|---|
| FAIL CHKSUM-TST | Symbolic text | Indicates checksum test fails.                  |
| pmid            | Symbolic text | Identifies the affected PM.                     |
| VALUE           | 0 to 9999     | Provides checksum value.                        |
| REASON          | Symbolic text | Identifies reason the system generates the log. |

# Action

Repeat checksum test. A circuit pack list appears on the MAP terminal if a failure occurs.

If the test fails, change the first circuit pack on list. Run the test again. If the test fails again, change second circuit pack on list and run the test again. Continue until test passes or until there are no more circuit packs on the list.

## **PM101** (end)

Contact the next level of maintenance if all of the following events occur:

- there are no more circuit packs on the list
- the test does not pass
- the PM does not return to service (RTS)

If the test passes, but the PM does not return to service, contact the next level of maintenance.

## **Associated OM registers**

There are no associated OM registers.

### Explanation

The peripheral module (PM) subsystem generates log report PM102 when the state of a PM changes to system busy (SysB). The following are example situations that generate this log:

- An Operator Services Node Maintained (OSNM) changes state when a node audit detects a fault.
- An Ethernet TPC connection is lost. The log indicates the date and time of the transmission failure and the name and id number of the node on the lost connection. Audits will attempt to re-establish the connection.

## Format

The maintenance arbitrator (MtcArb) state is associated with the PM log. The MtcArb state can be functional or disabled The MtcArb state is associated with the PM log when MtcArb is present on the XPM load. The log format is Format 2 when a load that contains MtcArb is present on both XPM units. The log format is Format 3 when a load that contains MtcArb is present in the units.

The fields and entries associated with maintenance arbitrator are optional (apply only to XPMs). When a load containing MtcArb is present in both XPM units, the MtcArb state is indicated for each unit as either functional or disabled. In XPM81, when a load containing MtcArb is present in only one of the units, the MtcArb state is indicated for that unit only. The state of the of the second unit is not indicated. Beginning in TL09, MtcArb is always functional and the MtcArb state is not indicated in the logs.

The log report formats for PM102 are as follows:

### Format 1

alm PM102 mmmdd hh:mm:ss ssdd SYSB pmid Node : SysB <sq> From <previous PM state> <optional text> Unit0 : <unit state> <sq> <reason text> <previous unit state> Unit1 : <unit state> <sq> <reason text> <previous unit state> Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

### Format 2

alm PM102 mmmdd hh:mm:ss ssdd SYSB pmid SysB <sq> From <previous PM state> <sq> REASON: Processing data update request Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

#### Format 3

alm PM102 mmmdd hh:mm:ss ssdd SYSB pmid FROM: <previous PM state> <comment text> REASON: <reason text> Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

#### Format 4

alm PM102 mmmdd hh:mm:ss ssdd SYSB pmid FROM: <previous PM state><comment text> REASON: <reason text> Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

#### Format 5

alm PM102 mmmdd hh:mm:ss ssdd SYSB pmid Node : SysB <reason text> From <previous PM state> <log reason> Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

#### Format 6

alm PM102 mmmdd hh:mm:ss ssdd SYSB pmid SysB <sq> From <previous PM state> Unit0: MTCARB is <state>, Unit1: MTCARB is <state> <optional text>

#### Format 7

alm PM102 mmmdd hh:mm:ss ssdd SYSB pmid SysB <sq> From <previous PM state> Unit<unit\_no>: MTCARB is <state> <optional text>

#### Format 8

alm PM102 mmmdd hh:mm:ss ssdd SYSB pmtype pmid <text>

### Example

Examples of log report PM102 follow:

#### **Example 1**

\*\*\*PM102 MAY31 08:22:32 2112 SYSB LGC HOST 02 0
Node : SysB from CBsy
Unit0 : SysB (CSLink RTS)
Unit1 : SysB (CSLink RTS) From CBsy
Unit0: MTCARB is functional, Unit1: MTCARB is disabled

#### Example 2

PM102 JAN11 16:43:22 2201 SYSB LCOM 101 SysB From SysB (NA) REASON: Processing data update request

#### Example 3

PM102 MAR10 12:23:34 4501 SYSB LDT PSAP 4 0
FROM: InSv
REASON: CS Link

#### Example 4

\*\* PM102 FEB14 08:00:01 1988 SYSB TPC 60 FROM: InSv REASON: UNSOLICITED MSG THR EXCEEDED

#### Example 5

PM102 APR25 08:19:42 3200 SYSB IPE HOST 00 3
Node: SysB (WAI recvd) From CBsy

#### Example 6

```
PM102 MAR13 03:20:15 3791 SYSB DTC 3
SysB From InSv
Unit0: MTCARB is functional, Unit1: MTCARB is disabled
```

#### Example 7

```
PM102 MAR13 03:20:15 3791 SYSB DTC 3
SysB From InSv
Unit0: MTCARB is functional
```

#### Example 8

PM102 APR06 14:25:52 2600 SYSB OSNM 27 SysB From InSv

#### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 4)

| Field | Value    | Description  |
|-------|----------|--|
| alm   | ***      | Indicates a critical alarm.  |
|       | **       | Indicates a major alarm.   |
|       | *        | Indicates a minor alarm.   |
|       | (blank)  | Indicates that an alarm is not present.  |
|       | mmmdd    | Month and day that the system generates log report, for example, OCT25.        |
|       | hh:mm:ss | Time that the system generates the log report, in hours, minutes, and seconds. |

| ( | Sheet  | 2 | of  | 4)    |  |
|---|--------|---|-----|-------|--|
| • | 011000 | _ | ••• | - ' / |  |

| Field                                   | Value                              | Description  |
|---|------------------------------------|--|
|   | ssdd                               | The sequence number for the log report.  |
| pmtype                                  | alphanumeric text                  | Identifies the affected PM type.   |
| pmid                                    | alphanumeric text                  | Identifies the affected PM number.   |
| SYSB                                    | constant                           | Indicates the node (PM) is system busy.  |
| Node : SysB                             | constant                           | Indicates the node (PM) is system busy.  |
| SysB                                    | constant                           | Indicates the node (PM) is system busy.  |
| sq                                      |                                    | Optional field. Provides the status qualifier.<br>This field appears when the PM is one of the following:  |
|   |                                    | a link interface module (LIM)  |
|   |                                    | application processing unit (APU)  |
|   |                                    | <ul> <li>application processing unit with UNIX<br/>(APUX)</li> </ul>   |
|   |                                    | data communication processor (DCP)   |
|   |                                    | LIU datacom (LCOM)   |
|   |                                    | external node (EXND)   |
|   |                                    | service peripheral module (SPM)  |
|   |                                    | service processor with UNIX (SPX)  |
|   |                                    | <ul> <li>voice processing unit (VPU)</li> </ul>  |
|   | NA                                 | Not accessible (NA) indicates that all links to<br>the PM unit are logically closed or physically out<br>of service. Messaging between the PM and the<br>CM is not possible. |
|   | RU                                 | Resources unavailable (RU) means external resources, which are necessary for the PM unit to be in service, are out of service.   |
| REASON: Processing data update request. | constant                           |  |
| previous PM state                       | InSv, ISTb, Offl, ManB,<br>or Cbsy | Indicates the previous state of the PM.  |

### (Sheet 3 of 4)

| Field               | Value  | Description   |
|---------------------|--|---|
| optional text       | ISTb cleared <character<br>string&gt;</character<br> | Optional field. Indicates the clearance of a PM ISTb condition. A clearance occurs as a result of a state change.   |
| Unit n              | n = 0 or 1   | The PM unit number.   |
| unit state          | InSv, ISTb, Cbsy, SysB,<br>Offl, or ManB             | The current state of the unit.  |
| reason text         | text   | Optional field. Indicates the reason for the state change. Some of the entries in this field are:   |
|                     |  | <ul> <li>INIT or CS Link: Indicates that a central<br/>control (CC) restart or the central-side<br/>(C-side) link of the line appearance on a<br/>digital trunk (LDT) is out-of-service.</li> </ul> |
|                     |  | • LINK AUDIT: Indicates that a recent audit detects a C-side busy (CBsy) TOPS position controller (TPC), which causes the TPC to become SysB.   |
|                     |  | <ul> <li>RTS FAILED: Indicates that an attempt to<br/>return a CBsy TPC to service fails because<br/>of the data channel returns.</li> </ul>  |
|                     |  | <ul> <li>UNSOLICITED MSG THR EXCEEDED:<br/>Indicates that messages the TPC does not<br/>request exceed the threshold.</li> </ul>  |
|                     |  | • FAULT OCCURRED ON CSC/TMC<br>CHANNELS: Indicates that a fault occurs<br>on the cell site controller (CSC) or the<br>timeslot management channel (TMC).  |
|                     |  | <ul> <li>NODE AUDIT FAILED: Indicates that the<br/>node audit, associated with an OSNM,<br/>detects a fault.</li> </ul>   |
| previous unit state | InSv, ISTb, Cbsy, SysB,<br>Offl, or ManB             | An optional field that indicates the previous state of the PM unit.   |

| Field             | Value                  | Description   |
|-------------------|------------------------|---|
| Unit 0: MTCARB is | constant               | Indicates that the current state of the<br>maintenance arbitrator in XMS-based<br>peripheral module (XPM) unit 0 follows. An<br>optional field that applies only to digital trunk<br>controllers (DTC), line trunk controllers (LTC)<br>and line group controllers (LGC). If the XPM<br>maintenance arbitrator is not loaded in the unit,<br>the field is blank. Beginning in TL09, this field<br>is not present. |
| Unit 1: MTCARB is | constant               | Indicates that the current state of the<br>maintenance arbitrator in XPM unit 0 follows.<br>An optional field that applies to DTCs, LTCs,<br>and LGCs. If the unit does not contain the XPM<br>maintenance arbitrator, the field is blank.<br>Beginning in TL09, this field is not present.   |
| state             | functional or disabled | Indicates the state of MtcArb in the XPM unit<br>when the log is formatted for display. This state<br>may differ from the state of the log at the time<br>that the system generates the log. The<br>possibility of a difference increases as the time<br>between log generation and log formatting<br>increases. Beginning in TL09, this field is not<br>present.   |
| comment text      | text                   | An optional field. If the affected PM is an LDT, this field provides additional information on the previous state.  |
| log reason        | text                   | The reason the system generates the log report.   |

## Action

Manually test the PM or PM unit. Identify the fault(s) responsible for the system busy state, correct the faults, and return the PM to service.

- If the test passes but the PM does not return to service (RTS), contact the next level of maintenance. Save the reports that the system produces during the 5 min period before the system generates the PM102 log report.
- If the test fails and the system generates a card list, follow correct card replacement procedure. Change the first card on the list. Repeat the test. If the test fails again, change the next card on the list, and repeat the test.

Continue until the test passes or until there are no more cards on the card list.

• There are no more cards on the card list and the test fails. The PM does not return to service. Save the reports that the system produces during the 5 min period before the system generates the PM102 log report. Contact the next level of maintenance.

If DS-1 message links or the cell site controller (CSC) channel are busy, perform the following steps:

- Verify that associated facilities, like group intercom (GIC), DS-1s, and D-channel handlers (DCH), are in-service.
- Attempt to RTS the DS-1 message links at the GIC PM level.
- Attempt to RTS the channels at the GIC; ISG level.
- Issue the CONT command on the channel at the GIC; ISG level.
- If the problem persists, contact the next level of support.

If an external node is busy, refer to log PM181. For additional information on potential causes of the problem, refer to log PM181.

#### **Operator Services Node Maintained problems**

In addition to the general actions that the user must perform, the user also must perform the following actions:

- Determine the reason, repair, and return PM to service. A circuit pack list appears on the terminal when a manual test fails.
- Make sure that all DMS EIUs are in-service, the DMS LAN-BAY is operational, and all cabling is in good condition. If these components are in-service, check for service node faults.

*Note:* For OSNM post analysis, every in-service session pool entered on the SYSB service node has an OAIN107 CBSY log. Manually busy and test the service node to determine the reason for the change to out-of-service state.

#### Ethernet connection is lost

Investigate data connectivity between the DMS switch and the node.

#### Associated OM registers

Registers SYSBUSE and INSSYSB associate with PMs EXND and SPX.

## PM102 (end)

#### **Operator Services Node Maintained OM information**

For an OSNM log, OM group EXNDINV, register INSSYSB increases for that service node. A use register SYSBUSE records the amount of time the service node stays SYSB.

#### Ethernet connection is lost

There is no OM associated with this log.

### PM103

#### Explanation

The peripheral module (PM) subsystem generates log report PM103 when a PM node becomes offline (OffL). This basic log report uses Format 1.

The PM log contains the maintenance arbitrator (MtcArb) state (functional or disabled). The PM log contains the MtcArb when the MtcArb is present in the XPM load. The log format is Format 2 when a load that contains MtcArb is present in both XPM units. The log format is Format 3 when a load that contains MtcArb is present in one of the units.

### Format

The fields and entries associated with maintenance arbitrator are optional (apply only to XPMs). When a load containing MtcArb is present in both XPM units, the MtcArb state is indicated for each unit as either functional or disabled. In XPM81, when a load containing MtcArb is present in only one of the units, the MtcArb state is indicated for that unit only. The state of the of the second unit is not indicated. Beginning in TL09, MtcArb is always functional and the MtcArb state is not indicated in the logs.

The log report formats for PM103 are as follows:

Format 1

PM103 mmmdd hh:mm:ss ssdd OFFL pmid OffL from statxt (sq) <info\_text>

Format 2

PM103 mmmdd hh:mm:ss ssdd OFFL pmid OffL from statxt (sq) <info\_text> Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

Format 3

PM103 mmmdd hh:mm:ss ssdd OFFL pmid OffL from statxt (sq) <info\_text> Unit<unit\_no>: MtcArb is <state>

## **Examples**

Examples of log report PM103 follow:

Example 1

PM103 JAN20 23:11:10 1200 OFFL EIU 0 OffL from ManB

Example 2

PM103 JAN20 23:11:10 1200 OFFL DTC 0
OffL from ManB
Unit0: MtcArb is disabled, Unit1: MtcArb is functional

Example 3

```
PM103 JAN20 23:11:10 1200 OFFL DTC 0
OffL from ManB
Unit0: MtcArb is disabled
```

# **Field descriptions**

The following table describes each field in the log report:

(Sheet 1 of 2)

| Field                   | Value         | Description   |
|-------------------------|---------------|---|
| alarm                   |               | Optional field. Indicates the type of alarm that accompanies the change of state. |
|                         | ***           | Indicates a critical alarm.   |
|                         | **            | Indicates a major alarm.  |
|                         | *             | Indicates a minor alarm.  |
|                         | (blank)       | Indicates an alarm is not present.  |
| pmid                    | symbolic text | Identifies affected PM.   |
| statxt                  | Uneq or ManB  | Defines the state before the change to OffL.                                      |
| sq                      | Blank or (NA) | (NA) indicates that communication is not available.                               |
| <info_text></info_text> | text          | Indicates the reason the PM changes to OffL state.                                |

## **PM103** (end)

(Sheet 2 of 2)

| Field                | Value                  | Description  |
|----------------------|------------------------|--|
| Unit 0:<br>MTCARB is | constant               | Indicates the current state of the<br>maintenance arbitrator in XPM unit 0<br>follows. This is an optional field that applies<br>only to digital trunk controllers (DTC), line<br>trunk controllers (LTC) and line group<br>controllers (LGC). If the XPM maintenance<br>arbitrator is not loaded in the unit, the field is<br>blank. Beginning in TL09, this field is not<br>present. |
| Unit 1:<br>MTCARB is | constant               | Indicates the current state of the<br>maintenance arbitrator in XPM unit 1<br>follows. This is an optional field that applies<br>only to DTCs, LTCs, and LGCs. If the XPM<br>maintenance arbitrator is not loaded in the<br>unit, the field is blank. Beginning in TL09,<br>this field is not present.   |
| state                | functional or disabled | Indicates the state of MtcArb in the XPM unit<br>when the log is formatted for display. This<br>state can differ from the state of the log<br>when the system generates the log. The<br>possibility of a difference increases as the<br>period between log generation and log<br>formatting increases.   |

# Action

There is no action required.

# **Associated OM registers**

There are no associated OM registers.

## **Additional information**

There is no additional information.

## Explanation

The Peripheral Module (PM) subsystem generates log report PM104 when a PM changes from offline (OffL) state to unequipped (UNEQ) state.

## Format

The log report format for PM104 is as follows:

PM104 mmmdd hh:mm:ss ssdd UNEQ pmid Uneq from OffL

## Example

An example of log report PM104 follows:

PM104 JAN20 23:11:10 1200 UNEQ EIU 0 Uneq from OffL

# **Field descriptions**

The following table describes each field in the log report:

| Field  | Value         | Description                            |
|--------|---------------|--|
| pmid   | symbolic text | Identifies the affected PM.            |
| statxt | OffL          | Defines the current state of the unit. |

# Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

There is no additional information.

### PM105

#### Explanation

The peripheral module (PM) subsystem generates log report PM105 when a PM changes to manual busy (ManB) state. The change of state appears in Formats 1 and 2. The PM generates PM105 when the Subscriber Carrier Module-100S Remote (SMS-R) is set to busy at the MAP display while in the offline (Offl) state.

The PM subsystem generates Format 2 when the Operator Services Node Maintained (OSNM) changes state to ManB. The OSNM changes state to ManB as a result of a manual action.

The PM subsystem generates Format 3 when a line on a digital trunk (LDT) is set to ManB.

The PM subsystem generates Format 4 when a PM changes state to ManB. Log report PM105 confirms the change of the PM state to ManB.

The PM subsystem generates Format 5 when a load that contains maintenance arbitrator (MtcArb) is present in only one of the units.

#### Format

The fields and entries associated with maintenance arbitrator are optional (apply only to XPMs). When a load containing MtcArb is present in both XPM units, the MtcArb state is indicated for each unit as either functional or disabled. In XPM81, when a load containing MtcArb is present in only one of the units, the MtcArb state is indicated for that unit only. The state of the of the second unit is not indicated. Beginning in TL09, MtcArb is always functional and the MtcArb state is not indicated in the logs.

The log report format for PM105 are as follows:

Format 1

PM105 mmmdd hh:mm:ss ssdd MANB pmid Node : ManB From <previous PM state> <optional text> Unit0 : <sq> <unit state> <previous unit state> <reason text> Unit1 : <sq> <unit state> <previous unit state> <reason text> Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

Format 2

PM105 mmmdd hh:mm:ss ssdd MANB pmid MANB <sq> from <previous PM state> <sq> Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

Format 3

PM105 mmmdd hh:mm:ss ssdd MANB pmid From: <previous PM state> Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

#### Format 4

PM105 mmmdd hh:mm:ss ssdd MANB pmid From <previous PM state Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

Format 5

PM105 mmmdd hh:mm:ss ssdd MANB pmid From <previous PM state Unit<unit\_no>: MTCARB is <state>

### Example

Examples of log report PM105 follow:

Example 1

PM105 APR01 12:00:00 2112 MANB HOST LGC 7 0
Node : ManB From ISTb
ISTb Cleared (Unit OOS)
Unit0 : ManB
Unit1 : ManB From InSv
Unit0: MTCARB is functional, Unit1: MTCARB is disabled

#### Example 2

PM105 FEB09 15:31:54 0697 MANB DCP 201 ManB From OffL

Example 3

```
PM105 FEB09 15:31:54 0697 MANB LDT PSAP 01 0
FROM: INSV
```

#### Example 4

```
PM105 JAN01 08:32:51 1181 MANB DTC HOST 00 3
Node :ManB From Offl
Unit0: MTCARB is functional, Unit1: MTCARB is disabled
```

#### Example 5

```
PM105 JAN01 08:32:51 1181 MANB DTC HOST 00 3
Node :ManB From Offl
Unit0: MTCARB is functional
```

## **Field descriptions**

The following table describes each field in the log report:

| (Sheet 1 | of 3) |
|----------|-------|
|----------|-------|

| Field | Value             | Description   |
|-------|-------------------|---|
| alarm |                   | Optional field. Indicates the type of alarm that accompanies the change of state. |
|       | ***               | Indicates a critical alarm.   |
|       | **                | Indicates a major alarm.  |
|       | *                 | Indicates a minor alarm.  |
|       | (blank)           | Indicates an alarm is not present.  |
|       | mmmdd             | Month and day that the system generates the log report, for example, OCT25.       |
|       | hh:mm:ss          | Time that the system generates the log report, in hours, minutes, and seconds.    |
|       | ssdd              | The sequence number of the log report.  |
| MANB  | constant          | Indicates that the current state of the PM is ManB.                               |
| pmid  | alphanumeric text | Identifies the affected PM.   |

| (Sheet | 2 | of | 3) |
|--------|---|----|----|
|--------|---|----|----|

| Field               | Value  | Description  |
|---------------------|--|--|
|                     | IPE, SPX,APUX ff<br>s                                    | Identifies an IPE, SPX, or APUX PM type.<br>The frame and shelf that the PM occupies.  |
| FROM:               | constant   | Indicates that the previous PM state follows.  |
| previous PM state   | InSv, ISTb, SBsy,<br>Offl, Uneq, or Cbsy                 | The previous state of the PM.  |
| optional text       | ISTb cleared<br><character string=""></character>        | Indicates the clearance of a PM ISTb condition a clearance occurs as a result of a state change. If not in use, this field is blank.   |
| Unit0:              | constant   | Indicates information on unit 0 follows.   |
| Unit1:              | constant   | Indicates information on unit 1 follows.   |
| sq                  | (RU) or (NA), blank<br>for an APUX.                      | Provides status qualifier: resources<br>unavailable (RU), or not accessible (NA).<br>The RU status indicates that external<br>resources of an in-service PM unit are out of<br>service. The NA status indicates that all<br>links to the PM unit are logically closed or<br>physically out of service. Messaging<br>between the PM and the CM is not possible.               |
| unit state          | ManB, InSv, ISTb,<br>Offl, Uneq, CBsy,<br>or SysB        | The current state of the PM unit.  |
| previous unit state | ManB, InSv, ISTb,<br>CBsy, Offl, SysB,<br>Uneq, or blank | Indicates the previous state of a PM unit.<br>Indicates the reason for that state. If no<br>state change occurs on a PM when the<br>system generates a log, this field is blank.   |
| reason text         | text   | Indicates the reason for the state change. If not in use, the field is blank.  |
| Unit 0: MTCARB is   | constant   | This field applies to digital trunk controllers (DTC), line trunk controllers (LTC) and line group controllers (LGC). If the XPM maintenance arbitrator is not loaded in the unit, the field is blank. If the field is in use, the field indicates that the current state of the maintenance arbitrator in XPM unit 0 follows. Beginning in TL09, this field is not present. |

### **PM105** (end)

(Sheet 3 of 3)

| Field             | Value                     | Description   |
|-------------------|---------------------------|---|
| Unit 1: MTCARB is | constant                  | This field applies to DTCs, LTCs, and LGCs.<br>If the XPM maintenance arbitrator is not<br>loaded in the unit, the field is blank. If the<br>field is in use, the field indicates that the<br>current state of the maintenance arbitrator in<br>XPM unit 1 follows. Beginning in TL09, this<br>field is not present.                                  |
| state             | functional or<br>disabled | Indicates the state of MtcArb in the XPM unit<br>when the log is formatted for display. This<br>state can differ from the state of the log<br>when the system generates the log. The<br>possibility of a conflict increases as the<br>period between log generation and log<br>formatting increases. Beginning in TL09,<br>this field is not present. |

## Action

There is no action required.

### **Associated OM registers**

### **Operator Services Node Maintained OM information**

For Format 2, INSV, ISTB to MANB transitions, OM group EXNDINV, register INSMANB increases. The OM register MANBUSE records the amount of time that the service node is in the MANB state.

### Explanation

The peripheral module (PM) subsystem generates log report PM106 in Formats 1 and 4. The subsystem generates this report when a PM returns to service (RTS). The subsystem also generates this report when a PM changes from system busy (SysB) to in-service (InSv) state. The log indicates the previous state of each PM unit, and provides the reason for the state change.

The PM subsystem generates this report in Format 2 when a remote carrier urban (RCU) module completes initialization. There are two initialization modes: warm start and backup switchover. When warm start initialization is complete, the subsystem generates log report PM106. When backup switchover initialization is complete, the system generates log report PM106. The system only generates this log if no alarms are present on the RCU. If alarms are present, the system generates log report PM128. Log report PM128 indicates that initialization is complete and alarms are present on the RCU.

The PM subsystem generates this report in Format 3 when the final alarm on a specified RCU clears. If an alarm clears on an RCU but other alarms are present, the system generates a PM128 log. The types of alarms that appear in the PM106 log are card, configuration, digital line, and coded alarms.

The PM subsystem generates this report in Format 4 when an Operator Services Node Maintained (OSNM) changes state. The OSNM changes to InSv from a manual busy (ManB) or SysB state.

The PM subsystem generates this report in Format 5 when a line appearance on a digital trunk (LDT) is in service.

The PM subsystem generates this report in Format 6 to confirm and notify of a change in a PM to InSv. The PM subsystem generates this report when a system request set returns the SysB RTS of a PM to service. The subsystem also generates the report after a manual request returns a PM to service from ManB.

The PM subsystem generates this report in Format 7 when a load with a maintenance arbitrator (MtcArb) is present in only one unit.

### Format

The fields and entries associated with maintenance arbitrator are optional (apply only to XPMs). When a load containing MtcArb is present in both XPM units, the MtcArb state is indicated for each unit as either functional or disabled. In XPM81, when a load containing MtcArb is present in only one of the units, the MtcArb state is indicated for that unit only. The state of the of

the second unit is not indicated. Beginning in TL09, MtcArb is always functional and the MtcArb state is not indicated in the logs.

The log report formats for PM106 are as follows:

Format 1

PM106 mmmdd hh:mm:ss ssdd RTS pmid Node : INSV From <previous PM state> <reason> <optional text> Unit0 : <unit state> <previous unit state> <reason text> Unit1 : <unit state> <previous unit state> <reason text> Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

Format 2

PM106 mmmdd hh:mm:ss ssdd RTS pmid FROM: <previous PM state>, REMOTE INITIALIZATION COMPLETE :<initialization type> REMOTE INITIALIZATION COMPLETE

Format 3

PM106 mmmdd hh:mm:ss ssdd RTS pmid FROM: <previous PM state> <alarm text> REMOTE ALARM CLEARED

Format 4

PM106 mmmdd hh:mm:ss ssdd RTS pmid InSv From <previous PM state>

Format 5

PM106 mmmdd hh:mm:ss ssdd RTS pmid From <previous PM state>

Format 6

PM106 mmmdd hh:mm:ss ssdd RTS pmid Node :InSv From <previous IPE state> <optional text> Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

Format 7

PM106 mmmdd hh:mm:ss ssdd RTS pmid Node :InSv From <previous IPE state> <optional text> Unit<unit\_no>: MTCARB is <state>

#### Example

Examples of log report PM106 follow:

#### Example 1

```
PM106 APR01 12:00:00 2112 RTS LGC HOST 7 1
Node : InSv From ISTb
ISTb Cleared (Unit OOS)
Unit0 : InSv
Unit1 : InSv From SysB (CSLink RTS)
Unit0: MTCARB is functional, Unit1: MTCARB is disabled
```

#### Example 2

```
PM106 APR01 12:00:00 2112 RTS RCU RCU0 00 1
From: ISTb, REMOTE INITIALIZATION COMPLETE :Backup
Switchover
REMOTE INITIALIZATION COMPLETE
```

#### Example 3

```
PM106 APR01 12:00:00 2112 RTS RCU RCU0 00 1
From: ISTb Min loc=3,10 Configuration alarm
remote alarm cleared
```

#### Example 4

```
PM106 FEB09 16:27:36 8030 RTS DCP 201
InSv from ManB
<reason_text>
```

#### Example 5

```
PM106 FEB09 16:27:36 8030 RTS LDT PSAP 01 0
From SYSB
Example 6
PM106 FEB01 21:50:00 2200 RTS IPE HOST 00 3
Node :InSv From ISTb
:ISTb Cleared (Load File Mismatch)
Example 7
PM106 FEB01 21:50:00 2200 RTS IPE HOST 00 3
Node :InSv From ISTb
:ISTb Cleared (Load File Mismatch)
```

Unit0: MTCARB is functional

### **Field descriptions**

The following table describes each field in the log report:

| Field | Value         | Description   |
|-------|---------------|---|
| alarm |               | Optional field. Indicates the type of alarm that accompanies the change of state. |
|       | ***           | Indicates a critical alarm.   |
|       | **            | Indicates a major alarm.  |
|       | *             | Indicates a minor alarm.  |
|       | (blank)       | Indicates an alarm is not present.  |
|       | mmmdd         | Month and day the system generates the log report, for example, OCT25.            |
|       | hh:mm:ss      | Time the system generates the log report, in hours, minutes, and seconds.         |
|       | ssdd          | The sequence number of the log report.  |
| RTS   | constant      | Indicates the PM returns to service or changes from system busy to in-service.    |
| pmid  | symbolic text | Identifies the affected PM.   |

| ( | Sł         | neet | 2 | of         | 4) |  |
|---|------------|------|---|------------|----|--|
|   | <b>U</b> . | 1001 | - | <b>U</b> 1 | ,  |  |

| Field                             | Value   | Description   |
|-----------------------------------|---|---|
|                                   | IPE, APUX ff s                                    | Identifies the IPE, or APUX PM type and the frame (ff) and shelf (s) the PM occupies.   |
| Node : INSV                       | constant  | Indicates the node (PM) is in service.  |
| From                              | constant  | Indicates the previous state of the node (PM) follows.  |
| previous PM state                 | SBsy, ManB, ISTb,<br>Offl, or Cbsy                | Indicates the previous state of the PM.   |
| reason                            | text  | Optional field. Indicates the reason for the previous PM state.   |
| optional text                     | ISTb cleared<br><character string=""></character> | Indicates the clearance of a PM ISTb condition. A clearance occurs as a result of a state change. If the field is not in use, this field is blank.              |
| Unit n                            | n = 0 or 1  | Indicates the PM unit number.   |
| unit state                        | InSv, ISTb, SysB,<br>or ManB                      | Indicates the current state of the unit.  |
| previous unit state               | InSv, ISTb, SysB,<br>ManB                         | Indicates the previous state of the PM unit.  |
| reason text                       | text  | Optional field. Indicates the reason for the previous PM unit state. If no state change occurs on a unit when the system generates the log, the field is blank. |
| REMOTE INITIALIZATION<br>COMPLETE | constant  | Indicates initialization of the remote terminal.  |

(Sheet 3 of 4)

| Field               | Value                                | Description   |
|---------------------|--------------------------------------|---|
| initialization type | warm start or<br>backup switchover   | Identifies the type of initialization. For warm<br>start initialization, enter the PMRESET<br>command from the PM level of the MAP<br>display. You can also enter the P6055 or<br>P6087 RCU maintenance card faceplate<br>commands. The TST or BCKPSEL<br>commands you enter from the PM level of<br>the MAP display cause a backup<br>switchover. The P6011, P6022, or P6044<br>RCU maintenance card faceplate<br>commands can also invoke backup<br>switchover. |
| sq                  | NA                                   | Indicates that no communication is available between the CM and the SDM.  |
| alarm text          | REMOTE ALARM<br>CLEARED              | Indicates a remote alarm on an RCU cleared.   |
|                     | min loc=x, y<br>configuration alarm  | Indicates the configuration alarm, which is a minor alarm, cleared. The location of the fault is on shelf x (x = 1 to 7) slot y (y = 1 to 24).  |
|                     | min loc=x, y card<br>failure         | Indicates a card failure alarm, which is a minor alarm, cleared. The location of the fault is on shelf x (x = 1 to 7) slot y (y = 1 to 24).   |
|                     | maj code=xxx<br>digital line failure | Indicates a digital line failure, which is a major alarm, cleared. A three-digit code (001 to 008) identifies the digital line that fails. Code 001 is the topmost digital line that connects to line shelf 1 (shelf 5). Code 008 is the bottom digital line that connects to control shelf 2 (shelf 1).  |
|                     | maj code=xxx<br>"coded alarm text"   | Indicates a coded alarm failure, which is a<br>major alarm, cleared. Refer to<br>363-2051-108 for details on coded alarms.<br>Coded alarms 600-625 and 700-725 apply<br>to special-service modules.   |

# PM106 (end)

| Field              | Value                   | Description  |
|--------------------|-------------------------|--|
| Unit 0: MTCARB is  | constant                | Indicates that the current state of the MtcArb<br>in XPM unit 0 follows. Optional field that<br>applies only to digital trunk controllers<br>(DTC), line trunk controllers (LTC) and line<br>group controllers (LGC). If the XPM MtcArb<br>is not loaded in the unit, the field is blank.<br>Beginning in TL09, this field is not present.                     |
| Unit 1: MTCARB is  | constant                | Indicates that the current state of the MtcArb<br>in XPM unit 1 follows. Optional field that<br>applies only to DTCs, LTCs, and LGCs. If<br>the XPM MtcArb is not loaded in the unit, the<br>field is blank. Beginning in TL09, this field is<br>not present.  |
| state              | functional,<br>disabled | Indicates the state of MtcArb in the XPM unit<br>at the time the log is formatted for display.<br>This state can differ from the state of the log<br>when the system generates the log. The<br>possibility of a difference increases as the<br>period between log generation and log<br>formatting increases. Beginning in TL09,<br>this field is not present. |
| previous IPE state | text                    | Describes the state of the IPE module before the IPE module is in service.   |

#### (Sheet 4 of 4)

## Action

There is no action required.

## **Associated OM registers**

#### **Operator Services Node Maintained OM information**

A successful RTS does not have an OM register. If the RTS fails in OM group EXNDINV, register RTSFAIL increases.

### PM107

#### Explanation

The log report formats for PM107 are as follows:

The Peripheral Module (PM) subsystem generates Format 1 when a PM changes state to central-side busy (CBsy). A system or manual request from the C-side node of the PM causes the change in state.

The PM generates Format 2 when the line appearance on a digital trunk (LDT) subsystem changes state to CBsy. A system or manual request from the C-side node of the subsystem causes the change in state.

The PM generates Format 3 when a PM changes state to CBsy. A system request for a specific PM causes the change in state.

The PM log contains the maintenance arbitrator (MtcArb) state (functional or disabled). The PM log contains MtcArb when MtcArb is present in the XPM load. The PM generates Format 5 when a load that contains MtcArb is present in both XPM units. The PM generates Format 6 when a load that contains MtcArb is present in only one of the units.

#### Format

The fields and entries associated with maintenance arbitrator are optional and apply only to XPMs. If a load contains MtcArb in both XPM units, the MtcArb state is indicated for each unit as either functional or disabled. In XPM81, when a load containing MtcArb is present in only one of the units, the MtcArb state is indicated for that unit only. The state of the of the second unit is not indicated. Beginning in TL09, MtcArb is always functional and the MtcArb state is not indicated in the logs.

The log report formats for PM107 are as follows:

Format 1

PM107 mmmdd hh:mm:ss ssdd CBSY pmid Node : CBsy opttxt2 Unit0 : statxt opttxt1 Unit1 : statxt opttxt1

Format 2

PM107 mmmdd hh:mm:ss ssdd CBSY pmid FROM: State Text

Format 3

PM107 mmmdd hh:mm:ss ssdd CBSY pmid Node :CBsy From sttxt opttxt

Format 4

PM107 mmmdd hh:mm:ss ssdd CBSY pmid Node : CBsy Unit0 Act: statxt Unit1 Inact: statxt

Format 5

PM107 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

Format 6

PM107 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit<unit\_no>: MtcArb is <state>

#### Example

Examples of log report PM107 follow:

Example 1

PM107 APR01 12:00:00 2112 CBSY HOST LCM 7 0 Node : CBsy Unit0 : CBsy From ManB Unit1 : CBsy

Example 2

PM107 FEB09 15:30:17 8879 CBSY LDT PSAP 04 FROM: InSv

#### Example 3

PM107 JAN18 15:14:26 4405 CBSY IPE HOST 00 3 Node :CBsy From InSv

#### Example 4

PM107 MAR16 11:25:53 5493 CBSY RCC 0 Node : CBsy From ISTb Unit0 Act: CBsy From InSv Unit1 Inact: SysB (XPM in ESA)

#### Example 5

PM107 APR01 12:00:00 2112 TBL PP-HARDWARE DTC 1 REASON: SysB From ISTb Unit0: MtcArb is disabled, Unit1: MtcArb is functional

#### Example 6

PM107 APR01 12:00:00 2112 TBL PP-HARDWARE DTC 1 REASON: SysB From ISTb Unit0: MtcArb is disabled

### **Field descriptions**

The following table describes each field in the log report:

| (Sheet | 1 | of | 2) |  |
|--------|---|----|----|--|
|--------|---|----|----|--|

| Field            | Value                   | Description   |
|------------------|-------------------------|---|
| alarm            |                         | Optional field. Indicates the type of alarm that accompanies the change of state. |
|                  | ***                     | Indicates a critical alarm.   |
|                  | **                      | Indicates a major alarm.  |
|                  | *                       | Indicates a minor alarm.  |
|                  | (blank)                 | Indicates an alarm is not present.  |
| CBSY pmid        | Symbolic text           | Identifies the PM affected.   |
| Node : CBsy From | Symbolic text           | Indicates the previous state of the node.   |
| TBL PP-HARDWARE  | Symbolic text           | Defines trouble as a peripheral processor hardware or firmware error.             |
| FROM             | InSv, ISTb, and<br>SysB | Node changes to SBSY from a previous state.                                       |
| UNITO            | Symbolic text           | Equipment state of unit 0 of the PM.  |

| Field             | Value   | Description  |
|-------------------|---|--|
| UNIT1             | Symbolic text                                       | Equipment state of unit 1 of the PM.   |
| opttxt1           | Character string or<br>blank                        | Identifies the previous state of the PM unit.<br>Indicates the cause of that state. If no state<br>change occurs when the system generates<br>the log, this field is blank.  |
| opttxt2           | ISTb CLEARED<br>and a character<br>string, or blank | Clearance of PM in-service trouble (ISTb)<br>as a result of a state change. If no state<br>change occurs, field is empty.  |
| sttxt             | Symbolic text                                       | Defines state before CBSY state.   |
| opttxt            | Symbolic text                                       | For ISTb conditions that the system clears.  |
| REASON: reastxt   | Symbolic text                                       | Identifies the reason that the PM generates<br>the log. Identifies the product engineering<br>code (PEC) for the suspect circuit pack.   |
| Unit 0: MTCARB is | constant  | Indicates the current state of the<br>maintenance arbitrator in XPM unit 0<br>follows. This is an optional field that applies<br>only to digital trunk controllers (DTC), line<br>trunk controllers (LTC) and line group<br>controllers (LGC). If the XPM maintenance<br>arbitrator is not loaded in the unit, the field is<br>blank. Beginning in TL09, this field is not<br>present. |
| Unit 1: MTCARB is | constant  | Indicates the current state of the<br>maintenance arbitrator in XPM unit 1<br>follows. This is an optional field that applies<br>only to DTCs, LTCs, and LGCs. If the XPM<br>maintenance arbitrator is not loaded in the<br>unit, the field is blank. Beginning in TL09,<br>this field is not present.   |
| state             | functional or<br>disabled                           | Indicates the state of MtcArb in the XPM unit<br>at the time the log is formatted for display.<br>This state may differ from the state of the log<br>at the time it is generated. The likelihood of<br>such a discrepancy increases as the time<br>between log generation and log formatting<br>increases. Beginning in TL09, this field is<br>not present.                            |

### **PM107** (end)

## Action

Determine the cause of the CBsy state and return to service (RTS). A circuit pack list appears on the terminal if a failure occurs.

- If test passes, but PM is not RTS, contact next level of maintenance.
- If test fails, change first circuit pack on the list and run the test again. If test fails again, change second pack on list and run test again. Continue until test passes or no more circuit packs are on the list.
- The PM does not RTS after no more circuit packs are on the list. The test fails. Contact the next level of maintenance.

## **Associated OM registers**

### Explanation

The peripheral module (PM) subsystem generates log report PM108. The subsystem generates this report after the system detects a firmware or hardware error in the peripheral processor (PP). This basic log report uses Format 1.

The PM log contains the maintenance arbitrator (MtcArb) state (functional or disabled). The PM log contains the MtcArb when MtcArb is present in the XPM load. The log format is Format 2 when a load that contains MtcArb is present in both XPM units. The log format is Format 3 when a load that contains MtcArb is present in only one of the units.

### Format

The log report formats for PM108 are as follows:

Format 1

PM108 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt

Format 2

PM108 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

#### Format 3

PM108 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit<unit\_no>: MtcArb is <state>

### Example

Examples of log report PM108 follow:

Example 1

PM108 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
 REASON: SIGNAL FAILED ON 2X38

Example 2

```
PM108 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
REASON: SIGNAL FAILED ON 2X38
Unit0: MtcArb is disabled, Unit1: MtcArb is functional
```

#### Example 3

```
PM108 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
    REASON: SIGNAL FAILED ON 2X38
    Unit0: MtcArb is disabled
```

## **Field descriptions**

The following table describes each field in the log report:

| Field           | Value                  | Description  |
|-----------------|------------------------|--|
| alarm           |                        | Optional field. Indicates the type of alarm that accompanies the change of state.  |
|                 | ***                    | Indicates a critical alarm.  |
|                 | **                     | Indicates a major alarm.   |
|                 | *                      | Indicates a minor alarm.   |
|                 | (blank)                | Indicates an alarm is not present.   |
| PP-HARDWARE     | Constant               | Defines problem as a peripheral processor hardware or firmware error.  |
| pmid            | Symbolic text          | Identifies the affected PM.  |
| REASON: reastxt | Symbolic text          | Identifies the reason the system generates the log. Identifies the product engineering code (PEC) for the suspect circuit pack.  |
| Unit_no         | 0 or 1                 | When MtcArb is loaded in only one PM unit, the field identifies that unit.   |
| state           | functional or disabled | Indicates the state of MtcArb in the XPM unit<br>when the log is formatted for display. This<br>state can differ from the state of the log when<br>the system generates the log. The possibility<br>of a difference increases as the period<br>between log generation and log formatting<br>increases. |

### Action

If the PM subsystem generates PM108 for less than 2 min, there is no action required.

If a diagnostic fails or the system generates log report PM108 for more than 2 min, initiate a manual test. The terminal displays a circuit pack list if a manual test fails.

If the manual test passes but the PM does not return to service (RTS), contact the next level of maintenance.

If the manual test fails, change the first circuit pack on the list and run the test again. If the test fails again, change the second circuit pack on the list and run the test again. Continue until the test passes or no more circuit packs are on the list.

If the test passes but the PM does not RTS, contact the next level of maintenance. The PM does not RTS, and there are no more circuit packs on the list. The test fails. Contact the next level of support.

## **Associated OM registers**

### PM109

### Explanation

The Peripheral Module (PM) subsystem generates log report PM109 when a T1 carrier line is set to System Busy (SBsy).

This log also contains a blank line of 64 characters in length. This blank line is initialized to be overwritten by MSL layer procedures if the specific PM and carrier exists in table CARID.

### Format

The log report format for PM109 is as follows:

\*PM109 mmmdd hh:mm:ss ssdd SBSY CARRIER pmid sidetxt CARRIER–NO: nnnn, REASON: reastxt (blank line)

## Example

An example of log report PM109 follows:

\*PM109 APR01 12:00:00 2112 SBSY CARRIER FRIU 202 CARRIER-NO: 1, REASON: CARRIER LOCAL ALARM SET (blank line)

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field   | Value         | Description  |
|---------|---------------|--|
| CARRIER | Symbolic text | Indicates T1 carrier is SBsy.  |
| sidetxt | Symbolic text | Identifies the affected PM. When PMID is frame relay interface unit (FRIU), the 3 digits that follow indicate the FRIU identification.   |
| sidetxt | C-side        | Indicates that the T1 carrier made SBSY is<br>on the C-side of the peripheral module. The<br>system generates this field if the PM has T1<br>carriers on both P-side and C-side.   |
|         | P-side        | Indicates that the T1 carrier set to SBsy is on<br>the P-side of the peripheral module. The<br>system generates this field if the PM has T1<br>carriers on both P-side and C-side. |

## PM109 (end)

#### (Sheet 2 of 2)

| Field            | Value         | Description   |
|------------------|---------------|---|
|                  | blank         | Indicates that the peripheral module does<br>not have T1 carriers on both C-side and<br>P-side.   |
| CARRIER-NO: nnnn | 0 -9999       | Indicates which T1 carrier the log report<br>refers to. When pmid is FRIU,<br>CARRIER-NO is set to 1, because the FRIU<br>has only one carrier.   |
| REASON: reastxt  | Symbolic text | Identifies the reason that the system generates the log.  |
| (blank line)     | constant      | Consists of a blank line, 64 characters in<br>length. The blank characters can only be<br>overwritten by MSL layer procedures if the<br>specific PM and carrier exists in table<br>CARID. Refer to Table CARID in the data<br>schema section of the <i>Translations Guide</i> . |

## Action

If the PM subsystem generates log report PM109 for less than 2 min, there is no action required.

If the PM subsystem generates log report PM109 for more than 2 min, perform maintenance on the T1 carrier. *Trunks, Subsystem Alarm Analysis, Testing and Card Replacement*, 297-1001-501, lists step-by-step procedures for trunk maintenance.

### PM110

### **Explanation**

The Peripheral Module (PM) subsystem generates log report PM110 when a change in the service count level occurs. No trunks are removed from service when an out-of-service (OOS) limit is set. The OOS limit affects 24 trunks. Maintenance personnel can use the trunk test position (TTP) to deload the trunks. The system generates this report when the number of service counts reaches the service count threshold.

This log also contains a blank line of 64 characters in length. This blank line is initialized to be overwritten by MSL layer procedures if the specific PM and carrier exists in table CARID.

### Format

The log report format for PM110 is as follows:

\*PM110 mmmdd hh:mm:ss ssdd INFO CARRIER pmid sidetxt CARRIER–NO: nnnn, REASON: reastxt

### Example

An example of log report PM110 follows:

\*PM110 APR01 12:00:00 2112 INFO CARRIER FRIU 202 CARRIER-NO: 1, REASON: CARRIER BER-OOS LIMIT SET

#### Field descriptions

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field        | Value         | Description  |
|--------------|---------------|--|
| INFO CARRIER | Symbolic text | Indicates that the information the log report supplies, relates to the T1 carrier.   |
| pmid         | Constant      | When pmid IS frame relay interface unit (FRIU), the 3 digits that follow indicate the FRIU identification number.  |
| sidetxt      | C-side        | Indicates that the T1 carrier set to PBsy is on<br>the C-side of the peripheral module. The<br>system generates this field if the PM has T1<br>carriers on both the P-side and C-side. |

## **PM110** (end)

| Field            | Value    | Description   |
|------------------|----------|---|
|                  | P-side   | Indicates that the T1 carrier set to PBsy is on<br>the P-side of the peripheral module. The<br>system generates this field if the PM has T1<br>carriers on both the P-side and C-side.  |
|                  | blank    | Indicates the peripheral module does not have T1 carriers on both C-side and P-side.  |
| CARRIER-NO: nnnn | 0-9999   | Identifies T1 carrier. When PMID is FRIU,<br>CARRIER-NO is set to 1, because the FRIU<br>has only one carrier.  |
| REASON: reastxt  | Table H  | Identifies the reason the system generates the log. Refer to Table H in the front of this document.   |
| (blank line)     | constant | Consists of a blank line, 64 characters in<br>length. The blank characters can only be<br>overwritten by MSL layer procedures if the<br>specific PM and carrier exists in table<br>CARID. Refer to Table CARID in the data<br>schema section of the <i>Translations Guide</i> . |

#### (Sheet 2 of 2)

## Action

If the limit is cleared, there is no action required.

If maintenance limit is set, perform facility maintenance. Refer to the operating company facility maintenance and repair manual for digital trunks.

If OOS limit is set, deload trunks and perform facility maintenance. Refer to the operating company facility maintenance and repair manual for digital trunks.

### PM111

### Explanation

The peripheral module (PM) subsystem generates log report PM111 when a T1 carrier returns to service (RTS). This report also indicates the cause of the RTS. The basic log report format for PM111 is Format 1.

The PM log contains the maintenance arbitrator (MtcArb) state (functional or disabled). The PM log contains the MtcArb when the MtcArb is present in the XPM load. The log format is Format 2 when a load that contains MtcArb is present in both XPM units. The log format is Format 3 when a load that contains MtcArb is present in only one of the units.

This log also contains a blank line of 64 characters in length. This blank line is initialized to be overwritten by MSL layer procedures if the specific PM and carrier exists in table CARID.

#### Format

The log report formats for PM111 are as follows:

Format 1

PM111 mmmdd hh:mm:ss ssdd RTS CARRIER pmid sidetxt CARRIER–NO: nnnn, REASON: reastxt

Format 2

PM111 mmmdd hh:mm:ss ssdd RTS CARRIER pmid sidetxt CARRIER–NO: nnnn, REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

#### Format 3

PM111 mmmdd hh:mm:ss ssdd RTS CARRIER pmid sidetxt CARRIER–NO: nnnn, REASON: reastxt Unit<unit\_no>: MtcArb is <state>

#### Example

Examples of log report PM111 follow:

Example 1

PM111 (continued)

PM111 APR01 12:00:00 2112 RTS CARRIER FRIU 202 CARRIER-NO: 15, REASON: CARRIER LOCAL ALARM CLEARED

#### Example 2

PM111 APR01 12:00:00 2112 RTS CARRIER FRIU 202 CARRIER-NO: 15, REASON: CARRIER LOCAL ALARM CLEARED Unit0: MtcArb is disabled, Unit1: MtcArb is functional

#### Example 3

PM111 APR01 12:00:00 2112 RTS CARRIER FRIU 202 CARRIER-NO: 15, REASON: CARRIER LOCAL ALARM CLEARED Unit0: MtcArb is disabled

### **Field descriptions**

The following table describes each field in the log report:

| (Sheet | 1 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field   | Value         | Description   |
|---------|---------------|---|
| alarm   |               | Optional field. Indicates the type of alarm that accompanies the change of state.   |
|         | ***           | Indicates a critical alarm.   |
|         | **            | Indicates a major alarm.  |
|         | *             | Indicates a minor alarm.  |
|         | (blank)       | Indicates an alarm is not present.  |
| CARRIER | Constant      | Indicates that the information, which the log report supplies, relates to T1 carrier.   |
| pmid    | Symbolic text | Identifies the affected PM. When<br>pmid=FRIU (frame relay interface unit) the 3<br>digits that follow indicate the FRIU<br>identification number.                  |
| sidetxt | C-side        | Indicates that the T1 carrier set to PBSY is<br>on the C-side of the PM. The system<br>generates this field if the PM has T1 carriers<br>on both P-side and C-side. |

## **PM111** (end)

(Sheet 2 of 2)

| Field            | Value                     | Description   |
|------------------|---------------------------|---|
|                  | P-side                    | Indicates that the T1 carrier set to PBSY is<br>on the P-side of the PM. The system<br>generates this field if the PM has T1 carriers<br>on both P-side and C-side.   |
|                  | blank                     | Indicates the PM does not have T1 carriers on both C-side and P-side.   |
| CARRIER-NO: nnnn | 0 through 9999            | Identifies the T1 carrier. When pmid=FRIU,<br>CARRIER-NO is set to 1 because the FRIU<br>has only one carrier.  |
| REASON: reastxt  | Symbolic text             | Identifies the reason the system generates the log.   |
| Unit_no          | 0 or 1                    | When MtcArb is loaded in only one PM unit, this field identifies that unit.   |
| state            | functional or<br>disabled | Indicates the state of MtcArb in the XPM unit<br>at the time the log is formatted for display.<br>This state can differ from the state of the log<br>when the system generates the log. The<br>possibility of a difference increases as the<br>period between log generation and log<br>formatting increases. |
| (blank line)     | constant                  | Consists of a blank line, 64 characters in length. The Blanks can only be overwritten by MSL layer procedures if the specific PM and carrier exists in table CARID. Refer to Table CARID in the data schema section of the <i>Translations Guide</i> .  |

# Action

There is no action required. Log PM111 is an information log.

## **Associated OM registers**

### **Explanation**

The Peripheral Module (PM) subsystem generates log report PM112. The subsystem generates this report when the T1 carrier slip counter is set to zero by the central control (CC). The subsystem generates a report every 24 h for each digital carrier module (DCM). Log report PM112 provides notification of a slip counter restart. If the subsystem generates more than one report in 24 h, the log indicates a facility fault.

## Format

The log report format for PM112 is as follows:

PM112 mmmdd hh:mm:ss ssdd INFO T1-SLIP-INIT DCM nnnn

## Example

An example of log report PM112 follows:

PM112 APR01 12:00:00 2112 INFO T1-SLIP-INIT DCM 7

## **Field descriptions**

The following table describes the fields in the log report:

| Field             | Value         | Description                                     |
|-------------------|---------------|---|
| INFO T1-SLIP-INIT | Symbolic text | Indicates restart of T1 carrier slip counter.   |
| DCM nnnn          | 0 to 9999     | Identifies DCM for the T1 slip counter restart. |

## Action

If the subsystem only generates one report in 24 h, there is no action required.

If the subsystem generates more than one report in 24 h, perform facility maintenance. Refer to the operating company facility maintenance and repair manual for digital trunks.

## **Associated OM registers**

#### PM113

#### Explanation

The Peripheral Module (PM) subsystem generates log report PM113 when a peripheral processor (PP) encounters message congestion.

The PM log contains the maintenance arbitrator (MtcArb) state (functional or disabled). The PM log contains the MtcArb when the MtcArb is in the XPM load. The log format is Format 2 when a load that contains MtcArb is in both XPM units. The log format is Format 3 when a load that contains MtcArb is in only one of the units.

#### Format

The log report formats for PM113 are as follow:

Format 1

PM113 mmmdd hh:mm:ss ssdd TBL PP\_CONGESTION pmid

Format 2

PM113 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

Format 3

PM113 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit<unit\_no>: MtcArb is <state>

#### Example

Examples of log report PM113 follow:

Example 1

PM113 APR01 12:00:00 2112 TBL PP\_CONGESTION DCM 7

#### Example 2

PM113 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
REASON: SIGNAL FAILED ON 2X38
Unit0: MtcArb is disabled, Unit1: MtcArb is functional

### PM113 (continued)

```
Example 3
```

```
PM113 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
    REASON: SIGNAL FAILED ON 2X38
    Unit0: MtcArb is disabled
```

## **Field descriptions**

The following table describes the fields in the log report:

| Field             | Value                 | Description  |
|-------------------|-----------------------|--|
| alarm             |                       | Optional field. Indicates the type of alarm that accompanies the change of state.  |
|                   | ***                   | Indicates a critical alarm.  |
|                   | **                    | Indicates a major alarm.   |
|                   | *                     | Indicates a minor alarm.   |
|                   | (blank)               | Indicates an alarm is not present.   |
| TBL PP_CONGESTION | Symbolic text         | Indicates PP encounters congestion.  |
| TBL PP-HARDWARE   | Symbolic text         | Defines problem as a peripheral processor hardware or firmware error.  |
| pmid              | Symbolic text         | Indicates the affected PM.   |
| REASON: reastxt   | Symbolic text         | Identifies the reason the system generates the log. Identifies the product engineering code (PEC) for the suspect circuit pack.  |
| Unit_no           | 0 or 1                | When MtcArb is loaded in only one PM unit, this field identifies that unit.  |
| state             | operating or disabled | Indicates the state of MtcArb in the XPM unit<br>when the log is formatted for display. This<br>state can differ from the state of the log when<br>the system generates the log. The possibility<br>of a difference increases as the period<br>between log generation and log formatting<br>increases. |

## Action

If the system generates PM113 in less than 2 min, there is no action required. Expect message congestion on high traffic days.

### **PM113** (end)

If the system generates log report PM113 in more than 2 min, perform maintenance. If the condition persists, contact the next level of maintenance.

## **Associated OM registers**

### Explanation

The Peripheral Module (PM) subsystem generates PM114 when a trouble (TBL) occurs during a PM operation. This condition can occur during an attempt to load, test, initialize or return a PM to service. The line appearance on a digital trunk (LDT) subsystem generates this log when a return to service (RTS) of the LDT fails.

The PM log contains maintenance arbitrator (MtcArb) state (functional or disabled). The PM log contains the MtcArb when MtcArb is in the XPM load. The log format is Format 2 when a load that contains MtcArb is in both XPM units. The log format is Format 3 when a load that contains MtcArb is in only one of the units.

### Format

The log report formats for PM114 are as follow:

Format 1

\*PM114 mmmdd hh:mm:ss ssdd TBL pmid REASON: reastxt

Format 2

PM114 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

Format 3

PM114 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit<unit\_no>: MtcArb is <state>

### Example

Examples of log report PM114 follow:

Example 1

\*PM114 APR01 12:00:00 2112 TBL DCM 7 REASON: FAILED TO GET A ROUTE

### PM114 (continued)

#### Example 2

```
PM114 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
REASON: SIGNAL FAILED ON 2X38
Unit0: MtcArb is disabled, Unit1: MtcArb is functional
```

#### Example 3

```
PM114 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
REASON: SIGNAL FAILED ON 2X38
Unit0: MtcArb is disabled
```

### Field descriptions

The following table describes the fields in the log report:

#### (Sheet 1 of 2)

| Field           | Value                  | Description  |
|-----------------|------------------------|--|
| alarm           |                        | Optional field. Indicates the type of alarm that accompanies the change of state.                    |
|                 | ***                    | Indicates a critical alarm.  |
|                 | **                     | Indicates a major alarm.   |
|                 | *                      | Indicates a minor alarm.   |
|                 | (blank)                | Indicates an alarm does not occur.   |
| TBL             | Constant               | Indicates problem on a PM.   |
| pmid            | Symbolic text          | Indicates the affected PM.   |
| REASON: reastxt | Symbolic text          | Identifies the reason the system generates the log. Identifies the PEC for the suspect circuit pack. |
| REASON          | NO RESPONSE<br>FROM PP | Reply not received from the TPC in response to the RTS request.                                      |
|                 | RTS FAIL               | Fail or bad message received from TPC in response to the RTS request.                                |
|                 | TBL<br>PP-HARDWARE     | Defines problem as a peripheral processor hardware or firmware error.                                |

## **PM114** (end)

| Field   | Value                    | Description  |
|---------|--------------------------|--|
| Unit_no | 0 or 1                   | When MtcArb is loaded in only one PM unit, this field identifies the unit.   |
| state   | operating or<br>disabled | Indicates the state of MtcArb in the XPM unit<br>at the time the system formats the log for<br>display. This state can differ from the state<br>of the log at the time the system generates<br>the log. The possibility of difference<br>increases as the period between log<br>generation and log formatting increases. |

#### (Sheet 2 of 2)

## Action

The following actions relate to log report PM114:

- 1. Operation requests can fail on the peripheral side (P-side) message DS-1s of the SMA associated with the corresponding international digit trunk (IDT). Check the status of the SMA, IDT, and P-side message DS-1s at the MAP terminal. Failure to MTCOPEN or open the P-side message DS-1s can cause operation requests to fail. Refer to other logs for PM reports that can describe the cause of the problem.
- 2. Failure can occur during the RTS phase of the line. This phase is part of the RTS of the IDT. This failure indicates an internal problem. Refer to other logs for PM reports that can describe the cause of the problem. For additional information, refer to the note that followed.
- 3. If SMA fails to respond or does not respond correctly to RTS message for the IDT, the log indicates internal routing problems. If central control (CC) fails to send the message correctly, the log indicates internal routing problems. At the MAP terminal, check status of SMA, and C-side message links of the IDT for faults. Refer to other logs with PM and software error (SWER) that can describe the cause of the problem.
- 4. If SMA does not respond to messages for the IDT, log PM180.

*Note:* The IDT does not fail to RTS when the line RTS fails, unless an internal process problem occurs.

## **Associated OM registers**

### PM115

### Explanation

The Peripheral Module (PM) subsystem generates log report PM115. The subsystem generates this report when the peripheral processor (PP) finds miscellaneous trouble (TBL) during normal operation.

The subsytem generates log report PM115 when an SHI link of an InSv TPC is out of service (OOS). The log report can include asterisks to denote the severity of the alarm associated with the report. One asterisk denotes a minor alarm (one SHI link OOS). Two asterisks denote a major alarm (both SHI links OOS). Three asterisks denote a critical alarm.

The PM log contains the maintenance arbitrator (MtcArb) state (functional or disabled). The log contains MtcArb when MtcArb is in the XPM load. The log format is Format 2 when a load that contains MtcArb is in both XPM units. The log format is Format 3 when a load that contains MtcArb is in only one of the units.

### Format

The log report formats for PM115 are as follows:

Format 1

PM115 mmmdd hh:mm:ss ssdd INFO PP-MISC-TBL pmid REASON: reastxt

#### Format 2

PM115 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

#### Format 3

PM115 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit<unit\_no>: MtcArb is <state>

### Example

Examples of log report PM115 follow:

Example 1

PM115 (continued)

```
PM115 APR01 12:00:00 2112 INFO PP-MISC_TBL TM8 0
REASON: DEL.NODE FAILED: FACIL. ATTCHD
```

#### Example 2

PM115 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
 REASON: SIGNAL FAILED ON 2X38
 Unit0: MtcArb is disabled, Unit1: MtcArb is functional

#### Example 3

```
PM115 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
    REASON: SIGNAL FAILED ON 2X38
    Unit0: MtcArb is disabled
```

### **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field            | Value         | Description   |
|------------------|---------------|---|
| alarm            |               | Optional field. Indicates the type of alarm that accompanies the change of state. |
|                  | ***           | Indicates a critical alarm.   |
|                  | **            | Indicates a major alarm.  |
|                  | *             | Indicates a minor alarm.  |
|                  | (blank)       | Indicates an alarm did not occur.   |
| INFO PP-MISC-TBL | Symbolic text | Miscellaneous trouble on a PP.  |
| TBL PP-HARDWARE  | Symbolic text | Defines trouble as a peripheral processor hardware or firmware error.             |
| pmid             | Symbolic text | Indicates the affected PM.  |
| REASON           | Symbolic text | Identifies reason the system generates the log.                                   |

## **PM115** (end)

(Sheet 2 of 2)

| Field   | Value                 | Description  |
|---------|-----------------------|--|
| Unit_no | 0 or 1                | When MtcArb is loaded in only one PM unit, this field identifies that unit.  |
| state   | operating or disabled | Indicates the state of MtcArb in the XPM unit<br>when the log is formatted for display. This<br>state can differ from the state of the log when<br>the system generates the log. The possibility<br>of this conflict increases as the period between<br>log generation and log formatting increases. |

## Action

If the system generates less than three reports in 2 min, there is no action required.

The system generates three reports and a PM108 report that indicates a firmware error. Check for a hardware fault in the PM. Follow "Action" for log report PM108.

If you do not find faults, load the PM again. This condition can indicate a corrupted load. If the system continues to generate PM115, contact the next level of maintenance.

### **Associated OM registers**

### Explanation

The Peripheral Module (PM) subsystem generates log report PM116 when a a message error report is received from a PM.

## Format

The log report format for PM116 is as follows:

## Example

An example of log report PM116 follows:

PM116 APR01 12:00:00 2112 INFO PP-REPORT-DUMP TM8 0 3F3A 4000 0017 0000 0B55 FF01 FFFF FFFF 0600 0600 . . . 6162 2064

## **Field descriptions**

The following table describes the fields in the log report:

| Field                  | Value         | Description  |
|------------------------|---------------|--|
| INFO<br>PP-REPORT-DUMP | Symbolic text | Indicates message error report received from PM.   |
| pmid                   | Symbolic text | Indicates the affected PM.   |
| hhhh                   | 0000-FFFF     | Provides additional information for problem isolation by Northern Telecom or operating company software experts. |

# Action

The system can generate a PM108, PM115, PM124, PM125, PM126 before this report. The system also can generate a PM138 report for the same PM. If this condition occurs, ignore log report PM116. Investigate the report that the system generates before PM116.

If the system generates more than three PM116 reports for the same PM, contact the next level of maintenance. If the system generates only one PM116 report, there is no action required.

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**PM116** (end)

# **Associated OM registers**

### Explanation

The Peripheral Module (PM) subsystem generates log report PM117 when trouble (TBL) occurs during a PM operation. The subsystem generates log PM117 to indicate that a TBL occurs. The reason text describes the trouble.

### Format

The log report format for PM117 is as follows:

PM117 mmmdd hh:mm:ss ssdd TBL pmid VALUE: nnnn, REASON: reastxt

# Example

An example of log report PM117 follows:

PM117 JAN18 17:20:48 1097 TBL IPE HOST 00 3 UNIT 0 VALUE: 0. REASON: NO RESPONSE FROM PP

# **Field descriptions**

The following table describes the fields in the log report:

| Field   | Value         | Description  |
|---------|---------------|--|
| TBL     | Symbolic text | TBL occurs during a PM operation.  |
| pmid    | Symbolic text | Indicates the affected PM.   |
|         | IPE ff s      | IPE PM type with frame and shelf the PM occupies.  |
| VALUE:  | 0-35          | Link that associates with the trouble. Values<br>between 0-19 are for P-side links with port<br>numbers 0-19. Values between 20-35 are for<br>C-side links with port numbers 0-15. |
| REASON: | Symbolic text | The suspect PM finds trouble.  |

# Action

Refer to maintenance procedures for action required.

# **Associated OM registers**

### PM118

### Explanation

The Peripheral Module (PM) subsystem generates log report PM118. The subsystem generates this report when miscellaneous trouble (TBL) occurs during normal operation of the peripheral processor PP.

The PM log contains the maintenance arbitrator (MtcArb) state (functional or disabled). The PM log contains the MtcArb when MtcArb is in the XPM load. The log report format is Format 2 when a load that contains MtcArb is in both XPM units. The log report format is Format 3 when a load that contains MtcArb is in only one of the units.

### Format

The log report formats for PM118 are as follows:

Format 1

PM118 mmmdd hh:mm:ss ssdd INFO PP-MISC-TBL pmid VALUE: n, REASON: reastxt

Format 2

PM118 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

#### Format 3

PM118 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit<unit\_no>: MtcArb is <state>

### Example

Examples of log report PM118 follow:

Example 1

PM118 APR01 12:00:00 2112 INFO PP-MISC\_TBL TM2 2
VALUE: 0, REASON: PP WAIT FOR MESSAGE TIMEOUT

```
PM118 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
    REASON: SIGNAL FAILED ON 2X38
    Unit0: MtcArb is disabled, Unit1: MtcArb is functional
Example 3
```

```
PM118 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
    REASON: SIGNAL FAILED ON 2X38
    Unit0: MtcArb is disabled
```

# **Field descriptions**

The following table describes the fields in the log report:

| Field            | Value                 | Description   |
|------------------|-----------------------|---|
| alarm            |                       | Optional field. Indicates the type of alarm that accompanies the change of state.   |
|                  | ***                   | Indicates a critical alarm.   |
|                  | **                    | Indicates a major alarm.  |
|                  | *                     | Indicates a minor alarm.  |
|                  | (blank)               | Indicates an alarm did not occur.   |
| INFO PP-MISC-TBL | Symbolic text         | Indicates miscellaneous trouble on a PP.  |
| TBL PP-HARDWARE  | Symbolic text         | Defines problem as a peripheral processor hardware or firmware error.   |
| pmid             | Symbolic text         | Indicates the affected PM.  |
| VALUE: n         | 0-1                   | Defines affected plane of PM.   |
| REASON: reastxt  | Symbolic text         | Identifies reason the system generates the log.   |
| Unit_no          | 0 or 1                | When MtcArb is loaded in only one PM unit, this field identifies that unit.   |
| state            | operating or disabled | Indicates the state of MtcArb in the XPM unit<br>when the log is formatted for display. This<br>state can differ from the state of the log when<br>the system generates the log. The possibility<br>of conflict increases as the period between log<br>generation and log formatting increases. |

### **PM118** (end)

### Action

If the system generates less than three reports in 2 min, there is no action required.

If the system generates three reports and a PM108 report that indicates a firmware error, check the PM for hardware faults. Follow the "Action" description for log report PM108.

If you do not find faults, load the PM again. This condition can indicate a corrupt load.

If the system continues to generate log report PM118, contact the next level of maintenance.

## **Associated OM registers**

### **Explanation**

The Peripheral Module (PM) subsystem generates log report PM119. The subsystem generates this report when integrity loss occurs on an intra-bay link or inter-bay link. A remote line module (RLM) channel reports an integrity failure or a parity failure while the RLM handles a call. The call does not involve a connection through the network in the host office.

# Format

The log report format for PM119 is as follows:

PM119 mmmdd hh:mm:ss ssdd INFO PP–INTEG–FLD pmid Location: <object description> REASON: <change reason>

# Example

An example of log report PM119 follows:

# Field descriptions

The following table describes the fields in the log report:

### (Sheet 1 of 2)

| Field             | Value         | Description  |
|-------------------|---------------|--|
| INFO PP-INTEG-FLD | Symbolic text | Indicates integrity lost on intra-bay or inter-bay link. |
| pmid              | Symbolic text | Indicates affected PM.                                   |
| PORT: n           | 0- 3          | Identifies line module (LM) port (RLM bay).              |
| PL: n             | 0             | Indicates plane 1 integrity failure; no call set up.     |
|                   | 1             | Indicates plane 1 accuracy failure; call set up.         |
|                   | 2             | Indicates plane 1 parity error; no call set up.          |
|                   | 3             | Indicates plane 1 parity error; call set up.             |
| PL: n (continued) | 4             | Indicates plane 0 integrity failure; no call set up.     |

# **PM119** (end)

### (Sheet 2 of 2)

| Field     | Value         | Description                                       |
|-----------|---------------|---|
|           | 5             | Indicates plane 0 integrity failure; call set up. |
|           | 6             | Indicates plane 0 parity error; no call set up.   |
|           | 7             | Indicates plane 0 parity error; call set up.      |
| CHNL: nnn | 0-119         | Provides LM (RLM bay) internal channel number.    |
| REASON:   | Symbolic text | Provides reason for integrity loss.               |

# Action

There is no action required.

# Associated OM registers

Refer to OM register PMFLT.

# **Additional information**

There is no additional information.

### Explanation

The Peripheral Module (PM) subsystem generates log report PM120. The subsystem generates this report when one or more peripheral processor (PP) error counters are not zero during a node audit. The counters are set to zero again.

# Example

An example of log report PM120 follows:

PM120 APR21 22:49:17 8110 INFO PP\_ERROR\_COUNTERS TM4 2
 NACKS\_SENT FALSE\_MIS NACKS\_REC MIS\_NOT\_RECOG
 EVEN/ODD\_PORT: 0/ 2 0/ 0 0/ 1
0/ 0
 LOST\_MSGS: 0,REP\_LOST\_BUF\_OVFL: 0, REP\_LOST\_LIM\_EXCD:
 0

# **Field descriptions**

The following table describes the fields in the log report:

| (Sheet | 1 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field                         | Value         | Description   |
|-------------------------------|---------------|---|
| INFO<br>PP_ERROR_COUNTE<br>RS | Constant      | Indicates one or more PP error counters are not zero  |
| pmid                          | Symbolic text | Indicates the affected PM.  |
| NACKS_SENT                    | Constant      | If NACK sends the number of messages to central control (CC). Provides header for NOT_ACKNOWLEDGE (NACK) SENT counter value.  |
| FALSE_MIS                     | Constant      | Provides header for FALSE MAY_I_SEND<br>(MIS) counter value. Indicates MIS from CC<br>and SEND dispatches back to CC, but CC<br>does not receive more messages before<br>timeout. |
| NACK_REC                      | Constant      | Provides header for NACK RECEIVED<br>counter value. Indicates NACK is received or<br>no ACKNOWLEDGE (ACK) is received from<br>CC before timeout.                                  |

## **PM120** (end)

(Sheet 2 of 2)

| Field                 | Value    | Description   |
|-----------------------|----------|---|
| MIS_NOT_RECOG         | Constant | Provides header for MIS NOT RECOGNIZED<br>counter value, that indicates MIS sends to CC.<br>The SEND does not return from CC before<br>timeout.   |
| EVEN/ODD_PORT         | 0-9999   | Provides header for counter values of both planes.  |
| LOST_MSG              | 0-9999   | Provides LOST MESSAGE counter value,<br>which indicates the reason for the lost the<br>messages. Double received NACK, invalid<br>command (length less than 9 bytes), network<br>module (NM) cannot send message to central<br>message controller (CMC), or no message<br>buffer, can result in a lost message. |
| REP_LOST_BUF_OVF<br>L | 0-9999   | Provides REPORT LOST BUFFER<br>OVERFLOW counter value that indicates<br>report from CC to PM dumped because report<br>buffer is not available.  |
| REP_LOST_LIM_EXCD     | 0-9999   | Provides REPORT LOST LIMIT EXCEEDED<br>counter value, that indicates report from CC to<br>PM is dumped. Report dumped because<br>number of reports is more than time frame can<br>support.  |

# Action

Check for continuous reports from same PM during normal operation.

- NACKS\_SENT, FALSE\_MIS, NACK\_REC, and MIS\_NOT\_RECOG errors can occur on both planes of network. To correct this condition, replace the 36 card (network interface).
- If these errors occur on only one plane, refer to other PM120 logs. Replace the message processor card in the associated PM.

If these actions do not correct the problem, contact the next level of maintenance.

# **Associated OM registers**

### Explanation

The Peripheral Module (PM) subsystem generates log report PM121. The system generates this report when the active high-level data link control (HDLC) link switches. The HDLC link switches between the host office digital carrier module (DCM) and the line module (LM) in the remote site. System noise can cause switchovers. Switchovers are not common.

# Format

The log report format for PM121 is as follows:

PM121 mmmdd hh:mm:ss ssdd INFO HDLC\_T1\_SWITCHOVER pmid From T1 n To T1 n

# Example

An example of log report PM121 follows:

PM121 APR01 12:00:00 2112 INFO HDLC\_T1\_SWITCHOVER TM4 2
From T1 0 To T1 1

# Field descriptions

The following table describes the fields in the log report:

| Field                          | Value         | Description  |
|--------------------------------|---------------|--|
| INFO<br>HDLC_T1_SWITCHOV<br>ER | Symbolic text | Indicates active HDLC that switches.                 |
| pmid                           | Symbolic text | PM Identification (pmid). Indicates the affected PM. |
| From T1 n                      | 0 or 1        | Provides previous HDLC link number.                  |
| To T1 n                        | 0 or 1        | Provides current HDLC link number.                   |

# Action

If switchovers occur more than one time every 30 s for a PM, check for bi-polar violations, loss of frame, and slips. Large numbers of bi-polar violations, loss of frame, and slips can indicate a T-1 facility fault. A T-1 line facility fault can be a defective DCM interface card (NT2X35) or a defective remote line module (RLM) T1 line card (NT3X48).

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**PM121** (end)

# **Associated OM registers**

### Explanation

The Peripheral Module (PM) subsystem generates log report PM122. The subsystem generates this report when a peripheral processor (PP) exception report occurs during normal operation.

The PM log contains the maintenance arbitrator (MtcArb) state (functional or disabled). The log contains MtcArb when MtcArb is present in the XPM load. The log format is Format 2 when a load that contains MtcArb is present in both XPM units. The log format is Format 3 when a load that contains MtcArb is present in only one of the units.

### Format

The log report formats for PM122 are as follow:

Format 1

PM122 mmmdd hh:mm:ss ssdd INFO PP-EXCPTN-RPT pmid excptxt CLCD=hhhh CT=hhhh RG=hhhh hhhh SP=hhhh RA=hhhh PS=hhhh

#### Format 2

PM122 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

### Format 3

PM122 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit<unit\_no>: MtcArb is <state>

# Example

Examples of log report PM122 follow:

Example 1

PM122 APR01 12:00:00 2112 INFO PP-EXCPTN-RPT HOST 01 1 LM 4 CC CHALRT CLCD=0101 CT=0004 RG=0F14 0209 0501 SP=AFEE RA=6EF7 PS=000F

#### Example 2

```
PM122 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
REASON: SIGNAL FAILED ON 2X38
Unit0: MtcArb is disabled, Unit1: MtcArb is functional
```

#### Example 3

```
PM122 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
    REASON: SIGNAL FAILED ON 2X38
    Unit0: MtcArb is disabled
```

## Field descriptions

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field              | Value         | Description  |
|--------------------|---------------|--|
| alarm              |               | Optional field. Indicates the type of alarm that accompanies the change of state.                                      |
|                    | ***           | Indicates a critical alarm.  |
|                    | **            | Indicates a major alarm.   |
|                    | *             | Indicates a minor alarm.   |
|                    | (blank)       | Indicates an alarm did not occur.  |
| INFO PP-EXCPTN-RPT | Symbolic text | Indicates PP exception report encountered.   |
| TBL PP-HARDWARE    | Symbolic text | Defines trouble as a peripheral processor hardware or firmware error.  |
| pmid               | Symbolic text | Indicates the PMID.  |
| excptxt            | Symbolic text | Indicates the reason the system generates log report PM122. Refer to table Exception reasons at the end of log report. |

| Field           | Value                 | Description   |
|-----------------|-----------------------|---|
| CLCD=nnnn       | 0000-FFFF             | Provides error class (CL) and error code (CD).<br>Bits 0-7 provide the error code. Bits 8-15<br>provide the error class. Values for error class<br>are:   |
|                 |                       | • 01= CC errors   |
|                 |                       | • 02= PP firmware exception errors  |
|                 |                       | • 03= PP SP firmware exception errors   |
|                 |                       | • 04= PP checksum errors  |
| CT=nnnm         | 0000-FFFF             | Provides error count.   |
| RG=nnnn         | 0000-FFFF             | Identifies registers.   |
| SP=nnnn         | 0000-FFFF             | Provides stack pointer value.   |
| RA=nnnn         | 0000-FFFF             | Provides register address.  |
| PS=nnnn         | 0000-FFFF             | Provides previously stacked data.   |
| REASON: reastxt | Symbolic text         | Identifies the reason the system generates the log. Identifies the product engineering code (PEC) for the suspect circuit pack.   |
| Unit_no         | 0 or 1                | When MtcArb is loaded in only one PM unit, this field identifies that unit.   |
| state           | operating or disabled | Indicates the state of MtcArb in the XPM unit<br>when the log is formatted for display. This<br>state can differ from the state of the log when<br>the system generates the log. The possibility<br>of a conflict increases as the period between<br>log generation and log formatting increases. |

#### (Sheet 2 of 2)

# Action

For additional help, contact the next level of maintenance.

# **Associated OM registers**

### **Error Table**

The following table describe the possible exception reasons.

### Exception reasons (Sheet 1 of 2)

| Class                  | Туре      | Description  |
|------------------------|-----------|--|
| CC CREATED<br>ERRORS:  |           |  |
|                        | CC CHALTR | Indicates channel has associated terminal  |
|                        | CCCHDGIV  | Indicates the digit group and channel-line drawer assignment conflict  |
|                        | CCDGCOER  | Indicates error in table-driven digit collection function  |
|                        | CCRLMTIV  | Indicates attempt of remote line module (RLM)<br>maintenance test on remote service module<br>(RSM) drawer; test skipped |
|                        | CCRSLTNR  | Indicates cdtb prime issues when line test unit (LTU) test position is not ready   |
|                        | CCRSMTIV  | Indicates attempt of RSM maintenance test when no RSM defined; test skipped  |
|                        | CCTRALCH  | Indicates terminal has associated channel  |
| PP CHECKSUM<br>ERRORS: | CKCMRA    | Indicates card NT2X22 connection random access memory (RAM) failure  |
|                        | CKEMRA    | Indicates card NT3X49 extension RAM failure  |
|                        | CKHDEP    | Indicates card NT3X47 high-level data link control (HDLC) process EPROM failure  |
|                        | СКМРЕР    | Indicates card NT2X26 master process<br>EPROM failure  |
|                        | CKMPRA    | Indicates card NT2X26 master process RAM failure   |
|                        | CKSPEP    | Indicates card NT2X24 signaling processor<br>EPROM failure   |
|                        | CKSPRA    | Indicates card NT2X24 signaling processor RAM failure  |
|                        | CKUTEP    | Indicates utility test card EPROM failure  |

# **PM122** (end)

### Exception reasons (Sheet 2 of 2)

| Class                              | Туре     | Description  |
|------------------------------------|----------|--|
| PP FIRMWARE<br>EXCEPTION ERRORS:   | PMDECDGR | Indicates decrease in the number of DGREC process from 0                         |
|                                    | PMINCDGR | Indicates increase in the number of DGREC when the count is FF                   |
|                                    | PMMSACIV | Indicates a message that is not expected is received                             |
|                                    | PMRSBUIV | Indicates wrong LTU buffer number for release                                    |
|                                    | PMRSCHMM | Indicates channel number of terminal is not equal to channel number in tpb table |
|                                    | PMRSCHMM | Indicates channel number of terminal is not equal to channel number in tpb table |
|                                    | PMRSCHNA | Indicates channel number in message does not associate to RSM terminal           |
|                                    | PMRSGT6B | Indicates register more than six LTU buffers                                     |
|                                    | PMRSTNIV | Indicates invalid RSM terminal number in tpb                                     |
|                                    | PMRSTNOR | Indicates terminal number out of range   |
|                                    | PMRSTPIV | Indicates invalid tp state for trunk scan message                                |
|                                    | PMRTTHEX | Indicates real time threshold exceeds limit                                      |
|                                    | PMSMSGEX | Indicates terminal processes receives more than 256 stray messages on start up   |
|                                    | PMTPACIV | Indicates invalid activity code for terminal processes                           |
| PP SP FIRMWARE<br>EXCEPTION ERRORS | SPRSLRIV | Indicates not ready to receive from LTU; read-pending                            |
|                                    | SPRSLXIV | Indicates not ready to send to LTU;<br>write-pending                             |

#### PM124

### Explanation

The Peripheral Module (PM) generates log report PM124 when a peripheral processor (PP) encounters miscellaneous problems during normal operation.

The PM log contains maintenance arbitrator (MtcArb) state (functional or disabled). The log contains MtcArb when MtcArb is present in the XPM load. The log format is Format 2 when a load that contains MtcArb is present in both XPM units. The log format is Format 3 when a load that contains MtcArb is present in only one of the units.

#### Format

The log report formats for PM124 are as follows:

Format 1

PM124 mmmdd hh:mm:ss ssdd INFO PP-MISC-TBL pmid REASON: reastxt vltnnm EC=hhhh TN=hhhh CP=hhhh OPC=hhhh hhhh hhhh EX= hhhh hhhh hhhh sQ=hhhh hhhh hhhh

#### Format 2

PM124 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

#### Format 3

PM124 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit<unit\_no>: MtcArb is <state>

#### Example

Examples of log report PM124 follow:

Example 1

PM124 APR01 12:00:00 2112 INFO PP-MISC-TBL REM1 00 0 LM 4 REASON: PP COMMAND PROTOCOL VIOLATION SV PSUF EC=0007 TN=0000 CP=BC09 OPC=0000 0000 0000 0500 EX= 0000 0000 0000 0000 SQ=0000 0516 0000 0105

#### Example 2

```
PM124 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
REASON: SIGNAL FAILED ON 2X38
Unit0: MtcArb is disabled, Unit1: MtcArb is functional
```

#### Example 3

```
PM124 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
    REASON: SIGNAL FAILED ON 2X38
    Unit0: MtcArb is disabled
```

# Field descriptions

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field            | Value         | Description   |
|------------------|---------------|---|
| alarm            |               | Optional field. Indicates the type of alarm that accompanies the change of state.                       |
|                  | ***           | Indicates a critical alarm.   |
|                  | **            | Indicates a major alarm.  |
|                  | *             | Indicates a minor alarm.  |
|                  | (blank)       | Indicates an alarm did not occur.   |
| INFO PP-MISC-TBL | Symbolic text | Indicates miscellaneous problem encountered.  |
| TBL PP-HARDWARE  | Symbolic text | Defines problem as a peripheral processor hardware or firmware error.                                   |
| pmid             | Symbolic text | Indicates the pmid.   |
| REASON           | Symbolic text | Identifies problem.   |
| vltnnm           | Symbolic text | The reason the system generates the log report; refer to table command protocol violations that follow. |
| EC=nnnn          | 0000-FFFF     | Provides error code.  |
| TN=nnnn          | 0000-FFFF     | Provides terminal number.   |
| CP=nnnn          | 0000-FFFF     | Provides command pointer value.   |

(Sheet 2 of 2)

| Field    | Value                 | Description   |
|----------|-----------------------|---|
| OPC=nnnn | 0000-FFFF             | Provides option code (opcode).  |
| EX=nnnn  | 0000-FFFF             | Additional problem isolation information.   |
| SQ=nnnn  | 0000-FFFF             | Additional problem isolation information.   |
| Unit_no  | 0 or 1                | When the MtcArb is loaded in only one PM unit, this field identifies the unit.  |
| state    | operating or disabled | Indicates the state of MtcArb in the XPM unit<br>when the log is formatted for display. This<br>state can differ from the state of the log when<br>the system generates the log. The possibility<br>of conflict increases as the period between log<br>generation and log formatting increases. |

# Table command protocol violation

The following list describes possible command protocol violations.

| Туре   | Description  |
|--------|--|
| CHDGIV | Conflict in digit group (channel-line drawer) assignment |
| CHIDIV | Invalid line module (LM) channel/process identification  |
| CHIDIV | Channel identification is invalid or out of range        |
| CHNTAS | There is no correct channel                              |
| DRHDNE | High-level data link control (HDLC) is not defined       |
| DRLKCL | Indicates link is not open                               |
| DRT1IV | Indicates specified T1 carrier is not in message group   |
| DTBFUS | Indicates data terminal pb buffer is in use              |
| DTXFNR | Data terminal input data not ready for transfer          |
| ESATOR | Indicates attribute table offset out of range            |
| ESENIV | Attempt to enter again emergency stand alone (ESA)       |
| ESLDNE | ESA load is not present; ESA enter ignored               |

### Command protocol violations (Sheet 1 of 3)

### Command protocol violations (Sheet 2 of 3)

| Туре   | Description   |
|--------|---|
| ESLVIV | Indicates attempt to leave ESA when not in ESA  |
| ESXLNA | ESA data base not active; ESA enter ignored   |
| EXENIV | Indicates ENDXEC attempt when not in an exec  |
| EXIDIV | Indicates exec identification is invalid or out of range  |
| EXIVEX | Indicates attempt to reference exec that is not defined   |
| EXSTOV | Indicates not enough store to save exec   |
| EXWRIV | Indicates exec store area write protection problem  |
| GLOFOR | Indicates global area offset out of range   |
| MTMSIG | CC hardware maintenance message too long  |
| MTPRIV | Indicates maintenance process identification invalid  |
| MTPRNS | Indicates maintenance process not stopped   |
| PRIDIV | Indicates parameter identity invalid  |
| PVBRIV | Indicates invalid branch value for primitive  |
| RLRSIV | Indicates an RLM to remote service module (RSM) switchover that is not permitted after first definition |
| RPHDOR | Attempt to write past report header with MRPHDR   |
| RPNTOP | Close report attempted when no report is open   |
| RPNTOP | Indicates attempt to write in report that is not present  |
| RPOFOR | Indicates not enough room in report   |
| RSTBOV | Indicates data terminal buffer overflow   |
| RSTPNR | Indicates terminal process does not run   |
| STBFOV | Indicates stacked AUX command buffer overflow   |
| STCMIV | Indicates invalid stacked command mode  |
| SVDCTO | Indicates PP server decoder timeout   |
| SVFCIV | Indicates invalid control/function code for primitive   |

# **PM124** (end)

| Туре   | Description   |
|--------|---|
| SVMBUF | Indicates server memory block counter underflow       |
| SVOPIV | Indicates primitive opcode is invalid or not assigned |
| SVPSOV | Indicates PP server decoder timeout                   |
| SVPSUF | Indicates not enough parameters on parameter stack    |
| SVRFIV | Indicates reflex message length is invalid            |
| SVSCIV | Security code violation on restricted opcode          |
| TDOFOR | Indicates terminal data area index out of range       |
| TNIVOR | Indicates terminal number is invalid or out of range  |
| TVOFOR | Terminal pb variable area offset out of range         |

#### Command protocol violations (Sheet 3 of 3)

# Action

For additional help, contact the next level of maintenance.

# **Associated OM registers**

### Explanation

The Peripheral Module (PM) subsystem generates log report PM125 after the detection of a firmware or hardware error in the peripheral processor (PP).

The maintenance arbitrator (MtcArb) state is operational or disabled. The PM log includes the MtcArb state when MtcArb is present in the XPM load. Log report PM125 uses format 2 when a load that contains MtcArb is present in both XPM units. Log report PM125 uses format 3 when a load that contains MtcArb is present in only one XPM unit.

### Format

The log report formats for PM125 are as follows:

Format 1

\*PM125 mmmdd hh:mm:ss ssdd TBL PP–HARDWARE pmid REASON: reastxt CT=hhhh RG=hhhh hhhh hhhh SP=hhhh RA=hhhh PS=hhhh

Format 2

PM125 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

#### Format 3

PM125 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit<unit\_no>: MtcArb is <state>

### Example

Examples of log report PM125 follow:

#### Example 1

\*PM125 APR01 12:00:00 2112 TBL PP-HARDWARE HOST 17 1 LM 35 REASON: PP FIRMWARE ERROR CT=000D RG=4000 B963 B960 AB72 SP=AFF4 RA=5972 PS=AB70

#### Example 2

```
PM125 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
REASON: SIGNAL FAILED ON 2X38
Unit0: MtcArb is disabled, Unit1: MtcArb is functional
```

#### Example 3

```
PM125 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
    REASON: SIGNAL FAILED ON 2X38
    Unit0: MtcArb is disabled
```

# Field descriptions

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field           | Value         | Description   |
|-----------------|---------------|---|
| alarm           |               | Optional field. Indicates the type of alarm that accompanied the change of state. |
|                 | ***           | Indicates a critical alarm.   |
|                 | **            | Indicates a major alarm.  |
|                 | *             | Indicates a minor alarm.  |
|                 | (blank)       | Indicates there is no alarm.  |
| TBL PP-HARDWARE | Symbolic text | Defines trouble as a peripheral processor hardware or firmware error.             |
| pmid            | Symbolic text | Indicates the pmid.   |
| REASON          | Symbolic text | Identifies the error.   |
| CT=nnnn         | 0000-FFFF     | Provides the error count.   |
| RG=nnnn         | 0000-FFFF     | Identifies registers.   |
| SP=nnnn         | 0000-FFFF     | Provides the stack pointer value.   |
| RA=nnnn         | 0000-FFFF     | Provides the register address.  |
| PS=nnnn         | 0000-FFFF     | Provides the previous stacked data  |

Log reports 1-515

# PM125 (end)

#### (Sheet 2 of 2)

| Field   | Value                   | Description   |
|---------|-------------------------|---|
| Unit_no | 0 or 1                  | When only one PM unit contains MtcArb, this field identifies that unit.   |
| state   | operational or disabled | Indicates the state of MtcArb in the XPM unit at<br>the time the log is formatted for display. This<br>state can be different from the state of the log<br>at the time the log generates. The possibility of<br>a discrepancy increases as the time between<br>log generation and log formatting increases. |

# Action

Retain this report and all reports that generate during a two min period after this report. Contact the next level of support.

# **Associated OM registers**

### PM126

### Explanation

The Peripheral Module (PM) subsystem generates log report PM126 when trouble (TBL) occurs in a peripheral processor (PP) during normal operation.

The maintenance arbitrator (MtcArb) state is operational or disabled. The PM log includes the MtcArb state when MtcArb is present in the XPM load. The log report uses format 2 when a load that contains MtcArb is present in both XPM units. The log report uses format 3 when a load that contains MtcArb is present in only one XPM unit.

### Format

The log report formats for PM126 are as follows:

Format 1

PM126 mmmdd hh:mm:ss ssdd INFO PP-MISC-TBL pmid REASON: reastxt vltnnm EC=hhhh TN=hhhh CP=hhhh OPC=hhhh

#### Format 2

PM126 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

#### Format 3

PM126 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit<unit\_no>: MtcArb is <state>

### Example

Examples of log report PM126 follow:

Example 1

PM126 APR01 12:00:00 2112 INFO PP-MISC-TBL LM HOST 00 0 REASON: PP COMMAND PROTOCOL VIOLATION SV PSUF EC=0007 TN=0002 CP=370B OPC=00EF

#### Example 2

```
PM126 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
REASON: SIGNAL FAILED ON 2X38
Unit0: MtcArb is disabled, Unit1: MtcArb is functional
```

#### Example 3

```
PM126 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
    REASON: SIGNAL FAILED ON 2X38
    Unit0: MtcArb is disabled
```

# Field descriptions

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field            | Value         | Description   |
|------------------|---------------|---|
| alarm            |               | Optional field. Indicates the type of alarm that accompanied the change of state. |
|                  | ***           | Indicates a critical alarm.   |
|                  | **            | Indicates a major alarm.  |
|                  | *             | Indicates a minor alarm.  |
|                  | (blank)       | Indicates there is no alarm.  |
| INFO PP-MISC-TBL | Symbolic text | Indicates detection of miscellaneous trouble.                                     |
| TBL PP-HARDWARE  | Symbolic text | Defines trouble as a peripheral processor hardware or firmware error.             |
| pmid             | Symbolic text | Indicates the pmid.   |
| REASON           | Symbolic text | Identifies trouble detected.  |
| vltnnm           | Symbolic text | Reason the system generates log report.   |
| EC=nnnn          | 0000-FFFF     | Provides error code.  |
| TN=nnnn          | 0000-FFFF     | Provides terminal number.   |
| CP=nnnn          | 0000-FFFF     | Provides command pointer value.   |
| OP=nnnn          | 0000-FFFF     | Provides opcode.  |

# PM126 (end)

(Sheet 2 of 2)

| Field   | Value                   | Description   |
|---------|-------------------------|---|
| Unit_no | 0 or 1                  | When one PM unit contains MtcArb, this field identifies that unit.  |
| state   | operational or disabled | Indicates the state of MtcArb in the XPM unit at<br>the time the log is formatted for display. This<br>state can be different from the state of the log<br>at the time the log generates. The possibility of<br>a discrepancy increases as the time between<br>log generation and log formatting increases. |

# Action

Contact the next level of support.

# **Associated OM registers**

### **Explanation**

The Peripheral Module (PM) subsystem generates log report PM127. The subsystem generates PM127 when the system forces high-level data link control (HDLC) link between host office and a remote peripheral out of service. The remote peripheral can be in an emergency stand alone (ESA) state.

# Format

The log report format for PM127 is as follows:

\*PM127 mmmdd hh:mm:ss ssdd PBSY CARRIER pmid SYNC VALUE: hhhh, REASON: reastxt

# Example

An example of log report PM127 follows:

\*PM127 APR01 12:00:00 2112 PBSY CARRIER DCM 2 SYNC VALUE: 0007, REASON: HDLC\_LINK\_DOWN

# Field descriptions

The following table describes each field in the log report:

| Field           | Value         | Description  |
|-----------------|---------------|--|
| PBSY CARRIER    | Symbolic text | Indicates the HDLC link between host office and remote peripheral forced out of service. |
| pmid            | Symbolic text | Indicates the affected PM.   |
| SYNC VALUE=nnnn | 0000-FFFF     | Provides sync value.   |
| REASON          | Symbolic text | Indicates the reason the system forced the HDLC link out of service.                     |

# Action

Check the HDLC link and the mate link, at PBsy CARRIER MAP to determine the cause of failure.

# **Associated OM registers**

### PM128

#### Explanation

The peripheral module (PM) subsystem generates a PM128 log when the PM encounters trouble (TBL) during normal operation. The PM state changes as a result of a system or manual request. In-service trouble (ISTb) conditions are usually not service affecting and are resolved by system action.

*Note:* For the SuperNode Data Manager (SDM), an ISTb condition indicates that one or more non-critical faults are present on the SDM. An SDM fault requires manual intervention to clear in most cases. For additional information, refer to the *SuperNode Data Manager User Guide* for your system.

One set of fault reasons, called power-miscellaneous alarms, is programmed during datafill in table RCSINV. This table contains a field named MISCTEXT (miscellaneous text) that can hold up to 16 characters. Operating company personnel can enter whatever text they want to describe the alarm, and this text appears in PM128 log reports when the associated alarm occurs. Typical entries are for high temperature, cabinet door open, flooding, and related problems. Another field in table RCSINV named ALMSEVER (alarm severity) is datafilled to indicate whether the alarm is minor or major.

*Note:* The sending of operation, administration, maintenance, and provisioning messages to corresponding remote digital terminals (RDT) is unavailable.

In NA006, the PM subsystem also generates a PM128 log when an operator centralization data link (OCDL) changes to either a system busy (SysB) or manual busy (ManB) state and causes the OC Enhanced Traffic Operator Position System (TOPS) message switch (ETMS) PM to change to a state of ISTb. When this condition occurs, ETMS OCDL OOS is displayed in the reason text of this log for the ETMS.

The PM subsystem generates a PM128 log when the Extended Peripheral Modules Diagnostics History feature (Diag Hist) system registers a hardware fault for the posted XPM and requires a check of the hardware system (such as the 6X69 messaging card) that is displayed in the Diag Hist system. When this condition occurs, DIAG HIST is displayed in the status report field of this log for the XPM.

### Format

The fields and entries associated with the maintenance arbitrator are optional, and apply only to XMS-based peripheral modules (XPMs). That is, these fields do not appear in all PM128 log reports. If maintenance arbitrator is not

loaded in one or both XPM units, the fields indicating the status of maintenance arbitrator in one or both units are not in the log report.

Formats for log report PM128 are as follows:

### Format 1

almPM128 mmmdd hh:mm:ss ssdd TBL ISTB pmid Node : ISTb <state info> Unit 0 <unit state/status info><sq> Unit 1 <unit state/status info><sq> Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

Format 1 is the default format for the PM128 log report. The PM subsystem generates this log when a PM state is set to TBL (trouble) due to a fault that does not affect service. This format is used for all TBL conditions not specifically covered by the additional formats.

### Format 2

PM128 mmmdd hh:mm:ss ssdd TBL ISTB pmid FROM: <previous PM state> REASON: <severity>: <trouble info>

Format 2 is generated when an alarm is reported for a line assigned to any of the following cards:

- NT7A20AA line card
- NT7A21AA line card
- NT7A23AA line card
- NT7A25AA line card
- NT7A26AA line card
- NT7A27AA line card

Format 2 is also generated when an alarm is cleared for a line assigned to an NT7A25AA, NT7A26AA, or NT7A27AA line card.

### Format 3

PM128 mmmdd hh:mm:ss ssdd TBL ISTB pmid ISTb (sq) <From <previous PM state> <sq>> <reason text>

Format 3 is generated when a Common Channel Signaling 7 (CCS7) link interface unit (LIU7) or multiple link interface unit (MLIU) has difficulty processing CCS7 messages because of real time limitations. This condition indicates that CCS7 messages are in danger of being discarded. Format 3 is also generated when the state of the SDM node changes to in-service trouble.

Where the link interface unit (LIU) is a multiple link interface unit (MLIU), the output string of this log is MLIU in place of LIU7.

*Note:* The previous PM state is only displayed if the state changes.

#### Format 4

PM128 mmmdd hh:mm:ss ssdd TBL ISTB pmid FROM: ISTb, Remote Initialization Complete:Backup Switchover remote initialization complete

#### Format 5

PM128 mmmdd hh:mm:ss ssdd TBL ISTB pmid FROM: ISTb <trouble reason> remote alarm <alarm info>

#### Format 6

PM128 mmmdd hh:mm:ss ssdd TBL ISTB pmid Node: ISTb <reason> Unit 0 <state/status info> FROM <previous unit state> Unit 1 <state/status info> FROM <previous unit state> Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

### Format 7

PM128 mmmdd hh:mm:ss ssdd TBL ISTB pmid remote initialization warning

### Format 8

PM128 mmmdd hh:mm:ss ssdd TBL ISTB pmid From <previous PM state>, REASON

### Format 9

PM128 mmmdd hh:mm:ss ssdd TBL ISTB pmid FROM: <previous PM state> REASON: <reason>

### Format 10

This format has two versions:

PM128 mmmdd hh:mm:ss ssdd TBL ISTB pmid FROM: <previous PM state> <trouble info>

PM128 mmmdd hh:mm:ss ssdd TBL ISTB pmid From <previous PM state>

### Format 11

PM128 mmmdd hh:mm:ss ssdd TBL ISTB pmid

- Node : ISTb <reason text> From Insv
- Unit 0 : ISTb <trouble info>
- Unit 1 : InSv

Unit0: MTCARB is <state>, Unit1: MTCARB is <state>

### Format 12

PM128 mmmdd hh:mm:ss ssdd TBL ISTB pmid Node : ISTb <reason text> From Sysb Unit 0 <state/status info> Unit 1 <state/status info>

#### Format 13

| PM128 mm | mdd hh:mm:ss ssdd TBL ISTB pmid            |
|----------|--|
| Node     | : ISTb <reason text=""> From InSv</reason> |
| Unit0    | <state info="" status=""></state>          |
| Unit1    | <state info="" status=""></state>          |

#### Example

Examples of log report PM128 follow:

#### Example 1

```
PM128 APR01 12:00:00 2112 TBL ISTB LGC 0
Node : ISTb (Unit ISTb, CSLink OOS)
Unit0 Inact : ISTb (PM Load)
Unit1 Act : ISTb (PM Load)
Unit0: MTCARB is functional, Unit1: MTCARB is disabled
```

Example 1 generates Format 1 when the PM encounters trouble during normal operation. The display shows the status of the node, Unit 0, and Unit 1, and reasons for the trouble.

#### Example 2

PM128 JUL05 11:07:14 1989 TBL ISTB RCS IDT 55 0
FROM: InSv, REASON: minor: Maintenance connection not
established

Example 2 generates Format 2 when a remote concentrator SLC-96 (RCS) peripheral module encounters problems that might affect service. Examples of faults that affect service are loss of commercial AC power to the RCS or failure of equipped ringing generators. Examples of faults that may not affect

service are disabling of a protection link or a fault on a protection link. An RCS and an RCU will both cause a PM128 log report when

- the state of the RCS or RCU changes from InSv to ISTb
- an alarm is set in the central control (CC) for an RCS or an RCU
- an alarm is cleared in the CC for an RCS or an RCU
- an alarm occurs or clears at the RCU.

#### Example 3

Example for an LCME:

PM128 MAY29 08:28:48 1990 TBL ISTB LCME 21 ISTb(NA) From InSv

Example for an SDM:

```
PM128 JAN20 23:11:10 1200 TBL ISTB SDM 0
ISTb from InSv
<reason_text>
```

Example 3 generates Format 3 when a PM encounters trouble during normal operation when any of the following PM types become ISTb:

- link interface module (LIM)
- application processing unit (APU)
- application processing unit with UNIX (APUX)
- data communication processor (DCP)
- link interface unit datacom (LCOM)
- external node (EXND)
- service peripheral module (SPM)
- voice processing unit (VPU)
- Packet Handler node (PHN)
- service processor with UNIX (SPX) Node
- SuperNode Data Manager (SDM)

```
PM128 APR01 11:23:44 2115 TBL ISTB RCU RCU0 00 1
FROM: ISTb, Remote Initialization Complete :Backup
Switchover
remote initialization complete
```

Example 4 generates Format 4 when an RCU completes initialization only if alarms still exist at the RCU; otherwise, a PM106 log is generated to indicate that initialization has completed.

#### Example 5

```
PM128 APR01 11:23:44 2115 TBL ISTB RCU RCU0 00 1
FROM: ISTb, Min loc=3,7 Card failure
remote alarm received
```

Example 5 generates Format 5 when an alarm occurs or clears at an RCU or ICB. Several types of alarms can occur on an RCU: line card, line card carrier, or common equipment card alarms; configuration alarms (where hardware equipped on a shelf does not match datafill); digital line alarms; and coded alarms. Coded alarms cover many faults, such as excessive bipolar violations, blown fuses, and faulty common equipment cards.

Coded alarms 120-130 are programmable spare RCU alarms. Coded alarms 600-625 and 700-725 are special service module alarms. The text that appears in log reports when these alarms occur is datafilled in field RCUSPALM of table RCUINV.

If the alarm occurs at an integrated channel bank (ICB), the log reports the following:

- ICB number
- link number
- if the link is out of service (remote alarm received)
- if the link was returned to service (remote alarm cleared)

```
PM128 JAN09 09:43:02 6994 TBL ISTB LTC 1
Node : ISTb (Unit ISTb)
Unit 0 Act: InsV
Unit 1 Inact: ISTB (CMR Load) FROM InSv
```

Example 6 generates Format 6 when a unit goes into the ISTb state. It is also generated for the detection of a hard-memory parity fault. A hard-memory parity fault results in the generation of a faulty card list. The unit remains system busy (SysB) until the faulty card(s) is replaced. The unit must be reloaded and returned to service (RTS) manually.

When the XMS-based peripheral module (XPM) is a subscriber carrier module-100 urban (SMU) RCU, log report PM128 indicates that the CLASS modern resource (CMR) card is no longer functioning and implies that the Calling Number Delivery feature is not working for terminating lines on the RCU. In order to recover from this fault, the operating company personnel must switch activity (SWACT) from the SMU to the other unit.

### Example 7

PM128 APR01 11:23:44 2115 TBL ISTB RCU RCU0 00 1
 remote initialization warning

Example 7 generates Format 7 when the remote carrier urban (RCU) warns that it is about to initialize. The following RCU maintenance card faceplate and MAP commands cause backup switchover initialization:

- P6011 (RCU maintenance card faceplate command)
- P6022 (RCU maintenance card faceplate command)
- P6044 (RCU maintenance card faceplate command)
- BCKPSEL (PM level MAP command)
- TST (PM level MAP command)

### Example 8

PM128 FEB10 13:18:10 4523 TBL ISTB LDT PSAP 04 0
From InSv, REASON:

Example 8 generates Format 8 from the line appearance on a digital trunk (LDT) subsystem when the LDT is made ISTb by the system.

```
PM128 JUL05 11:07:14 1989 TBL ISTB pmid
FROM: ISTB REASON: EOC d1B Sync. in Progress
PM128 JUL05 11:07:14 1989 ISTB IDT55
FROM: ISTB REASON EPC D/B Corrupted
```

Example 9 generates Format 9 when the EOC d1B Sync.in Progress occurs in the process of synchronizing the embedded operations channel (EOC) local object database corresponding international digital trunk (IDT). The EOC D/B Corrupted log occurs when the information in the EOC local object database is known to be incorrect for the RDT corresponding to a particular IDT.

#### Example 10

PM128 JUL05 11:07:14 7306 TBL ISTB IDT12
FROM: InSv
Fault occurred on the channel

Example 10 generates Format 10 when the IDT becomes ISTb, or when an additional ISTb reason is detected.

PM128 JUN27 10:41:21 5678 TBL ISTB OSNM 0 ISTB from INSV REASON: Session pool out of service

In the previous example PM128 is generated when a service node goes from InSv to IsTb due to a session pool going out-of-service (SySb or ManB).

#### Example 11

```
PM128 JAN02 11:06:49 3804 TBL ISTB LGC HOST 00 0
Node : ISTb (Unit ISTb) From InSv
Unit 0: ISTb (Rex Failed)
Unit 1: InSv
Unit0: MTCARB is functional, Unit1: MTCARB is disabled
```

Example 11 uses Format 11 to display the state of the two units, here indicating that unit 0 went from an in-service (InSv) state to an ISTb state due to a routine exercise (REx) failure reason, and that unit 1 is InSv.

```
PM128 MAR10 05:36:01 2323 TBL ISTB RCC 0
Node : ISTb (Inact OOS) From SysB
Unit 0 Inact: SysB (XPM in ESA)
Unit 1 Act: InSv From SysB (XPM in ESA
```

Example 12 uses Format 12 to indicate a system busy reason of XPM in emergency stand-alone (ESA) when a remote carrier cluster (RCC) is returned to service after entering ESA over a central control (CC) warm or cold restart.

#### Example 13

| PM128 | MAR22 | 12:16:1 | 16 170 | )1 TBL | ISTE  | B DTC | 0    |
|-------|-------|---------|--------|--------|-------|-------|------|
| Nod   | le    | :       | ISTb   | (Unit  | ISTb) | From  | InSv |
| Uni   | t0    | Act:    | ISTb   | (Diag  | Hist) | From  | InSv |
| Uni   | .t1   | Inact:  | InSv   |        |       |       |      |

Example 13 uses Format 13 to indicate that the Diag Hist system registers a hardware fault for that XPM and requires a check of the hardware system (such as the 6X69 messaging card) that is displayed in the Diag Hist system. In order to recover from this fault, the operating company personnel must perform a SWACT FORCE, since a simple BSY/RTS will not do the work.

## **Field descriptions**

The following table explains each of the fields in the log report.

| (Sheet 1 | l of 10) |
|----------|----------|
|----------|----------|

| Field | Value    | Description  |
|-------|----------|--|
|       |          |  |
| alm   | ***      | Optional field indicating a critical alarm.                        |
|       | **       | Optional field indicating a major alarm.                           |
|       | *        | Optional field indicating a minor alarm.                           |
|       | (blank)  | Indicates no alarm.  |
|       | mmmdd    | Month and day the log report was generated, for example, OCT25.    |
|       | hh:mm:ss | Time the log report was generated, in hours, minutes, and seconds. |

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| Field                  | Value  | Description  |
|------------------------|--|--|
| TBL ISTB               | constant                                       | Indicates the node (PM) is in-service trouble.   |
| pmid                   | alphanumeric text                              | Identifies the affected PM.  |
| Node :                 | constant                                       | Indicates the state of the node (PM) follows.  |
| state info             | Unit ISTb <reason text=""></reason>            | Indicates a unit is in-service trouble, and indicates the reason for the in-service trouble (reason text). See example 1.  |
|                        | Unit ISTb                                      | Indicates a unit has gone into the in-service trouble state. See example 6.  |
|                        | From InSv                                      | Indicates a unit went from in-service. See example 11.   |
|                        | <reason text=""> From<br/>SysB</reason>        | Indicates the previous state of the node was<br>system busy, and indicates the reason for the<br>system-busy state (reason text). See<br>example 12.   |
| sq                     | RU, NA, or blank                               | Provides the status qualifier, which can be<br>not accessible (NA), or resources<br>unavailable (RU). RU is printed only when<br>the PM in question is a link interface module<br>(LIM). See format 1. |
| ISTb                   | constant                                       | Indicates the node (PM) is in-service trouble.   |
| Unit n                 | n = 0 or 1                                     | Identifies the PM unit number.   |
| unit state/status info | InSv   | Indicates the unit is in-service (InSv). See example 11.   |
|                        | Act or Inact: InSv                             | Indicates the unit is active (Act) or inactive (Inact), and in-service (InSv). See example 6.  |
|                        | Act or Inact <reason<br>text&gt;</reason<br>   | Indicates the unit is active (Act) or inactive (Inact), and indicates the reason for the trouble (reason text). See example 11.  |
|                        | Act or Inact ISTb<br><reason text=""></reason> | Indicates the unit is active (Act) or inactive (Inact), is in-service trouble, and the indicates reason for the in-service trouble state (reason text). See examples 1 and 11.                         |

| (Sheet | 3 | of | 10) |  |
|--------|---|----|-----|--|
|--------|---|----|-----|--|

| Field             | Value  | Description  |
|-------------------|--|--|
|                   | Act or Inact SysB<br><reason text=""></reason> | Indicates the unit is active (Act) or inactive (Inact), is system busy, and indicates the reason for the system busy state. See example 12.                      |
| FROM              | constant                                       | Indicates the previous state of the PM follows.  |
| previous PM state | InSv, ManB, SysB, CBsy                         | Indicates the previous state of the PM.  |
| REASON:           | constant                                       | Indicates the reason for the trouble follows.<br>May also indicate whether the trouble is<br>minor (not service-affecting) or major<br>(service-affecting).      |
| severity          | major, minor                                   | This optional field indicates trouble severity.<br>Minor indicates the trouble is not<br>service-affecting. Major indicates the trouble<br>is service-affecting. |
| trouble reason    | text   | Indicates the reason for the in-service trouble condition. See examples 2, 4, 8, 9, and 10.  |
|                   | Min loc= x,y line card z                       | Indicates a line card failed or is missing:  |
|                   | failure or missing                             | • Min indicates a minor alarm.   |
|                   |  | <ul> <li>x refers to the RCU shelf where the card<br/>has failed or is missing.</li> </ul>   |
|                   |  | • y refers to the slot where the fault exists.   |
|                   | Min loc= x,y card failure                      | Indicates a common equipment card or line card carrier failed:   |
|                   |  | • Min indicates a minor alarm.   |
|                   |  | <ul> <li>x refers to the RCU shelf on which the<br/>fault exists, where:</li> </ul>  |
|                   |  | <ul> <li>x refers to the RCU shelf where the<br/>line card has failed or is missing</li> </ul>   |
|                   |  | <ul> <li>y refers to the slot on this shelf where<br/>the card has failed or is missing.</li> </ul>  |
|                   |  | <ul> <li>z refers to the position of the card on<br/>the line card carrier, with 1 being the<br/>top position and 4 or 8 the bottom<br/>position.</li> </ul>     |

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| Field | Value   | Description  |  |
|-------|---|--|--|
|       | Min loc= x,y  | Indicates a minor configuration alarm:   |  |
|       | configuration alarm   | <ul> <li>Min indicates hardware equipped on a<br/>shelf or multiple shelves does not match<br/>datafill.</li> </ul>  |  |
|       |   | <ul> <li>x indicates the shelf on which the<br/>discrepancy exists.</li> </ul>   |  |
|       |   | <ul> <li>y indicates the slot where the<br/>discrepancy exists.</li> </ul>   |  |
|       | Min loc= x,y line card z<br>refresh failure                 | Min indicates a minor alarm that applies to 7A20AA, 7A21AA, and 7A23AA line cards. The line card could not be provisioned.   |  |
|       | Min loc= x,y line card z<br>failure, CGA set                | Min indicates a minor alarm that applies to 7A20AA, 7A21AA, and 7A23AA line cards. A line card had a hardware failure.   |  |
|       | Min loc= x,y line card z<br>provisioning<br>incompatibility | Min indicates a minor alarm that applies to<br>7A20AA, 7A21AA, and 7A23AA line cards.<br>The card in the slot does not match the<br>cardcode value in table LNINV.   |  |
|       | Min loc= x,y line card z<br>missing                         | Min indicates a minor alarm that applies to<br>7A20AA, 7A21AA, and 7A23AA line cards.<br>The line card has been provisioned but is not<br>in the slot.   |  |
|       | Min loc= x,y line card z<br>signaling module<br>missing     | Min indicates a minor alarm that applies to<br>7A20AA, 7A21AA, and 7A23AA line cards.<br>The line card assigned requires a signaling<br>module (SM) to be assigned in the next slot,<br>and the SM is not there. |  |
|       | Min loc= x,y invalid line card carrier present              | Min indicates a minor alarm that applies to<br>7A20AA, 7A21AA, and 7A23AA line cards.<br>The line card is provisioned but is not<br>provisioned into the correct slot.   |  |
|       | Min loc= x,y line card carrier missing                      | Min indicates a minor alarm that applies to 7A20AA, 7A21AA, and 7A23AA line cards. The line card is provisioned, but is missing.   |  |

| Field | Value  | Description   |
|-------|--|---|
|       | Min loc= x,y line card z<br>does not match the<br>CARDCODE | Min indicates a minor alarm that applies to<br>7A20AA, 7A21AA, and 7A23AA line cards.<br>The line card provisioned in LNINV does not<br>match the card that is in the slot.   |
|       | Maj code=xxx digital line<br>failure                       | Maj refers to a major alarm, here a digital line<br>failure alarm, where code xxx (001-008)<br>refers to the number of the digital line that<br>failed. The top digital line (shelf 5) is coded<br>001, and the bottom digital line (shelf 1) is<br>coded 008.  |
|       | Maj code= zzz <code<br>text&gt;</code<br>                  | Maj refers to a major alarm such as a blown fuse.   |
|       |  | <ul> <li>zzz refers to the three-digit code of the<br/>major alarm.</li> </ul>  |
|       |  | <ul> <li><code text=""> takes many text strings.</code></li> </ul>  |
|       | ISTb multiple card fault                                   | Indicates a line card of RCT 0 was tested and<br>found faulty, but not enough line cards were<br>tested to determine if it is actually a line card<br>or buffer card (for example, QPP496) fault.<br>This log tells operating company personnel to<br>replace the list of cards tested in the order<br>displayed on the MAP terminal. |
|       |  | ACTION: At the MAP display, post the RCT<br>indicated in the log and enter QUERYPM<br>FLT. Note the card list. Replace the cards in<br>the order shown, entering TST after each<br>replacement. If the failure continues, replace<br>the next card in the list.   |

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| Field | Value   | Description  |
|-------|---|--|
|       | ISTb line card tested on<br><shelf> <card></card></shelf> | Indicates a designated card on the specified<br>shelf was tested and found faulty, but not<br>enough line cards were tested to determine if<br>it is actually a line card or buffer card (for<br>example, QPP496) fault. This log tells<br>operating company personnel to replace the<br>list of cards tested in the order displayed on<br>the MAP terminal. |
|       |   | ACTION: At the MAP display, post the RCT<br>indicated in the log and enter QUERYPM<br>FLT. Note the card list. Replace the cards in<br>the order shown, entering TST after each<br>replacement. If the fault continues, then<br>replace the next card in the list.   |
|       | ISTb line card fault on<br><shelf> <card></card></shelf>  | Indicates a fault occurred on the specified line card on the specified shelf.  |
|       |   | ACTION: At the MAP display, post the RCT<br>indicated in the log and enter QUERYPM<br>FLT. Note the card list. Replace the cards in<br>the order shown, entering TST after each<br>replacement. If the fault continues, then<br>replace the next card in the list.   |
|       | ISTb buffer card tested<br>on <shelf></shelf>             | Indicates a buffer card on the specified shelf<br>was tested and found faulty, but not enough<br>line cards were tested to determine if it is<br>actually a line card or buffer card (for<br>example; QPP496) fault. This log tells<br>operating company personnel to replace the<br>list of cards tested in the order displayed on<br>the MAP terminal.     |
|       |   | ACTION: At the MAP display, post the RCT<br>indicated in the log and enter QUERYPM<br>FLT. Note the card list. Replace the cards in<br>the order shown, entering TST after each<br>replacement. If the fault continues, then<br>replace the next card in the list.   |

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|-----------------|
|-----------------|

| Field | Value   | Description   |
|-------|---|---|
|       | ISTb Buffer card fault on<br><shelf> <card></card></shelf>      | Indicates a fault occurred on the buffer card on the specified shelf.   |
|       |   | ACTION: At the MAP display, post the RCT indicated in the log and enter QUERYPM FLT. Note the card list. Replace the cards in the order shown, entering TST after each replacement. If the fault continues, then replace the next card in the list. |
|       | ISTb driver card <num.><br/>Fault on <digroup></digroup></num.> | Indicates fault of specified driver card on designated digroup.   |
|       |   | ACTION: At the MAP display, post the RCT indicated in the log and enter QUERYPM FLT. Note the card list. Replace the cards in the order shown, entering TST after each replacement. If the fault continues, then replace the next card in the list. |
|       | ISTb address control<br>fault on <digroup></digroup>            | Indicates a fault of the address control card (for example, QPP417) on indicated digroup.   |
|       |   | ACTION: At the MAP display, post the RCT indicated in the log and enter QUERYPM FLT. Note the card list. Replace the cards in the order shown, entering TST after each replacement. If the fault continues, then replace the next card in the list. |

### (Sheet 8 of 10)

| Field | Value                                   | Description   |
|-------|---|---|
|       | ISTb address control fault              | Indicates a fault of the address control card (for example, QPP417) on either digroup A and/or B of designated RCT.   |
|       |   | ACTION: At the MAP display, post the RCT<br>indicated in the log and enter QUERYPM<br>FLT. Note the card list. Replace the cards in<br>the order shown, entering TST after each<br>replacement. If the fault continues, then<br>replace the next card in the list.  |
|       |   | <i>Note:</i> RCT register audit cannot determine which address control on digroup A or B is faulty. Therefore, when replacing suspect address control card(s) found by the audit, replace the address control card on digroup A if digroup A is in-service; otherwise, replace the address control card on digroup B. |
|       | ISTb <digroup> card<br/>fault</digroup> | Indicates a fault of the designated digroup card (for example, QPP419).   |
|       |   | ACTION: At the MAP display, post the RCT<br>indicated in the log and enter QUERYPM<br>FLT. Note the card list. Replace the cards in<br>the order shown, entering TST after each<br>replacement. If the fault continues, then<br>replace the next card in the list.  |
|       | ISTb alarm card fault                   | Indicates a fault of the alarm card (QPP420).   |
|       |   | ACTION: At the MAP display, post the RCT<br>indicated in the log and enter QUERYPM<br>FLT. Note the card list. Replace the cards in<br>the order shown, entering TST after each<br>replacement. If the fault continues, then<br>replace the next card in the list.  |

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|-----------------|--------|------|-----|
|-----------------|--------|------|-----|

| Field                         | Value                | Description   |
|-------------------------------|----------------------|---|
|                               | ISTb SLT card fault  | Indicates a fault of the SLT card.  |
|                               |                      | ACTION: At the MAP display, post the RCT<br>indicated in the log and enter QUERYPM<br>FLT. Note the card list. Replace the cards in<br>the order shown, entering TST after each<br>replacement. If the fault continues, then<br>replace the next card in the list.  |
|                               | ISTb Diag Hist fault | Indicates that a hardware failure is pegged<br>against the Diag Hist system, which displays<br>the history of diagnostic failures for the<br>posted peripheral.   |
|                               |                      | ACTION: At the MAP display, post the<br>peripheral and enter QUERYPM DIAGHIST<br>to list the card (for example, a 6X69<br>messaging card) associated with the fault.<br>The only way to clear this alarm is to perform<br>a SWACT FORCE, since a simple BSY/RTS<br>will not do the work.  |
| Link                          | 1 to 4               | Indicates a link to an ICB. This link is out of service if the remote alarm is received. This link is in service if the remote alarm cleared.   |
| state/status info             | text                 | Indicates the state and status (Act or Inact) of<br>the PM unit, and provides additional<br>information regarding the faulty card(s). See<br>example 6.   |
| remote initialization warning | constant             | Indicates that an RCU is about to initialize.<br>See example 7.   |
| Unit 0: MTCARB is             | constant             | Indicates the current state of the<br>maintenance arbitrator in XPM unit 0 follows.<br>This is an optional field that applies only to<br>digital trunk controllers (DTCs), line trunk<br>controllers (LTCs), and line group controllers<br>(LGCs). When the XPM maintenance<br>arbitrator is not loaded in the unit, the field is<br>blank. |

#### (Sheet 10 of 10)

| Field             | Value                | Description  |
|-------------------|----------------------|--|
| Unit 1: MTCARB is | constant             | Indicates the current state of the<br>maintenance arbitrator in XPM unit 0 follows.<br>This is an optional field that applies only to<br>digital trunk controllers (DTC), line trunk<br>controllers (LTC), and line group controllers<br>(LGC). When the XPM maintenance<br>arbitrator is not loaded in the unit, the field is<br>blank. |
| state             | functional, disabled | The current state of the maintenance arbitrator in the XPM unit.   |
| sw_nm             | alphanumeric         | Optional field. Indicates the name of the switch associated with the PH node ISTb condition.   |

# Action

This section explains the actions to take for the following situations:

- line card faults and alarms
- RSC problems
- SDM problems
- miscellaneous problems and alarms

#### Line card faults and alarms

A multiple line card fault indicates that a line card of the remote concentrator terminal (RCT) 0 was tested and found faulty, but not enough line cards were tested to determine if it is actually a line card or buffer card (for example, a QPP496) fault. The log report tells the operating company personnel to replace the list of cards tested in the order shown on the MAP display.

At the MAP terminal, post the RCT indicated in the log and enter the QUERYPM FLT command. Note the card list. Replace the cards in the order shown on the MAP display, entering the TST command after each replacement. If the fault continues, replace the next card in the list.

An ISTb line card tested on a shelf card fault indicates that a designated card on the specified shelf was tested and found faulty, but not enough line cards were tested to determine if it is actually a line card or buffer card (for example, the QPP496) fault. This log tells the operating company personnel to replace the list of cards tested in the order shown on the MAP display.

At the MAP terminal, post the RCT indicated in the log and enter the QUERYPM FLT command. Note the card list. Replace the cards in the order shown on the MAP display, entering the TST command after each replacement. If the fault continues, replace the next card in the list.

An ISTb buffer card on a shelf fault indicates that a buffer card on a shelf was tested and found faulty, but not enough line cards were tested to determine if it is actually a line card or buffer card (for example; the QPP496) fault. This log tells operating company personnel to replace the list of cards tested in the order shown on the MAP display.

At the MAP terminal, post the RCT indicated in the log and enter the QUERYPM FLT command. Note the card list. Replace the cards in the order shown, entering the TST command after each replacement. If the fault continues, replace the next card in the list.

An ISTb buffer card fault on a shelf indicates a fault was detected in the buffer card (for example, the QPP496) on the specified shelf.

At the MAP terminal, post the RCT indicated in the log and enter the QUERYPM FLT command. Note the card list. Replace the cards in the order shown on the MAP display, entering the TST command after each replacement. If the fault continues, replace the next card in the list.

*An ISTb driver card <Num.> fault on <Digroup>* indicates a fault of specified driver card on designated digroup.

At the MAP terminal, post the RCT indicated in the log and enter the QUERYPM FLT command. Note the card list. Replace the cards in the order shown on the MAP display, entering the TST command after each replacement. If the fault continues, replace the next card in the list.

*An ISTb address control fault on <Digroup>* indicates a fault of the address control card (QPP417) on indicated digroup.

At the MAP terminal, post the RCT indicated in the log and enter the QUERYPM FLT command. Note the card list. Replace the cards in the order shown on the MAP display, entering the TST command after each replacement. If the fault continues, replace the next card in the list.

An ISTb address control fault indicates a fault of the address control card (QPP417) on either digroup A and/or B of designated RCT.

At the MAP display, post the RCT indicated in the log and enter the QUERYPM FLT command. Note the card list. Replace the cards in the order

# PM128 (end)

shown on the MAP display, entering the TST command after each replacement. If the fault continues, replace the next card in the list.

### Explanation

The peripheral module (PM) subsystem generates log report PM129 when table LMOVCODE changes. The PM129 provides a hard copy record of changes to the LMOVCODE table. Log report PM129 uses format 1.

The PM log includes the maintenance arbitrator (MtcArb) state (either functional or disabled) when MtcArb is present in the XPM load. This log uses format 2 when a load that contains MtcArb is present in both XPM units. This log uses format 3 when a load that contains MtcArb is present in only one of the units.

## Format

The log report formats for PM129 are as follows:

Format 1

PM129 mmmdd hh:mm:ss ssdd INFO REASON: reastxt

Format 2

PM129 mmmdd hh:mm:ss ssdd INFO REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

#### Format 3

PM129 mmmdd hh:mm:ss ssdd INFO REASON: reastxt Unit<unit\_no>: MtcArb is <state>

# Example

Examples of log report PM129 are as follows:

Example 1

PM129 APR12 12:23:37 2112 INFO DATA CHANGED REASON: DIGIT\_COLLECTION\_DATA\_CHANGED

Example 2

```
PM129 APR12 12:23:37 2112 INFO DATA CHANGED
REASON: DIGIT_COLLECTION_DATA_CHANGED
Unit0: MtcArb is disabled, Unit1: MtcArb is functional
```

#### Example 3

```
PM129 APR12 12:23:37 2112 INFO DATA CHANGED
REASON: DIGIT_COLLECTION_DATA_CHANGED
Unit0: MtcArb is disabled
```

# **Field descriptions**

Descriptions of each field in the log report appear in the following table:

| Field           | Value                  | Description   |
|-----------------|------------------------|---|
| alarm           |                        | Optional field. Indicates the type of alarm that accompanies the change of state.   |
|                 | ***                    | Indicates a critical alarm.   |
|                 | **                     | Indicates a major alarm.  |
|                 | *                      | Indicates a minor alarm.  |
|                 | (blank)                | Indicates an alarm did not occur.   |
| INFO            | Constant               | Informs of activity on the PM.  |
| REASON: reastxt | Symbolic text          | Identifies the reason the system generated the log. Identifies the product engineering code (PEC) for the suspect circuit pack.   |
| Unit_no         | 0 or 1                 | When only one PM unit includes MtcArb, identifies that unit.  |
| state           | functional or disabled | Indicates the state of MtcArb in the XPM unit at<br>the time the system formats the log for display.<br>There can be a difference between this state<br>and the state of the log when the system<br>generated the log. The possibility of a<br>difference increases as the time between the<br>log generation and log formatting increases. |

# Action

When table LMOVCODE changes, reload the static data to any line group controllers (LGC) and signaling terminal controllers (STC). Busy and return-to-service (RTS) any line modules (LM).

# **Associated OM registers**

There are no associated OM registers.

#### PM130

#### Explanation

The Peripheral Module (PM) subsystem log report PM130. Log PM130 appears when the SwAct (SWitching ACTion between central control) flag is set to a value that is not zero. This action occurs during warm SwAct. The flag must be reset to zero for audits and returns to service (RTS) to function.

This log indicates that the audit or a manual RTS resets the flag to zero.

The subsystem adds the maintenance arbitrator (MtcArb) state (operating or disabled) to the PM log when MtcArb is present in the XPM load. The system uses format 2 when a load that contains MtcArb is in both XPM units. The system uses format 3 when a load that contains MtcArb is in one unit.

#### Format

The log report formats for PM130 are as follows:

Format 1

PM130 mmmdd hh:mm:ss ssdd INFO AUDIT\_SWCT\_FLAG pmid VALUE: nnnnn REASON: PM\_SWCT\_FLAG\_SET

Format 2

PM130 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

#### Format 3

PM130 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit<unit\_no>: MtcArb is <state>

#### Example

Examples of log report PM130 follow:

#### Example 1

PM130 APR01 12:00:00 2112 INFO AUDIT\_SWCT\_FLAG DCM 2
VALUE: 3 REASON: PM\_SWCT\_FLAG\_SET

# PM130 (continued)

#### Example 2

```
PM130 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
REASON: SIGNAL FAILED ON 2X38
Unit0: MtcArb is disabled, Unit1: MtcArb is functional
```

#### Example 3

```
PM130 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
REASON: SIGNAL FAILED ON 2X38
Unit0: MtcArb is disabled
```

### Field descriptions

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                        | Value         | Description  |
|------------------------------|---------------|--|
| alarm                        |               | Optional field. Indicates the type of alarm, if an alarm occurs, that accompanies the change of state.   |
|                              | ***           | Indicates a critical alarm.  |
|                              | **            | Indicates a major alarm.   |
|                              | *             | Indicates a minor alarm.   |
|                              | (blank)       | Indicates that an alarm did not occur.   |
| INFO<br>AUDIT_SWCT_FLAG      | Symbolic text | Indicates SWCT_EXEC_VALID_FLAG is not zero.  |
| TBL PP-HARDWARE              | Symbolic text | Defines trouble as a peripheral processor hardware or firmware error.  |
| pmid                         | Symbolic text | Identifies affected PMs. Refer to descriptions for pmid in Table I at the beginning of this document.  |
| VALUE: nnnnn                 | 1-32767       | Provides flag value.   |
| REASON: PM_SWCT<br>_FLAG_SET | Constant      | Indicates that the flag is reset to zero.  |
| REASON: reastxt              | Symbolic text | Identifies the reason the system generates this<br>log and also identifies the product engineering<br>code (PEC) for the suspect circuit pack. |

# **PM130** (end)

(Sheet 2 of 2)

| Field   | Value                  | Description   |
|---------|------------------------|---|
| Unit_no | 0 or 1                 | When MtcArb is in one PM unit, this field identifies that unit.   |
| state   | functional or disabled | Indicates the state of MtcArb in the XPM unit at<br>the time the system formats the log for display.<br>The MtcArb state can differ from the state of<br>the log at the time the system generates this<br>log. The possibility of a difference increases<br>as the time between log generation and log<br>formatting increases. |

# Action

There is no action required.

# **Associated OM registers**

There are no associated OM registers.

### Explanation

The Peripheral Module (PM) subsystem generates PM131 when a state change occurs because of the routine exercise (REX) test. A system or manual request causes the PM to change state.

Format 1 is the default format for the PM131 log report. The PM subsystem generates this log when a PM state changes because of a REX test. Use this format for all trouble (TBL) conditions not covered by the additional formats.

The maintenance arbitrator (MtcArb) state (functional or disabled) is appended to the PM log when MtcArb is present in the XPM load. Use format 2 when a load that contains MtcArb is present in both XPM units. Use format 3 when a load that contains MtcArb is present in only one of the units.

# Format

The log report formats for PM131 are as follow:

Format 1

| PM131 mmmdd hh:mm:ss ssdd |                                  |  |
|---------------------------|----------------------------------|--|
| Node                      | : statxt (sq) (reastxt) opttxt3  |  |
| opttxt2                   |                                  |  |
| Unit n actxt              | : statxt1 (sq) (reastxt) opttxt1 |  |
| Unit n actxt              | : statxt1 (sq) (reastxt) opttxt1 |  |

#### Format 2

PM131 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

#### Format 3

PM131 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit<unit\_no>: MtcArb is <state>

# Example

Examples of log report PM131 follow:

Example 1

### PM131 (continued)

```
PM131 APR01 12:00:00 2112 INFO LGC 0
Node : INSV (REX)
Unit0 Inact : INSV (PM Load)
Unit1 Act : INSV (PM Load)
Example 2
PM131 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
REASON: SIGNAL FAILED ON 2X38
Unit0: MtcArb is disabled, Unit1: MtcArb is functional
Example 3
PM131 APR01 12:00:00 2112 TBL PP-HARDWARE DCM 3
```

```
REASON: SIGNAL FAILED ON 2X38
Unit0: MtcArb is disabled
```

# **Field descriptions**

The following table describes each field in the log report:

| (Sheet | 1 of | 2) |
|--------|------|----|
|--------|------|----|

| Field           | Value   | Description   |
|-----------------|---|---|
| alarm           |   | Optional field. Indicates the type of alarm, if<br>any are present, accompanied the change of<br>state. |
|                 | ***   | Indicates a critical alarm.   |
|                 | **  | Indicates a major alarm.  |
|                 | *   | Indicates a minor alarm.  |
|                 | (blank)   | Indicates an alarm is not present.  |
| TBL PP-HARDWARE | Symbolic text   | Defines trouble as a peripheral processor hardware or firmware error.                                   |
| pmid            | This field contains the peripheral that changed states. | Indicates the PM the state change affected.   |
| Node            | INSV ( rsntxt)  | Indicates the status of the node. The status of Unit 1 and Unit 0 will follow.                          |

## PM131 (continued)

| Field           | Value                  | Description   |
|-----------------|------------------------|---|
| Unit 0          |                        | Indicates that the unit is in-service.  |
| Unit 1          | Act, Inact             |   |
|                 | actxt: InSv            | Indicates the status of the unit as active (Act) or inactive (Inact), and that the unit is in-service (InSv).   |
| REASON: reastxt | Symbolic text          | Identifies the reason the system generated the log. Identifies the PEC for the suspect circuit pack.  |
| Unit_no         | 0 or 1                 | When MtcArb is loaded in only one PM unit, this field identifies that unit.   |
| state           | functional or disabled | Indicates the state of MtcArb in the XPM unit at<br>the time the log is formatted for display. This<br>state can be different from the state of the log<br>at the time the system generated the log. A<br>discrepancy is more possible as the time<br>between log generation and log formatting<br>increases. |

#### (Sheet 2 of 2)

## Action

There is no actions required. The PM131 is an information log.

As a successful REX progresses, the system generates PM131. Successful REX sequence:

- BSY inactive unit (PM131)
- RTS original inactive unit with full diagnostics
- Wait for superframe/data sync (PM131)
- Perform warm SWACT
- Busy newly inactive unit (PM131)
- Test newly active unit with in-service diagnostics
- Test newly inactive unit with out-of-service (OOS) diagnostics
- Wait for superframe/data sync (PM181 and PM131)

### **Associated OM registers**

There are no associated OM registers.

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PM131 (end)

# Additional information

There is no additional information.

### Explanation

The system log report PM132. The system generates PM132 when a bus interface card (BIC) relay test completes on a line concentrating module (LCM). The report gives a summary of each drawer in the LCM. The BIC relay test does not run on ILDN line drawers for remotes (ILDR).

The ILDR is available for remote switching center-SONET (RSC-S) and remote switching center (RSC) configurations in the NA007/XPM08 timeframe. The ILDR is available for the following configurations in the NA007/XPM08 timeframe:

-remote line concentrating module (RLCM)

-outside plant module (OPM)

-outside plant access cabinet (OPAC)

# Format

The log report format for PM132 is as follows:

PM132 mmmdd hh:mm:ss ssdd INFO pmid opttxt Drawer <drawer\_no>: <result>: <reason>

# Example

An example of log report PM132 follows:

| <pre>FP503 SEP05 18:14:33 4827 INFO Device State Change<br/>Location: FP 2 DEVICE 1 (DK) SCSI BUS 0<br/>REASON: Change of state of associated entity<br/>FROM: InSv ( Isolated ) DRIVE STATE: Unknown<br/>TO: InSv DRIVE STATE: On Line</pre> |
|---|
| PM132 OCT 04 17:21:50 0100 INFO BIC RELAY TEST LCM Host 00  |
|   |
| Node: ISTb,   |
| Unit0: InSv,  |
| Unit1: InSv   |
| LCM Host 00 0   |
| Node: ISTb,   |
| Unit0: InSv,  |
| Unitl: InSv   |
| Drawer 0: Passed:   |
| Drawer 1: Passed:   |
| Drawer 2: Passed:   |
| Drawer 3: Passed:   |
| Drawer 4: Not Run: ISDN Line Drawer   |
| Drawer 5: Not Run: ISDN Line Drawer   |
| Drawer 6: Passed:   |
| Drawer 7: Failed: REVERSAL Relay Test   |
| Drawer 8: Passed:   |
| Drawer 9: Failed: REVERSAL Relay Test   |
| Drawer 10: Passed:  |
| Drawer 11: Passed:  |
| Drawer 12: Passed:  |
| Drawer 13: Passed:  |
| Drawer 14: Not Run: Line card not available   |
| Drawer 15: Passed:  |
| Drawer 16: Passed:  |
| Drawer 17: Passed:  |
| Drawer 18: Passed:  |
| Drawer 19: Passed:  |

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field | Value         | Description                   |
|-------|---------------|-------------------------------|
| INFO  | Constant      | Indicates activity on the PM. |
| pmid  | Symbolic text | Identifies affected PM.       |

# PM132 (end)

| (Sheet | 2 | of | 2) |
|--------|---|----|----|
|--------|---|----|----|

| Field     | Value         | Description  |
|-----------|---------------|--|
| opttxt    | Symbolic text | Provides information about LCM node state.                   |
| drawer_no | 0 through 19  | Indicates the drawer number in the LCM.                      |
| result    | Symbolic text | Indicates the results of the BIC relay test for each drawer. |
| reason    | Symbolic text | Indicates the reason for the BIC relay test results.         |

# Action

If a failure occurs, replace the BIC and test the BIC again on a single drawer level. If test does not run on a given drawer, the test cannot seize the metallic test equipment (MTE). The MTE can go bad during the test. The test can abort, or lines can be in a call processing busy state.

You must enter an NT6X17 in the drawer or you must diagnose and fix the MTE. If the test aborted or calls are in progress, test the drawer again.

# **Associated OM registers**

There are no associated OM registers.

#### PM139

### **Explanation**

T he peripheral module (PM) subsystem log report PM139. The subsystem generates PM139 when over 90 percent of buffers in office parameter PPMBUFFS are in use. This event can occur in high maintenance conditions when the system requires more buffers than normal.

#### Format

The log report format for PM139 is as follows:

PM139 mmmdd hh:mm:ss ssdd TBL PPMBUFFS LEVEL CRITICAL trouble text action text

## Example

An example of log report PM139 follows:

PM139 MAR19 15:42:29 3900 TBL PPMBUFFS LEVEL CRITICAL OVER 90% OF PPM BUFFS UTILIZED. THE VALUE OF OFFICE PARAMETER PPMBUFFS IN TABLE OFCENG SHOULD BE INCREASED.

#### **Field descriptions**

The following table describes each field in the log report:

| Field                          | Value            | Description  |
|--------------------------------|------------------|--|
| TBL PPMBUFFS LEVEL<br>CRITICAL | Constant         | Indicates trouble in the PPMBUFFS  |
| trouble text                   | Character string | Identifies the type of trouble in PPMBUFFS                               |
| action text                    | Character string | Indicates additional trouble text line that indicates the action to take |

## Action

The PM subsystem generates PM139 when the switch does not receive enough PPMBUFFS. When the subsystem generates PM139 the first time, increase the value of office parameter PPMBUFFS in table OFCENG by 50 percent. If the log appears after this increase, set office parameter PPMBUFFS to the maximum value of 244.

# **Associated OM registers**

There are no associated OM registers.

#### PM140

#### **Explanation**

The Peripheral Module (PM) subsystem log report PM140. The subsystem generates PM140 when a request arrives at a busy line module (LM) and aborts. This event occurs when a MAP terminal operator tests a LM when the system tests the same LM.

#### Format

The log report format for PM140 is as follows:

PM140 mmmdd hh:mm:ss ssdd INFO LM\_MTCE\_REQUEST\_ABORTED pmid CURRENT TEST: testnm , hhhh,hhhh ABORTED TEST: testnm , hhhh,hhhh

### Example

An example of log report PM140 follows:

PM140 APR01 12:00:00 2112 INFO LM\_MTCE\_REQUEST\_ABORTED LM
REM1 00
CURRENT TEST: SYSTEM RTS TASK , B054,E002
ABORTED TEST: BKGND 10 MINUTE AUDIT , 404C,8001

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                               | Value         | Description  |
|-------------------------------------|---------------|--|
| INFO<br>LM_MTCE_REQUEST_<br>ABORTED | Constant      | Indicates LM maintenance request aborted.  |
| pmid                                | Symbolic text | Refer to definition for PMID in Table I.   |
| CURRENT TEST:<br>testnm             | Symbolic text | Identifies test is in progress. Refer to Table LM ACTIONS at the end of this log report. |
| hhhh,hhhh                           | 0000-FFFF     | Provides process identification for current test.  |

# **PM140** (end)

#### (Sheet 2 of 2)

| Field                   | Value         | Description   |
|-------------------------|---------------|---|
| ABORTED TEST:<br>testnm | Symbolic text | Identifies aborted test. Refer to Table LM ACTIONS at the end of this log report. |
| hhhh,hhhh               | 0000-FFFF     | Provides process identification for aborted test.                                 |

# Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

# **Additional information**

#### LM actions

| Action                     |
|----------------------------|
| BKGND TEST FAIL ANALYSIS   |
| UNSOL ACTVTY DROP ANALYSIS |
| SYSTEM BUSY TASK ON RESET  |
| SYSTEM RTS TASK            |
| BKGND 10 MINUTE AUDIT      |
| STATUS CHANGE              |
| TEST ACTION                |
| MSG OVERFLOW ANALYSIS      |
| DOWNLOAD                   |
| FORCE BUSY ACTION          |
| SOFTWARE ERROR             |
| WARM ACTION                |
| CUT OVER RELAY ACTION      |

#### PM141

#### Explanation

The Peripheral Module (PM) subsystem log report PM141. The subsystem generates PM141 when a more important request arrives at a busy line module (LM) and the current request aborts.

### Format

The log report format for PM141 is as follows:

PM141 mmmdd hh:mm:ss ssdd INFO LM\_MTCE\_PRE\_EMPTED pmid OLD TEST: testnm , hhhh,hhhh NEW TEST: testnm , hhhh,hhhh

## Example

An example of log report PM141 follows:

PM141 APR01 12:00:00 2112 INFO LM\_MTCE\_PRE\_EMPTED LM REM1 00
0
OLD TEST: SYSTEM RTS TASK , B054,E002
NEW TEST: BKGND 10 MINUTE AUDIT , 404C,8001

# **Field descriptions**

The following table describes each field in the log report:

| Field                       | Value         | Description  |
|-----------------------------|---------------|--|
| INFO LM_MTCE_<br>PRE_EMPTED | Constant      | Indicates LM maintenance request preempted.  |
| pmid                        | Symbolic text | Identifies affected PM. Refer to description for<br>PMID in Standard descriptions and equipment<br>identification table. |
| OLD TEST: testnm            |               | Identifies new test. Refer to Table LM ACTIONS at the end of PM140 log report.   |
| hhhh,hhhh                   | 0000-FFFF     | Provides process identification for new test.  |
| NEW TEST: testnm            |               | Identifies aborted test. Refer to Table LM ACTIONS at the end of PM140 log report.                                       |
| hhhh,hhhh                   | 0000-FFFF     | Provides process identification for aborted test.  |

# Action

There is no action required.

# **Associated OM registers**

There are no associated OM registers.

### PM150

### Explanation

The peripheral module (PM) subsystem log report PM150. The subsystem generates PM150 when the system detects temporary failures on a line drawer.

### Format

The log report format for PM150 is as follows:

PM150 mmmdd hh:mm:ss ssdd TRAN LINE\_DRAWER\_TEST LEN len pec CTRL: LM site ff b/m TEST: testnm

## Example

An example of log report PM150 follows:

PM150 APR01 12:00:00 2112 TRAN LINE\_DRAWER\_TEST LEN MERV 05 1 13 2 CTRL: LM MERV 05 1 TRAN: ACCESS REG

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                 | Value         | Description   |
|-----------------------|---------------|---|
| TRAN LINE_DRAWER_TEST | Constant      | Indicates the system detected temporary failure on line drawer  |
| LEN                   | Alphanumeric  | Control shelf that reports error condition.<br>The control shelf can be the mate if the mate<br>(a takeover condition) controls the bay that<br>contains defective equipment. The control<br>shelf can be the mate when test runs on the<br>secondary Bus Interface (BI) card on the<br>mate bay. |
| pec                   | Symbolic text | Refer to table card values below for strings that can be output for central control and PEC. The PEC can remain blank.  |

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# PM150 (end)

#### (Sheet 2 of 2)

| Field    | Value  | Description   |
|----------|--|---|
| CTRL: LM | Symbolic text  | The LM or RLM bay that contains line<br>module controller (LMC) that reports defect.<br>Refer to table I. |
| TEST     | (blank), Connected<br>again to RG-Bus,<br>Access Reg | Identifies test performed on drawer   |

# Action

There is no action required. If many temporary failures occur (50 or more in 8 h) on the same card, replace the card.

# **Associated OM registers**

There are no associated OM registers.

### PM151

# Explanation

The Peripheral Module (PM) subsystem log report PM151. The subsystem generates PM151 when the system detects a failure on a line drawer.

#### Format

The log report format for PM151 is as follows:

PM151 mmmdd hh:mm:ss ssdd FAIL LINE\_DRAWER\_TEST LEN len pec CTRL: LM site ff b/m TEST: testnm

#### Example

An example of log report PM151 follows:

PM151 APR01 12:00:00 2112 FAIL LINE\_DRAWER\_TEST LEN HOST 00 1 00 01 LINE CTRL: LM HOST 00 1 TEST: Test Reg Wr

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                  | Value         | Description  |
|------------------------|---------------|--|
| FAIL LINE_DRAWER _TEST | Constant      | Indicates failure on line drawer.  |
| LEN                    | Symbolic text | Indicates the control shelf that reported the<br>error condition. The control shelf can be the<br>mate if the mate (takeover condition)<br>controls the bay that contains the defective<br>equipment. The control shelf can be the<br>mate if test runs on the secondary bus<br>interface (BI) card on mate bay. |
|                        |               | Refer to Table Card Values at the end of log PM150 for values.   |
| pec                    | Symbolic text | Refer to Table Card Values at the end of log PM150. The strings that can be output for CC and PEC appear in this table. The PEC can remain blank.  |

# **PM151** (end)

#### (Sheet 2 of 2)

| Field    | Value               | Description   |
|----------|---------------------|---|
| CTRL: LM | Symbolic text       | The LM or RLM bay that contains line module controller (LMC) that reports errors.               |
| TEST     | Representative text | Identifies test performed on drawer. Refer to Table DRAWER TESTS at the end of this log report. |

### Action

Perform manual test on drawer. If test passes, there is no action required. If test fails, refer to *Lines, Trunks, and Peripherals Line Alarm and Performance Monitoring Procedures*. This document describes step-by-step procedures for PM maintenance.

## **Associated OM registers**

There are no associated OM registers.

# **Additional information**

The following is a list of drawer tests:

- Drawer Feed Interrupt
- Drwr RG-Bus Relay
- RSM Diagnostic
- F/W Testing Unequip Drwr
- Rel0 not on active RG
- Disconnected from RB-Bus
- Test Reg Wr

## PM152

# Explanation

The peripheral module (PM) subsystem log report PM152. The subsystem generates PM152 when a line drawer is made busy.

### Format

The log report format for PM152 is as follows:

PM152 mmmdd hh:mm:ss ssdd SYSB LINEDRAWER LEN len pec CTRL: LM site ff b/m FROM: statnm

## Example

An example of log report PM152 follows:

PM152 APR01 12:00:00 2112 SYSB LINEDRAWER LEN HOST 00 1 00 01 2X16 CTRL: LM HOST 00 1 FROM: SYSB

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field           | Value         | Description   |
|-----------------|---------------|---|
| SYSB LINEDRAWER | Constant      | Indicates the subsystem busied a line drawer  |
| LEN             | Symbolic text | Control shelf that reports error condition.<br>The control shelf can be the mate if the mate<br>(takeover condition) that contains the bay<br>controls the defective equipment. The<br>control shelf can be the mate if test runs on<br>the secondary bus interface (BI) card on the<br>mate bay. |
|                 |               | Refer to table card values at the end of log PM150 for the values.  |
| рес             | Symbolic text | Refer to table card values at the end of log PM150. This table indicates strings that can be output for CC and PEC. The PEC can remain blank.   |

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# PM152 (end)

#### (Sheet 2 of 2)

| Field    | Value         | Description   |
|----------|---------------|---|
| CTRL: LM | Symbolic text | Line module (LM) drawer that contains the state of the circuit that changes |
| FROM     | OK, SYSB      | Indicates previous drawer state   |

# Action

Perform the manual test on the drawer. If the test passes, return to service (RTS). If the test fails, refer to *Lines, Trunks, and Peripherals Card Replacement Procedures* for step-by-step procedures for PM maintenance.

### **Associated OM registers**

#### PM160

#### **Explanation**

The peripheral module (PM) subsystem log report PM160. The subsystem generates PM160 when the PM subsystem detects a temporary failure on a line module (LM). The subsystem generates PM160 when the PM subsystem detects a temporary failure on a remote line module (RLM) control pack.

#### Format

The log report format for PM160 is as follows:

PM160 mmmdd hh:mm:ss ssdd TRAN LM\_CTRL\_PACK\_TEST LM len pec CTRL: LM site ff b/m TEST: testnm

### Example

An example of log report PM160 follows:

PM160 APR01 12:00:00 2112 TRAN LM\_CTRL\_PACK\_TEST LM REM1 00 1 01 02 2X05 CTRL: LM REM1 00 1 TEST: RING GEN SHUTBACK

# **Field descriptions**

The following table describes each field in the log report:

| Field                  | Value         | Description  |
|------------------------|---------------|--|
| TRAN LM_CTRL_PACK_TEST | Constant      | Indicates a failure detected on LM or RLM control pack   |
| LM                     | Symbolic text | Control shelf that reported the error<br>condition. The control shelf can be the<br>mate if the mate (takeover condition)<br>controls the bay with the defective<br>equipment. The control shelf can be the<br>secondary bus interface (BI) card on a<br>mate bay. CC values cc are: |
|                        |               | <ul> <li>SHELF Indicates fault cannot isolate<br/>to single card</li> </ul>  |
|                        |               | <ul> <li>01 indicates failure in ringing<br/>generator 0</li> </ul>  |
|                        |               | <ul> <li>02 indicates failure in ringing<br/>generator 1</li> </ul>  |
| pec                    | Symbolic text | Product engineering code (PEC) for<br>circuit pack. Failure in ringing generator.<br>If cc value is SHELF, PEC remains blank.  |
| CTRL: LM               | Symbolic text | The LM or RLM bay has line module controller (LMC) that reports the error.   |
| TEST                   | Symbolic text | Test performed on control pack. Refer to table temporary failures below.   |

The following table lists temporary failure tests.

| Transient failure tests  |  |
|--------------------------|--|
| SP CONTROL WORD LOOPBACK |  |
| ACTIVITY SCAN            |  |
| RING GEN SHUTBACK        |  |

### **PM160** (end)

# Action

There is no action required. If several temporary failures occur on the same card, replace the card.

# **Associated OM registers**

#### **Explanation**

The peripheral module (PM) subsystem log report PM161. The subsystem generates PM161 when the subsystem detects a diagnostic failure on a line module (LM). The subsystem generates this report when the subsystem detects a failure on remote line module (RLM) control pack.

# Format

The log report format for PM161 is as follows:

PM161 mmmdd hh:mm:ss ssdd FAIL LM\_CTRL\_PACK\_TEST LM len pec CTRL: LM site ff b/m TEST: testnm

# Example

An example of log report PM161 follows:

PM161 APR01 12:00:00 2112 FAIL LM\_CTRL\_PACK\_TEST LM HOST 00
1 00 01 2X05
CTRL: LM HOST 00 1 TEST: RING GEN SHUTBACK

# **Field descriptions**

The following table describes each field in the log report:

| Field    | Value                  | Description  |
|----------|------------------------|--|
| PEC      | Symbolic text          | Product engineering code (PEC) for circuit<br>pack. Failure in ringing generator. This field<br>appears when value of CC in SHELF PEC is<br>blank. |
| CTRL: LM | Symbolic text          | The LM or RLM bay with line module controller (LMC) that reports the fault.  |
| TEST     | Representative<br>text | Test performed on control pack. Refer to table fail messages and table REX fail messages at end of log report.                                     |

The following table lists failure messages:

Fail messages (Sheet 1 of 3)

| Messages                           |  |
|------------------------------------|--|
| SCAN LINES                         |  |
| DRAWER TEST                        |  |
| MOST DRAWERS FAIL                  |  |
| AUDIBLE TONES                      |  |
| RGI INDICATOR STATUS               |  |
| EXCESS VOLTAGE DETECTED            |  |
| RG TEST ABORTED                    |  |
| INACTIVE RG, IND STAT TST NOT DONE |  |
| RG TEST VIA MTA                    |  |
| ALL RING GEN FAULTY                |  |
| DRWR FEED INTERRUPT                |  |
| DRWR RG_BUS RELAY                  |  |
| F/W TESTING UNEQUIP DRWR           |  |
| REL0 NO ON ACTIVE RG               |  |
| RECONNECTED TO RG_BUS              |  |
| DISCONNECT FROM RG BUS             |  |
| RSM DIAGNOSTIC                     |  |
| RSM TEST                           |  |
| F/W TESTING UNEQUIP DRWR           |  |
| TEST REG WRITE                     |  |
| TEST REG WR                        |  |
| FAILED TO RAISE ACTIVITY           |  |
| COMMUNICATION FAILURE WITH LM      |  |

Fail messages (Sheet 2 of 3)

| Messages            |                 |
|---------------------|-----------------|
| COULD NOT TAKEO     | /ER MATE        |
| FAILED TO RTS LINE  | S               |
| FAILED TO TAKEOVE   | ER MATES RG     |
| FAILED TO LOWER A   | CTIVITY         |
| DEAD LM             |                 |
| FAILED TO SEND ST   | ATIC DATA TO LM |
| CC-RLM COMM CHE     | CK FLAG         |
| RTS TESTS FAIL      |                 |
| TO SYSTEM BUSY LI   | Μ               |
| BASIC SANITY        |                 |
| MSG BUFFER          |                 |
| IBML TEST           |                 |
| NO RESPONSE         |                 |
| ACCESS TO DRAWE     | RS              |
| CONTROL CARD TES    | ST              |
| CLOCK SWITCH COL    | JNT             |
| LM TEST             |                 |
| RESET INHB_MATE_    | REPORT_FLAG     |
| RING GEN VOLTAGE    |                 |
| RINGING GENERATO    | DR TEST         |
| ROUTINE EXERCISE    |                 |
| SYNC FAIL: INTERBA  | NY T1           |
| INTERBAY T1 LOOPE   | BACK            |
| LOF/SLP OS LIMIT EX | XCEEDED         |

Fail messages (Sheet 3 of 3)

NO RESOURCES TO SYSBUSY LM

NO RESOURCES TO RECOVER STATUS

NO RESOURCES TO BCS SWACT BSY

LINK TEST FAILURE

The following table lists REX fail messages:

#### REX fail messages (Sheet 1 of 2)

| Messages                      |
|-------------------------------|
| REX insv test failed          |
| mate REX insv test failed     |
| HDLC link switch failed       |
| mate HDLC link switch failed  |
| takeover failed               |
| mate takeover failed          |
| REX takeover test failed      |
| mate REX takeover test failed |
| drawer fault                  |
| mate drawer fault             |
| tone fault                    |
| mate tone fault               |
| ringing fault                 |
| mate ringing fault            |
| RG fault                      |
| mate RG fault                 |
| takeback failed               |

## **PM161** (end)

REX fail messages (Sheet 2 of 2)

| Messages                   |  |
|----------------------------|--|
| mate takeback failed       |  |
| DCMR link test failed      |  |
| mate DCMR link test failed |  |
| interbay link test failed  |  |
| interbay link test failed  |  |

# Action

There is no action required. If several test failures occur on the same card, replace the card.

# **Associated OM registers**

### PM163

#### Explanation

The peripheral module (PM) subsystem log report PM163. The subsystem generates PM163 when a redundant circuit changes state.

### Format

The log report format for PM163 is as follows:

PM163 mmmdd hh:mm:ss ssdd SYSB LM\_CTRL\_PACK LM len pec CTRL: LM site ff b/m FROM: statnm

### Example

An example of log report PM163 follows:

PM163 APR01 12:00:00 2112 SYSB LM\_CTRL\_PACK LM REM1 00 1 01 2X05 CTRL: LM REM1 00 1 FROM: OK

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field             | Value         | Description  |  |
|-------------------|---------------|--|--|
| SYSB LM_CTRL_PACK | Constant      | Indicates redundant circuit changed state  |  |
| LM                | Symbolic text | Indicates the control shelf that reported th<br>fault condition. This control shelf can be th<br>mate if the mate (takeover condition)<br>controls the bay that contains defective<br>equipment. The control shelf can be the<br>secondary bus interface (BI) card on the<br>mate bay. Values for CC are : |  |
|                   |               | SHELF indicates system cannot isolate<br>error to single card.   |  |
|                   |               | <ul> <li>01 indicates failure in ringing generator<br/>0.</li> </ul>   |  |
|                   |               | <ul> <li>02 indicates failure in ringing generator</li> <li>1.</li> </ul>  |  |

# PM163 (end)

#### (Sheet 2 of 2)

| Field    | Value                  | Description  |
|----------|------------------------|--|
| рес      | Symbolic text          | Identifies product engineering code (PEC)<br>for circuit pack. Indicates failure in ringing<br>generator. If value of CC is SHELF, PEC<br>remains blank. |
| CTRL: LM | Symbolic text          | Line module (LM) or remote line module (RLM) bay that contains line module controller (LMC) that reports the fault.                                      |
| FROM     | OK MANB, OFFL,<br>UNEQ | Indicates previous control pack state.   |

# Action

Perform manual test on drawer. If test passes, there is no action required. If test fails, see maintenance procedures.

# **Associated OM registers**

#### PM166

#### **Explanation**

The Peripheral Module (PM) subsystem log report PM166. The subsystem generates PM166 when the system downloads a remote line module (RLM) with emergency stand alone (ESA). The subsystem downloads this data from the RLM host office. Manual requests from the host office cause the system to download RLM with ESA data. The system downloads all ESA feature RLM automatically with ESA data from the host office at approximately 0200 hours each day.

### Format

The log report format for PM166 is as follows:

PM166 mmmdd hh:mm:ss ssdd INFO ESA\_DATA\_LOAD

# Example

An example of log report PM166 follows:

PM166 APR01 12:00:00 2112 INFO ESA\_DATA\_LOAD

### Field descriptions

The following table describes each field in the log report:

| Field                 | Value    | Description  |
|-----------------------|----------|--|
| INFO<br>ESA_DATA_LOAD | Constant | Indicates RLM downloaded with ESA data from RLM host office. |

### Action

There is no action required.

# **Associated OM registers**

#### **Explanation**

The Peripheral Module (PM) subsystem log report PM167. The subsystem generates PM167 when an attempt to download emergency stand-alone (ESA) data occurs. The attempt to download ESA data from the host office to a remote line module (RLM) fails.

### Format

The log report format for PM167 is as follows:

PM167 mmmdd hh:mm:ss ssdd FAIL ESA\_DATA\_LOAD reastxt

# Example

An example of log report PM167 follows:

PM167 APR01 12:00:00 2112 FAIL ESA\_DATA\_LOAD ESA LOADER BUSY

# **Field descriptions**

The following table describes each field in the log report:

| Field              | Value            | Description                                    |
|--------------------|------------------|--|
| FAIL ESA_DATA_LOAD | Constant         | Indicates attempt to download ESA data failed. |
| reastxt            | Character string | Provides the cause for failure.                |

# Action

If the attempt to download of ESA data fails and a request for manual action occurs, repeat the request (ESALOAD command).

Contact the next level of support if the following conditions occur:

- the action fails the second time
- an automatic request to download occurs (at approximately 0200 hours each day)

# **Associated OM registers**

#### PM168

#### **Explanation**

The Peripheral Module (PM) subsystem log report PM168. The subsystem generates PM168. It generates it when a directory number (DN) in table Emergency stand-alone (ESA) does not equal the DN for any line on the remote line module (RLM). The subsystem generates this report during download of ESA data from the host office to a RLM.

### Format

The log report format for PM168 is as follows:

PM168 mmmdd hh:mm:ss ssdd FAIL ESA\_DATA\_LOAD BAD DN IN ESA TABLE: dn

#### Example

An example of log report PM168 follows:

PM168 APR01 12:00:00 2112 FAIL ESA\_DATA\_LOAD BAD DN IN ESA TABLE: 3652646

#### Field descriptions

The following table describes each field in the log report:

| Field               | Value         | Description   |
|---------------------|---------------|---|
| FAIL ESA_DATA_LOAD  | Constant      | Indicates DN in customer data table ESA does not equal any DN at RLM. |
| BAD DN IN ESA TABLE | Symbolic text | Provides bad DN.  |

### Action

Correct the DN in customer data table ESA.

#### **Associated OM registers**

#### **Explanation**

The Peripheral Module (PM) subsystem log report PM119. The subsystem generates PM119 when the subsystem takes operational measurement (OM) counts for a line module (LM) at a remote site. The subsystem takes OM counts for a LM when the LM is in the emergency stand-alone (ESA) mode.

### Format

The log report format for PM169 is as follows:

PM169 mmmdd hh:mm:ss ssdd INFO ESA\_OM\_STATS ORIGATT nn, TERMATT nn, TERMSUCC nn PREFIX USAGE nnnnnnnnnnnnnnnn RCVR UNAVAIL nn,RING BLK nn,RING FLT nn, COIN FLT nn, PRETRIP nn

# Example

An example of log report PM169 follows:

```
PM169 APR01 12:00:00 2112 INFO ESA_OM_STATS
ORIGATT 23, TERMATT 5,
TERMSUCC 1 PREFIX USAGE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RCVR UNAVAIL 0,RING BLK 0,RING FLT 0, COIN FLT 0,
PRETRIP 0
```

### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field             | Value    | Description   |
|-------------------|----------|---|
| INFO ESA_OM_STATS | Constant | Indicates OM counts generated for LM.                               |
| ORIGATT           | 0-99     | Provides count of origination attempts.                             |
| TERMATT           | 0-99     | Provides count of termination attempts.                             |
| TERMSUCC          | 0-99     | Provides count of terminating completions.                          |
| PREFIX USAGE      | 0-9      | Provides use counts for each of 16 entries in prefix table.         |
| RCVR UNAVAIL      | 0-99     | Provides count of reoriginations because of digitone (DT) receiver. |

#### 1-580 Log reports

#### **PM169** (end)

#### (Sheet 2 of 2)

| Field    | Value | Description                       |
|----------|-------|-----------------------------------|
| RING BLK | 0-99  | Provides count of ringing blocks. |
| RING FLT | 0-99  | Provides count of ringing faults. |
| COIN FLT | 0-99  | Provides count of coin faults.    |
| PRETRIP  | 0-99  | Provides count of pretrips.       |

# Action

Process as for other OM data.

# **Associated OM registers**

# PM171

# Explanation

The Peripheral Module (PM) subsystem log report PM171. The subsystem generates PM171 to display the present operational measurement (OM) counts for an XMS-based PM (XPM). This report displays the current OM counts for an XPM that exits the emergency stand-alone (ESA) mode.

# Format

The log report format for PM171 is as follows:

PM171 mmmdd hh:mm:ss ssdd INFO XPM\_ESA\_EXIT\_OM\_STATS RCC n Unit m ESA ENTER REASON : C\_Side message links down, VALUE : n ESA entry time <hh>:<mm>:<ss> Aggregate time in ESA : <at> mins ESA entrymethod ENTRY/exitmethod EXIT CALLS UP ON ENTRY nn CALLS UP ON EXIT nn TRANS\_DROP\_ON EXIT nn LINES: ORIG ATT TOTAL nn ORIG BLK n, ORIG\_ABAND n, DIAL\_ERR n. ORIG\_SB n, XLA\_ERR n, DIALED\_NUM\_INV n **INTRA**: IA\_TERM\_ATT\_TOTAL nn IA\_TERM\_SUC nn, IA\_TERM\_BLK n, IA\_TERM\_BSY n, IA\_TERM\_SB n, IA\_TERM\_NO\_ANS n **INTER:** IE\_TERM\_ATT\_TOTAL nn IE TERM SUC nn, IE NO RESP n, IE TERM BLK n. IE\_TERM\_BSY n, IE\_TERM\_SB n, IE\_TERM\_UNAVAIL n, IE TERM NO ANS n COIN\_FLT n, RING\_BLK n, TEST\_REG n, CON FAIL n, PRE TRIP nn TRUNKS: ORIG\_ATT\_TOTAL nn ORIG\_BLK n, ORIG\_ABAND n, ORIG SB n, XLA\_ERR n, DIALED\_NUM\_INV n **INTRA:** IA\_TERM\_ATT\_TOTAL nn IA TERM\_SUC n, IA\_TERM\_BLK n, IA\_TERM\_BSY n, IA TERM SB n, IA TERM NO ANS n **INTER:** IE\_TERM\_ATT\_TOTAL nn IE TERM SUC n, IE NO RESP n, IE TERM BLK n, IE\_TERM\_BSY n, IE\_TERM\_SB n, IE\_TERM\_UNAVAIL n, IE TERM NO ANS n **COMBINED:** RING TMO nn, NO IPC nn PREFIX USAGE preftxt HNPA USAGE hnpatxt

# Example

An example of log report PM171 follows:

```
PM171 OCT24 09:58:30 3714 INFO XPM_ESA_EXIT_OM_STATS
  RCC JRSC 1 Unit 0
  ESA ENTER REASON : Manual entry, VALUE : 4
  ESA entry time: 09:40:22 Aggregate time in ESA :18 mins
  ESA WARM ENTRY/warm EXIT
   CALLS SURVIVING WARM ENTRY
                                   0
   CALLS_SURVIVING_EXIT
                                   0
   TRANSIENT CALLS DROPPED ON EXIT 0
   STABLE_CALLS_DROPPED_ON_EXIT
                                   0
  LINES:
   ORIG_ATT_TOTAL 0
       ORIG_BLK 0, ORIG_ABAND 6, DIAL_ERR 0,
                 0, XLA_ERR
                                   0, DIALED_NUM_INV 0
       ORIG_SB
       INTRA:
       IA_TERM_ATT_TOTAL 0
       IA_TERM_SUC 0, IA_TERM_BLK 0, IA_TERM_BSY 0,
       IA_TERM_SB 0, IA_TERM_NO_ANS 0
       INTER:
       IE TERM ATT TOTAL 0
        IE_TERM_SUC 0, IE_NO_RESP 0, IE_TERM_BLK 0,
        IE TERM BSY 0, IE TERM SB 0, IE TERM UNAVAIL 0
        IE_TERM_SUC 0, IE_NO_RESP 0, IE_TERM_BLK 0,
        IE_TERM_BSY 0, IE_TERM_SB 0, IE_TERM_UNAVAIL 0
        IE_TERM_NO_ANS 0
   COIN_FLT 0, RING_BLK 0, TEST_REG 0,
   CON_FAIL 0, PRE_TRIP 0
  TRUNKS:
   ORIG_ATT_TOTAL 0
       ORIG_BLK 0, ORIG_ABAND 0, ORIG_SB 0,
       XLA_ERR 0, DIALED_NUM_INV 0
       INTRA:
       IA_TERM_ATT_TOTAL 0
        IA_TERM_SUC 0, IA_TERM_BLK 0, IA_TERM_BSY 0,
        IA_TERM_SB 0, IA_TERM_NO_ANS 0
       INTER:
       IE_TERM_ATT_TOTAL 0
        IE_TERM_SUC 0, IE_NO_RESP 0, IE_TERM_BLK
                                                     0,
        IE TERM BSY 0, IE TERM SB 0, IE TERM UNAVAIL 0,
        IE_TERM_NO_ANS 0
        IE TERM BSY 0, IE TERM SB 0, IE TERM UNAVAIL 0,
        IE_TERM_NO_ANS 0
  COMBINED:
    RING_TMO 0, NO_IPC 0
  PREFIX USAGE
  HNPA USAGE 0 0 0 0 0 0 0 0
              0 0 0 0 0 0 0 0
```

# **Field descriptions**

The following table describes each field in the log report:

(Sheet 1 of 5)

| Field                                     | Value                           | Description  |
|---|---------------------------------|--|
| INFO XPM_ESA_EXIT_OM_STATS                | Constant                        | Indicates the current OM counts for an XPM that exits ESA.   |
| RCC                                       | Integers                        | Indicates the remote cluster controller (RCC).               |
| Unit                                      | Integers                        | Indicates the unit.  |
| ESA ENTER REASON                          | Symbolic text                   | Indicates the ESA enter cause. For example, "manual entry."  |
| VALUE                                     | Integers                        | Indicates the value.   |
| hh, mm, ss                                | hh=hour,mm=minu<br>te,ss=second | Indicates time RCC last entered ESA.                         |
| at  | 0-MAXINT                        | Indicates total time RCC was in ESA.                         |
| ESA entrymethod ENTRY/<br>exitmethod EXIT | Symbolic text                   | Indicates the entry and exit methods.                        |
| CALLS_UP_ON_ENTRY                         | 0-32766 or<br>OVERFLOW          | Indicates number of stable calls on ESA entry.               |
| CALL_UP_ON_EXIT                           | 0-32766 or<br>OVERFLOW          | Indicates number of stable calls on exit.                    |
| CHNL_BLK                                  | 0-32766 or<br>OVERFLOW          | Indicates channel block count in dialing state.              |
| COIN_FLT                                  | 0-32766 or<br>OVERFLOW          | Indicates coin failures.                                     |
| COMBINED                                  | Constant                        | Indicates that grouped measurements follow.                  |
| CON_FAIL                                  | 0-32766 or<br>OVERFLOW          | Indicates continuous test failures while ringing.            |
| DIAL_ERR                                  | 0-32766 or<br>OVERFLOW          | Indicates error in Digitone (DGT) or data port (DP) dialing. |

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# PM171 (continued)

#### (Sheet 2 of 5)

| Field             | Value   | Description   |
|-------------------|---|---|
| DIALED_NUM_INV    | 0-32766 or<br>OVERFLOW  | Indicates the dialed number was not<br>on the same RCC or the spouse RCC.<br>Can indicate that an interval occurred<br>when the subscriber dialed.<br>(subscriber took too long to dial<br>number). |
| HNPA USAGE        | Refer to Customer<br>group 0 in Table<br>HNPA in customer<br>data schema. | Indicates use counts for each entry in Customer group 0 in table HNPA.  |
| IA_TERM_ATT_TOTAL | 0-32766 or<br>OVERFLOW  | Indicates termination attempts for intra-switched calls.  |
| IA_TERM_BLK       | 0-32766 or<br>OVERFLOW  | Indicates intra-switched calls blocked because resources not available.   |
| IA_TERM_BSY       | 0-32766 or<br>OVERFLOW  | Indicates intra-switched calls with non_idle terminations. For example, busy, system busy, or abandoned.  |
| IA_TERM_NO_ANS    | 0-32766 or<br>OVERFLOW  | Indicates intra-switched calls not<br>answered. Note: this field is always<br>pegged unless the ultimate terminator<br>(line) answers.  |
| IA_TERM_SB        | 0-32766 or<br>OVERFLOW  | Indicates intra-switched calls with<br>terminations that went system busy<br>while the system processed the call.<br>This condition normally occurs<br>because of ring faults.                      |
| IA_TERM_SUC       | 0-32766 or<br>OVERFLOW  | Indicates intra-switched calls terminated correctly.  |
| IE_NO_RESP        | 0-32766 or<br>OVERFLOW  | Indicates no response from spouse RCC (links down, etc.).   |
| IE_TERM_ATT_TOTAL | 0-32766 or<br>OVERFLOW  | Indicates termination attempts for inter-switched calls.  |
| IE_TERM_BLK       | 0-32766 or<br>OVERFLOW  | Indicates inter-switched calls blocked because resources not available.   |

| Field           | Value                  | Description  |
|-----------------|------------------------|--|
| IE_TERM_BSY     | 0-32766 or<br>OVERFLOW | Indicates inter-switched calls with terminations that were non_idle (busy, system busy, abandoned).  |
| IE_TERM_NO_ANS  | 0-32766 or<br>OVERFLOW | Indicates inter-switched calls not<br>answered. Note: this field is always<br>pegged unless the ultimate terminator<br>(line) answers.             |
| IE_TERM_SB      | 0-32766 or<br>OVERFLOW | Indicates inter-switched calls whose<br>terminations went system busy while<br>the system processes the call<br>(normally because of ring faults). |
| IE_TERM_SUC     | 0-32766 or<br>OVERFLOW | Indicates termination completions for inter-switched calls (number of calls answered).   |
| IE_TERM_UNAVAIL | 0-32766 or<br>OVERFLOW | Indicates inter-switched calls whose terminations were manually busied or not equipped (not available).  |
| LINES           | Constant               | Indicates line information.  |
| LINK_SB         | 0-32766 or<br>OVERFLOW | Indicates line system busy conditions.   |
| NO_IPC          | 0-32766 or<br>OVERFLOW | Indicates a condition of no<br>inter-peripheral connection (IPC)<br>buffer is available.   |
| ORIG_ABAND      | 0-32766 or<br>OVERFLOW | Indicates call originator terminated call<br>and did not dial any number. Can<br>indicate call originator did not<br>complete dial and hung up.    |
| ORIG_ATT        | 0-32766 or<br>OVERFLOW | Indicates origination attempts.  |
| ORIG_BLK        | 0-32766 or<br>OVERFLOW | Indicates resources not available for origination.   |
| ORIG_SB         | 0-32766 or<br>OVERFLOW | Indicates originating facility goes system busy.   |

#### (Sheet 3 of 5)

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| Field               | Value                  | Description  |
|---------------------|------------------------|--|
| PRE_TRIP            | 0-32766 or<br>OVERFLOW | Indicates ringing fault message count in talking state.  |
| PREFIX USAGE        | Integers               | Indicates use counts for each of 16<br>entries in Customer group 0, Table<br>Prefix (ie. plain ordinary telephone<br>service (POTS) lines prefix table). If<br>no prefix entry defined, this field<br>remains blank. Refer to Customer<br>group 0, table Prefix in the data<br>schema section of the <i>Translations</i><br><i>Guide</i> . |
| RING_BLK            | 0-32766 or<br>OVERFLOW | Indicates ringing fault message count<br>in ringing state (with error byte set to<br>ring block).  |
| RING_TMO            | 0-32766 or<br>OVERFLOW | Indicates ringing time outs.   |
| STABLE_DROP_ON_EXIT | 0-32766 or<br>OVERFLOW | Indicates number of stable calls taken down on ESA exit.   |
| TERM_ATT            | 0-32766 or<br>OVERFLOW | Indicates terminating attempts.<br>(Sends ringing supervision to phone.)   |
| TERM_BLK            | 0-32766 or<br>OVERFLOW | Indicates channel block count in ringing state.  |
| TERM_SUC            | 0-32766 or<br>OVERFLOW | Indicates termination completions.<br>(Call answered.)   |
| TEST_REG            | 0-32766 or<br>OVERFLOW | Indicates ringing fault message count<br>in ringing state. The error byte is set to<br>test for register failure.  |
| TRANS_DROP_ON_EXIT  | 0-32766 or<br>OVERFLOW | Indicates number of transitory calls taken down on ESA exit.   |
| TRKS_SB             | 0-32766 or<br>OVERFLOW | Indicates trunks were system busy because too many errors occur.   |
| TRUNKS              | Constant               | Indicates trunk information.   |

# **PM171** (end)

#### (Sheet 5 of 5)

| Field   | Value                  | Description   |
|---------|------------------------|---|
| UNIT    | 0, 1                   | Identifies active PM unit. If the PM is<br>of type ESA, the value of unit is always<br>0. |
| VALUE   | 0-99                   | Provides an ESA enter cause ID.   |
| XLA_ERR | 0-32766 or<br>OVERFLOW | Indicates translation errors.   |

# Action

Send this log to your traffic operator or the next level of support.

# **Associated OM registers**

#### PM172

#### Explanation

The peripheral module (PM) subsystem generates this report when it first discovers the remote cluster controller (RCC) in the emergency stand-alone (ESA) feature. This report gives the ESA exit recommended actions.

#### Format

The format for log report PM172 follows:

PM172 mmmdd hh:mm:ss ssdd INFO XPM\_IN\_ESA <pm\_name> Node: <ns>, Unit0 <ai>: <us>, Unit1 <ai>: <us> PM discovered in ESA ESA\_EXIT\_METHOD

### Example

Examples of log report PM172 follow:

#### Example 1

PM172 DEC14 09:58:30 3725 INFO XPM\_IN\_ESA RCC JRSC 1
Node: SysB, Unit0 Act: SysB, Unit1 Inact: CBsy
PM discovered in ESA
Exit pending RSC\_XPMESAEXIT countdown

#### Example 2

PM172 DEC14 09:58:30 3725 INFO XPM\_IN\_ESA RCC JRSC 1
Node: SysB, Unit0 Act: SysB, Unit1 Inact: CBsy
PM discovered in ESA
Manual ESA Exit required: try RTS WARMEXIT

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field           | Value   | Description   |
|-----------------|---|---|
| PM_NAME         | PM_TYPE,<br>SITE_INDEX,<br>EXT_PMNO   | Indicates the PM name and number of the<br>RCC in ESA. For example, PM_TYPE is RCC,<br>SITE_INDEX is the site name, and<br>EXT_PMNO is a number from 0 through 255. |
| ns              | Uneq,   | Indicates the node status of RCC.   |
|                 | SysB,   |   |
|                 | ManB,   |   |
|                 | OffL,   |   |
|                 | CBsy,   |   |
|                 | ISTb,   |   |
|                 | InSv  |   |
| ai              | Act,  | Indicates active and inactive units of RCC.   |
|                 | Inact   |   |
| us              | Uneq,   | Indicates status of RCC units.  |
|                 | SysB,   |   |
|                 | ManB,   |   |
|                 | OffL,   |   |
|                 | CBsy,   |   |
|                 | ISTb,   |   |
|                 | InSv  |   |
| ESA_EXIT_METHOD | Exit pending  | Indicates how ESA is to be exited.  |
|                 | RSC_XPMESAEXIT<br>countdown or Manual<br>ESA Exit required: try<br>RTS WARMEXIT |   |

# Action

If a manual ESA exit is required, post the RCC at the Maintenance Administration Position (MAP) and attempt to exit ESA using the RETURN TO SERVICE (RTS) command with the appropriate exit parameter. 1-592 Log reports

PM172 (end)

# Associated OM registers

None

#### **Explanation**

The peripheral module (PM) subsystem generates this report when an emergency stand-alone (ESA) exit is attempted for the remote cluster controller (RCC) in ESA. This report shows if the exit was manually- or system-initiated.

#### Format

The format for log report PM173 follows:

PM173 mmmdd hh:mm:ss ssdd INFO ESA\_EXIT\_ATTEMPT <pm\_name> Node: <ns>, Unit0 <ai>: <us>, Unit1 <ai>: <us> <ESA\_EXIT\_METHOD> ESA Exit started by <username>

### Example

Examples of log report PM173 follow:

Example 1

PM173 DEC14 11:58:30 3735 INFO ESA\_EXIT\_ATTEMPT RCC JRSC 1
Node: SysB, Unit0 Act: SysB, Unit1 Inact: CBsy
Warm ESA Exit attempt started by SYSTEM

#### Example 2

PM173 DEC14 11:58:30 3736 INFO ESA\_EXIT\_ATTEMPT RCC JRSC 1
Node: SysB, Unit0 Act: SysB, Unit1 Inact: CBsy
Warm ESA Exit attempt started by USERNAME: ESAHMI

#### Example 3

PM173 DEC14 11:58:30 3737 INFO ESA\_EXIT\_ATTEMPT RCC JRSC 1
Node: SysB, Unit0 Act: SysB, Unit1 Inact: CBsy
Cold ESA Exit attempt started by USERNAME: ESAHMI

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field           | Value              | Description   |
|-----------------|--------------------|---|
| PM_NAME         |                    | Indicates the PM name and number of the                                   |
|                 | SITE_INDEX,        | RCC in ESA. For example, PM_TYPE is RCC, SITE_INDEX is the site name, and |
|                 | EXT_PMNO           | EXT_PMNO is a number from 0 through 255.                                  |
|                 | •                  |   |
| ns              | Uneq,              | Indicates the node status of RCC.   |
|                 | SysB,              |   |
|                 | ManB,              |   |
|                 | OffL,              |   |
|                 | CBsy,              |   |
|                 | ISTb,              |   |
|                 | InSv               |   |
|                 | •                  |   |
| ai              | Act,               | Indicates active and inactive units of RCC.                               |
|                 | Inact              |   |
|                 | •                  |   |
| us              | Uneq,              | Indicates status of RCC units.  |
|                 | SysB,              |   |
|                 | ManB,              |   |
|                 | OffL,              |   |
|                 | CBsy,              |   |
|                 | ISTb,              |   |
|                 | InSv               |   |
|                 | •                  |   |
| ESA_EXIT_METHOD | Warm or Cold       | Indicates how ESA is to be exited.  |
| Username        | Username or SYSTEM | Indicates user that initiated the ESA exit.                               |

# Action

If the ESA exit fails, foward this log to the next level of maintenance.

# **Associated OM registers**

None

#### PM174

#### Explanation

The peripheral module (PM) subsystem generates this report when the remote cluster controller (RCC) fails an emergency stand-alone (ESA) exit. This report displays the reason for the exit failure.

#### Format

The format for log report PM174 follows:

PM174 mmmdd hh:mm:ss ssdd INFO ESA\_EXIT\_FAILED <pm\_name> Node: <ns>, Unit0 <ai>: <us>, Unit1 <ai>: <us> <ESA\_EXIT\_METHOD> ESA Exit failed <PMFR>

### Example

Examples of log report PM174 follow:

#### Example 1

PM174 DEC14 12:07:01 3745 INFO ESA\_EXIT\_FAILED RCC JRSC 1
Node: SysB, Unit0 Act: SysB, Unit1 Inact: CBsy
Warm ESA Exit failed
Failed to open link - cside

#### Example 2

PM174 DEC14 12:07:01 3746 INFO ESA\_EXIT\_FAILED RCC JRSC 1
Node: SysB, Unit0 Act: SysB, Unit1 Inact: CBsy
Cold ESA Exit failed
No response from ROM-RAM query

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field           | Value                            | Description  |
|-----------------|----------------------------------|--|
| PM_NAME         | PM_TYPE, SITE_INDEX,<br>EXT_PMNO | Indicates the PM name and number of the RCC in ESA. For example, PM_TYPE is RCC, SITE_INDEX is the site name, and EXT_PMNO is a number from 0 through 255. |
| ns              | Uneq,                            | Indicates the node status of RCC.  |
|                 | SysB,                            |  |
|                 | ManB,                            |  |
|                 | OffL,                            |  |
|                 | CBsy,                            |  |
|                 | ISTb,                            |  |
|                 | InSv                             |  |
|                 | •                                |  |
| ai              | Act,                             | Indicates active and inactive units of RCC.  |
|                 | Inact                            |  |
|                 | •                                |  |
| us              | Uneq,                            | Indicates status of RCC units.   |
|                 | SysB,                            |  |
|                 | ManB,                            |  |
|                 | OffL,                            |  |
|                 | CBsy,                            |  |
|                 | ISTb,                            |  |
|                 | InSv                             |  |
|                 | •                                |  |
| ESA_EXIT_METHOD | Warm or Cold                     | Indicates how ESA is to be exited.   |
| PMFR            | PM_FAILURE_REASON                | Indicates the reason for the ESA failure.  |

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**PM174** (end)

## Action

Forward this log to the next level of maintenance.

# **Associated OM registers**

None

# **Additional information**

An ESA exit failure log should not be generated if the craftsperson uses the EXITBYPASS option and the RETURN TO SERVICE (RTS) fails.

#### **Explanation**

The peripheral module (PM) subsystem generates this report when the emergency stand-alone (ESA) firewall created by the Remote Switching Center (RSC) ESA Human-Machine Interface (HMI) Robustness feature is bypassed by an HMI request. This report shows when the ESA exit bypass was initiated and who initiated it.

If the bypass is executed successfully, an outage will occur as the remote cluster controller (RCC) is forced out of ESA mode and ESA operational measurement (OM) data is lost.

#### Format

The format for log report PM175 follows:

PM175 mmmdd hh:mm:ss ssdd INFO ESA\_EXIT\_BYPASSED <pm\_name> Node: <ns>, Unit0 <ai>: <us>, Unit1 <ai>: <us> <bypass\_command> initiated by USERNAME: <username>

All stable calls and ESA OM data have been lost.

#### Example

Examples of log report PM175 follow:

#### Example 1

PM175 DEC14 12:22:01 3755 INFO ESA\_EXIT\_BYPASSED RCC JRSC 1
Node: ManB, Unit0 Act: ManB, Unit1 Inact: ManB
PMRESET EXITBYPASS initiated by USERNAME: ESAHMI
All stable calls and ESA OM data have been lost.

#### Example 2

PM175 DEC14 12:22:01 3756 INFO ESA\_EXIT\_BYPASSED RCC JRSC 1
Node: ManB, Unit0 Act: ManB, Unit1 Inact: ManB
RTS EXITBYPASS initiated by USERNAME: ESAHMI
All stable calls and ESA OM data have been lost.

#### Example 3

PM175 DEC14 12:22:01 3757 INFO ESA\_EXIT\_BYPASSED RCC JRSC 1
Node: ManB, Unit0 Act: ManB, Unit1 Inact: ManB
RECOVER EXITBYPASS initiated by USERNAME: ESAHMI
All stable calls and ESA OM data have been lost.

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field          | Value       | Description   |
|----------------|-------------|---|
| PM_NAME        | PM_TYPE,    | Indicates the PM name and number of the<br>RCC in ESA. For example, PM_TYPE is RCC,<br>SITE_INDEX is the site name, and<br>EXT_PMNO is a number from 0 through 255. |
|                | SITE_INDEX, |   |
|                | EXT_PMNO    |   |
| ns             | Uneq,       | Indicates the node status of RCC.   |
|                | SysB,       |   |
|                | ManB,       |   |
|                | OffL,       |   |
|                | CBsy,       |   |
|                | ISTb,       |   |
|                | InSv        |   |
| ai             | Act,        | Indicates active and inactive units of RCC.   |
|                | Inact       |   |
| us             | Uneq,       | Indicates status of RCC units.  |
|                | SysB,       |   |
|                | ManB,       |   |
|                | OffL,       |   |
|                | CBsy,       |   |
|                | ISTb,       |   |
|                | InSv        |   |
|                |             |   |
| BYPASS_COMMAND | RMRESET,    | Indicates which user initiated the bypass.  |
|                | RTS, or     |   |
|                | RECOVER     |   |
| USERNAME       | Username    | Indicates user initiated the bypass command.  |

# Action

Forward this log to the next level of maintenance.

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# PM175 (end)

# **Associated OM registers**

None

#### PM176

#### Explanation

The Peripheral Module (PM) subsystem generates this report when the Remote Switching Center (RSC) Emergency Stand-Alone (ESA) Human-Machine Interface (HMI) feature rejects a detrimental system request. This report shows when the ESA firewall denies either a system-initiated or manual RESET, RESTART, or JAM request sent to the remote cluster controller (RCC) in ESA mode.

The ESA firewall will not allow maintenance if the bypass option is specified. The PM176 log will be followed by a SWER to obtain a traceback of the calling module and procedures.

### Format

The format for log report PM176 follows:

PM176 mmmdd hh:mm:ss ssdd INFO MTC\_REJECTED <pm\_name> Node: <node>, Unit0 <ai>: <us>, Unit1 <ai>: <us> ESA Firewall rejected maintenance request. Message: <msg> Request: <reqt> Element: <elemno>

### Example

An example of log report PM176 and an explanation of the values in the Message, Request, and Element fields follows:

PM176 DEC14 12:45:17 3765 INFO MTC\_REJECTED RCC JRSC 1
Node: SysB, Unit0 Act: SysB, Unit1 Inact: CBsy
ESA Firewall rejected maintenance request.
Message: 0007 Request: 0032 Element: 0068

The example PM176 log translates as follows:

Message: 0007 = MRT\_RESTART

Request: 0032 = MT\_MRT\_RESPONSE

Element: 0068 = SWACT\_ELEMNO

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field   | Value       | Description   |
|---------|-------------|---|
| PM_NAME | PM_TYPE,    | Indicates the PM name and number of the                                   |
|         | SITE_INDEX, | RCC in ESA. For example, PM_TYPE is RCC, SITE_INDEX is the site name, and |
|         | EXT_PMNO    | EXT_PMNO is a number from 0 through 255.                                  |
| ns      | Uneq,       | Indicates the node status of RCC.   |
|         | SysB,       |   |
|         | ManB,       |   |
|         | OffL,       |   |
|         | CBsy,       |   |
|         | ISTb,       |   |
|         | InSv        |   |
| ai      | Act,        | Indicates active and inactive units of RCC.                               |
|         | Inact       |   |
| us      | Uneq,       | Indicates status of RCC units   |
|         | SysB,       |   |
|         | ManB,       |   |
|         | OffL,       |   |
|         | CBsy,       |   |
|         | ISTb,       |   |
|         | InSv        |   |
| msg     | 0-31        | Indicates message type captured by the ESA firewall.                      |
| reqt    | 0-255       | Indicates request type captured by the ESA firewall.                      |
| elemno  | 0-32767     | Indicates the element number of the maintenance request.                  |

## PM176 (end)

# Action

If this log is generated as a result of system maintenance, forward the log to BNR design support.

# **Associated OM registers**

None

### **Explanation**

The peripheral module (PM) subsystem generates this report when the remote cluster controller (RCC) inactive unit messaging link is retored prior to the active unit's link and an emergency stand-alone (ESA) warm exit is not possible. A warm ESA exit may not be possible because 1) a warm SWACT to exit is not possible or 2) the ESA status of the RCC is unknown because the inactive unit is at ROM and communication to the active unit cannot be established.

Log report PM177 replaces the log report PM181, which was generated when an RCC was found in ESA but could not warm SWACT to exit.

### Format

The format for log report PM177 follows:

PM177 mmmdd hh:mm:ss ssdd INFO XPM\_INACT\_RECOVERY <pm\_name> Node: <ns>, Unit0 <ai>: <us>, Unit1 <ai>: <us>

Recovery of the Inactive unit <recovery\_method> has started.

### Example

Examples of log report PM177 follow:

#### Example 1

PM177 DEC14 12:50:22 3775 INFO XPM\_INACT\_RECOVERY RCC JRSC 0
Node: CBsy, Unit0 Inact: SysB (CSLink RTS), Unit1 Act:
CBsy

Recovery of the Inactive unit for ESA exit has started.

#### Example 2

PM177 DEC14 12:50:22 3776 INFO XPM\_INACT\_RECOVERY RCC JRSC 0
Node: CBsy, Unit0 Inact: SysB (CSLink RTS), Unit1 Act:
CBsy
Recovery of the Inactive unit from ROM has started.

## **PM177** (end)

# Field descriptions

The following table explains each of the fields in the log report:

| Field           | Value  | Description   |
|-----------------|--|---|
| PM_NAME         | PM_TYPE<br>SITE_INDEX<br>EXT_PMNO                          | Indicates the PM name and number of the<br>RCC in ESA. For example, PM_TYPE is RCC,<br>SITE_INDEX is the site name, and<br>EXT_PMNO is a number from 0 through 255. |
| ns              | Uneq,<br>SysB,<br>ManB,<br>OffL,<br>CBsy,<br>ISTb,<br>InSv | Indicates the node status of RCC.   |
| ai              | Act,<br>Inact  | Indicates active and inactive units of RCC.   |
| us              | Uneq,<br>SysB,<br>ManB,<br>OffL,<br>CBsy,<br>ISTb,<br>InSv | Indicates status of RCC units.  |
| recovery_method | from ROM or for ESA<br>exit                                | Indicates recovery method for inactive unit.  |

# Action

If an inactive unit fails, forward this log to the next level of maintenance.

# Associated OM registers

None

### **Explanation**

The peripheral module (PM) subsystem generates this report when a craftsperson makes a request to load emergency stand-alone (ESA) static data to a remote cluster controller (RCC) running in simplex mode although the existing ESA static data is already valid in the active unit.

## Format

The format for log report PM178 follows:

PM178 mmmdd hh:mm:ss ssdd INFO ESASDATA\_ABORTED <pm\_name> Node: <ns>, Unit0 <ai>: <us>, Unit1 <ai>: <us> ESA Data download aborted due to lack of node redundancy. Existing ESA static data is valid.

# Example

An example of log report PM178 follows:

PM178 DEC15 11:20:17 3765 INFO ESASDATA\_ABORTED RCC JRSC 0
 Node: InSv, Unit0 Inact: SysB (CSLink RTS), Unit1 Act:
Insv
 ESA Data download aborted due to lack of node redundancy.
 Existing ESA static data is valid.

### PM178 (end)

## **Field descriptions**

The following table explains each of the fields in the log report:

#### PM 178 field descriptions

| Field   | Value  | Description   |
|---------|--|---|
| PM_NAME | PM_TYPE<br>SITE_INDEX<br>EXT_PMNO                          | Indicates the PM name and number of the<br>RCC in ESA. For example, PM_TYPE is RCC,<br>SITE_INDEX is the site name, and<br>EXT_PMNO is a number from 0 through 255. |
| ns      | Uneq,<br>SysB,<br>ManB,<br>OffL,<br>CBsy,<br>ISTb,<br>InSv | Indicates the node status of RCC.   |
| ai      | Act,<br>Inact  | Indicates active and inactive units of RCC.   |
| us      | Uneq,<br>SysB,<br>ManB,<br>OffL,<br>CBsy,<br>ISTb,<br>InSv | Indicates status of RCC units.  |

# Action

If it is necessary to reload ESA static data, wait until the inactive unit is inservice, then load the ESA static data to the active unit.

# **Associated OM registers**

None

### Explanation

The Peripheral Module (PM) subsystem generates PM179. The subsystem generates PM179 when a hardware condition affects the normal operation of the DMS switch or the peripherals of the DMS switch. The PM subsystem generates PM179 to provide information on a PM hardware (HW) exception report.

The alarm field for Format 8 (talk battery failure detected on a line concentrating module [LCM] shelf) contains three asterisks. The alarm field for Format 8 with three asterisks indicates a critical alarm. For Format 9 (not able to test talk battery on an LCM shelf), the alarm field contains one asterisk. One asterisk for Format 9 indicates a minor alarm.

For Format 8, the system generates a critical alarm if all of the following conditions are true:

- Office parameter TALK\_BATTERY\_ALARM in table OFCENG is set to Y.
- The state of the LCM unit is in-service (InSv) or in-service trouble (ISTb).
- The Talk Battery Alarm feature supports the LCM type.
- The LCM shelf detected loss of talk battery through a world line card (WLC).

For Format 9, the system generates the minor alarm if all conditions are true:

- Office parameter TALK\_BATTERY\_ALARM in table OFCENG is set to Y.
- The state of the LCM unit is InSv or ISTb.
- The Talk Battery Alarm feature supports the LCM type.
- There is no WLC available to test for loss of talk battery on an LCM shelf.

For Format 10, the log contains processor information about the remote line concentrating module with extended distance capability (RLCM-EDC) and the universal edge 9000 (UE9000). The field values depend on the task and the type of trap.

### Format

The log report formats for PM179 are as follows:

*Note:* In the following format examples, h indicates a hexadecimal value, and x indicates a text response.

Format 1

PM179 mmmdd hh:mm:ss ssdd TBL PM HW EXCEPTION REPORT pmid: acttxt TASKID: taskid; TIME: time, COMID: comid TEXT: swertxt hh hh hh hh hh hh hh

Format 2

PM179 mmmdd hh:mm:ss ssdd TBL PM HW EXCEPTION REPORT pmid: Unit n: acttx

Format 3

PM179 mmmdd hh:mm:ss ssdd TBL PM HW EXCEPTION REPORT pmid Unit n Self Test Fail – DPMC FAULT: FLTXT

Format 4

PM179 mmmdd hh:mm:ss ssdd TBL PM HW EXCEPTION REPORT pmid Exception ID: hh TEXT: xxxxxxxxx Status Register: hhhh Program Counter: hhhhhhhh

Format 5

PM179 mmmdd hh:mm:ss ssdd TBL PM HW EXCEPTION REPORT pmid Exception ID: hh TEXT: xxxxxxxx Status Register: hhhh Program Counter: hhhhhhhh Instruction Address: hhhhhhhh

Format 6

PM179 mmmdd hh:mm:ss ssdd TBL PM HW EXCEPTION REPORT pmid Exception ID: hh TEXT: xxxxxxxxx Status Register: hhhh Program Counter: hhhhhhhh Special Status Register: hhhh Instruction Pipe Stage C: hhhh Instruction Pipe Stage B: hhhh Data Cycle Fault Address: hhhhhhh Data Output Buffer: hhhhhhh

Format 7

Format 8

\*\*\*PM179 mmmdd hh:mm:ss ssdd TBL PM HW EXCEPTION REPORT
pmid Unit n
Self Test Fail – Talk Battery Problem
Talk Battery Failure: detected on shelf <ss> by card <pack>-<lsg>:<card>

Format 9

\*PM179 mmmdd hh:mm:ss ssdd TBL PM HW EXCEPTION REPORT pmid Unit n Self Test Fail – Talk Battery Problem Cannot test Talk Battery: shelf <ss> <reason>

Format 10

### Example

Examples of log report PM179 follow:

#### Example 1

PM179 APR01 12:00:00 2112 TBL PM HW EXCEPTION REPORT LGC 0 Unit 0: Act TASKID: 12345678 TPT; TIME: 0002A83E00, COMID: FF NILCID TEXT: no execs 00 C3 35 01 00 3F 10 23 0F

#### Example 2

PM179 JAN30 15:25:27 5266 TBL PM HW EXCEPTION REPORT LCME HOST 00 0 Unit 0 Self Test Fail - Line Card Communication : 6X71AC-11:31

#### Example 3

PM179 JAN05 15:45:27 8756 TBL PM HW EXCEPTION REPORT UEN 08 0 Unit 0 SELF TEST FAIL - CARD NOT PRESENT

#### Example 4

PM179 MAR15 18:54:26 8055 TBL PM HW EXCEPTION REPORT IPE HOST 00 3 Exception ID: 04 TEXT: I1 Instruc Status Register: 0004 Program Counter: 00401D44

Example 5

```
PM179 MAR12 15:54:41 3109 TBL PM HW EXCEPTION REPORT
IPE HOST 00 3
Exception ID: 09 TEXT: Trace
Status Register: 4704 Program Counter: 0040BA9C
Instruction Address: 0040BA8E
```

#### Example 6

PM179 MAR12 15:40:27 0078 TBL PM HW EXCEPTION REPORTIPE HOST 00 3Exception ID: 02TEXT: Bus ErrorStatus Register: 2009Program Counter: 00E00876Special Status Register: 0110Instruction Pipe Stage C:FDD8Instruction Pipe Stage B:4280Data Cycle Fault Address: 004019C9Data Output Buffer: 0044D94B

#### Example 7

\*\*PM179 SEP01 21:22:02 4000 TBL PM HW EXCEPTION REPORT ILCM HOST 00 0 Unit 1 PCM30 Line drawer 15: AIS Alarm

#### Example 8

\*\*\*PM179 NOV30 19:02:45 7465 TBL PM HW EXCEPTION REPORT LCM HOST 00 1 Unit 0 Self Test Fail - Talk Battery Problem Talk Battery Failure: detected on shelf 38 by card 6X17BA-8:2

#### Example 9

\*PM179 NOV30 18:57:45 5148 TBL PM HW EXCEPTION REPORT LCME RSC1 04 1 Unit 0 Self Test Fail - Talk Battery Problem Cannot test Talk Battery: shelf 38 no WLC provisioned

#### Example 10

\* PM179 JUL15 11:12:36 5119 TBL PM HW EXCEPTION REPORT UEN HOST 02 0 Unit 0 PM 30 Line Card Communication :NIL\_CC-2:4 :NIL\_CC-2:18

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 3)

| Field                            | Value                | Description   |
|----------------------------------|----------------------|---|
| *                                | Alarm                | One asterisk indicates a minor alarm condition. The log report identifies the alarm and the location of the alarm.  |
| **                               | Alarm                | Two asterisks indicate a major alarm condition. The log report identifies the alarm and the location of the alarm.  |
| ***                              | Alarm                | Three asterisks indicate a critical<br>alarm condition. The log report<br>identifies the alarm and the location of<br>the alarm.  |
| TBL PM HW<br>EXCEPTION<br>REPORT | Constant             | Indicates a problem that affects normal operation of the DMS switch or one of the PMs of the DMS.   |
| pmid                             | Alphanumeric         | Identifies the PM affected.   |
| UNIT-n                           | Integer (0 or 1)     | Identifies the PM unit that starts the report.  |
| acttxt                           | Act or Inact         | Identifies the activity state of the unit as active (Act) or inactive (Inact).  |
| Exception ID                     | Integer              | Provides the ID number for the exception that occurred.   |
| TEXT                             | Symbolic text (xxxx) | Provides the cause for the exception that occurred.   |
| TASKID                           | Alphanumeric         | Provides identification for suspect task.   |
| CONFIG REG                       | 0000-FFFF            | Provides configuration register value.<br>Field CONFIG REG appears for the<br>following four types of traps: bus<br>interval, parity error, write prot, and<br>sanity interval. |
| TIME                             | Hex (0000-FFFF)      | Indicates time the exception occurred.  |

| (Sheet | 2 | of | 3) |
|--------|---|----|----|
|--------|---|----|----|

| Field                       | Value   | Description   |
|-----------------------------|---|---|
| Time                        | 00 00-2359  | Indicates the RLCM-EDC or the UE9000 time of exception.   |
| COMID                       | Hex (0000-FFFF)   | Provides switch identification.   |
| SELF TEST FAIL              | FLTXT   | Indicates the fault and reason for the failure.   |
| Data Output Buffer          | Hex (0000-FFFF)   | Provides data dump from the procedure.  |
| SS                          | 2 decimal characters (value depends on on LCM bay type)   | Identifies the number of the LCM shelf that had loss of talk battery.   |
| pack                        | 6X17BA or 6X18BA  | Identifies the pack code of the WLC that reported the talk battery failure.   |
| lsg                         | 0-19 (Note)   | Identifies the line subgroup (LSG) and the location of the WLC.   |
|                             |   | <i>Note:</i> The LSG upper limit is 15 for LCMEs.   |
| card                        | 0-31  | Identifies the card slot from the LSG that contains the WLC.  |
| reason                      | no WLC provisioned <b>Of</b> card<br><lsg>: <card> (or other<br/>WLCS) unavailable</card></lsg> | The reason no WLC provisioned appears if no WLC appears on the LCM shelf.   |
|                             |   | The reason card <lsg>: <card><br/>(or other WLCS) unavailable<br/>appears if one WLC appears on the<br/>LCM shelf, but the WLC is not<br/>available for talk battery testing. A<br/>WLC is not available for talk battery<br/>testing if the line, the drawer of the<br/>line, or both are out of service (OOS).</card></lsg> |
| <hwex_string></hwex_string> | Character string  | Identifies the type of hardware exception.  |

#### (Sheet 3 of 3)

| Field           | Value           | Description   |
|-----------------|-----------------|---|
| Processor ID    | MP, CP, or PP   | Indicates the processor in the<br>RLCM-EDC or the UE9000 that<br>generates the report is a master<br>processor, control side (C-side), or<br>peripheral processor (P-side). |
| Status Register | Alphanumeric    | Identifies the values of the different registers.   |
| Program Counter | Hex (0000-FFFF) | Identifies the RLCM-EDC or UE9000 program counter.  |
| Stack Pointer   | Hex (0000-FFFF) | Identifies the RLCM-EDC or UE9000 stack pointer.  |
| Data            | Hex (0000-FFFF) | Provides additional information for problem isolation by software experts.  |

### Action

For Formats 1 to 9, save all reports generated during the 5 min before the system generated PM179 report. Contact the next level of support.

For Format 10, save all reports generated during the 6 h before the system generated the PM179 report. Contact the next level of support.

For digital line modules (DLMs), the fault is a SELF TEST FAIL – DPMC FAULT fault reason. Refer to the table under "Additional information" for the appropriate action for each fault.

For Format 2, manually-busy the power converter and replace the card that has faults, if the following conditions apply:

- the PM is a line concentrating module (LCM)
- the PM includes the phrase Self-Test Fail Pwr Conv Non Critical Flt:.
- the PM identifies a power converter card that has faults

The system generates PM179 when a system test detects a power converter card that has faults.

Format 8 normally requires immediate on-site action to resolve the talk battery failure on an LCM shelf. Follow these steps:

- If a PDCFAIL EXT critical alarm raises, fix the alarm to clear the LCM alarm and ISTb state.
- Check the LCM shelf and drawer fuses.
- Run the MAPCI;MTC;LNS;LTP;DIAG command on the WLC, to test the WLC that reported the alarm.
- If the DIAG command fails or the talk battery failure alarm continues, replace WLC that reported the alarm.

Resolve the problem then run the LCM InSv tests. Use the TST PM command while the LCM appears at the PM level of the MAP. This procedure tests the talk battery and clears the alarm if the test passes.

For Format 9, on-site action may be able to determine why the talk battery cannot test on an LCM shelf. Follow these steps:

- If <reason> is no WLC provisioned, provision a WLC on the LCM shelf.
- If <reason> is card <lsg>: <card> (or other WLCS) unavailable, attempt to RTS the WLC, the drawer of the WLC, or both. If the WLC is available and the minor alarm is temporary (less than 1 min), the alarm does not require any action. This temporary alarm can occur because automatic line testing (ALT) was used to test the last available WLC on the LCM shelf. The alarm can also occur because the LNS, LTR, DIAG command was used to test the last available WLC on the LCM shelf. The temporary alarm occurs because these tests temporarily ManB the WLC. When the tests ManB the WLC, the WLC is not available for talk battery testing.
- If <reason> is <len> is unavailable, attempt to RTS the WLC, the WLC drawer, or both. If the WLC is in-service (or HASU) and idle, test the WLC. Run the MAPCI;MTC;LNS;LTP;DIAG command. If the DIAG command fails or the "unable to test talk battery" alarm continues, try to replace the WLC.
- If the reported WLC cannot RTS, use the CI command QDNWRK (query working [assigned] directory number). This command lists other possible WLCs on the same LCM shelf. If other WLCs are present, attempt to RTS the WLCs.

Resolve the problem then run LCM InSv tests. To verify that the talk battery alarm is clear, use the TST PM command while LCM appears at the PM level of MAP.

### **PM179** (end)

# Associated OM registers

Format 8 (talk battery failure detected on an LCM shelf) pegs the PMERR register of the PM operational measurement (OM) group. This log also pegs the PM2ERR register of the PM2 OM group.

### **Additional information**

The following table provides DPMC fault reasons and actions.

| Fault reason               | Action  |
|----------------------------|---|
| Card Not Present           | Insert a DPMC in the DLM shelf in slot 13, Or change table DLMINV to indicate that the DLM is not equipped with a DPMC.   |
| Card Not Accessible        | The card was in use at the time the test. Activate in-service tests on either units of the DLM to test the DPMC again.  |
| Control Logic<br>Defective | For this and following fault reasons, replace the DPMC.   |
| Mate DMSX fail             | Indicates that the mate DMS-X failed. The DMS-X operates in simplex mode. Off-line, test, and return to service (RTS) the failed unit. Monitor the response, and apply all required changes |

### Explanation

The peripheral module (PM) subsystem generates log report PM180. This report appears when the system encounters a software exception. A software exception occurs when software is not used correctly. Operating company personnel use log report PM180 to identify and correct software errors. A software exception that relates to hardware can also generate log report PM 180.

The PM subsystem generates this report when a software condition occurs. This software condition affects normal operation of the DMS or the peripherals of the DMS. Formats 3 and 4 supply information on a PM EXCEPTION REPORT. Format 5 identifies software exceptions in the remote line concentrating module with extended distance capability (RLCM-EDC) and the universal edge 9000 (UE9000)..

## Format

The log report formats for PM180 are as follow:

Format 1

PM180 mmmdd hh:mm:ss ssdd TBL PM EXCEPTION REPORT pmid UNIT n: acttxt TASKID : taskid, TIME: hhhhhhhh, COMID: comid TEXT: swertxt hh hh hh hh hh CONTEXT TERMINAL: TID=(nodenum,termnum), EXTBYTE=n, AGENT=CKT trkid

Format 2

PM180 mmmdd hh:mm:ss ssdd TBL PM EXCEPTION REPORT pmid UNIT n swerrtxt

Format 3

PM180 mmmdd hh:mm:ss ssdd TBL PM EXCEPTION REPORT pmid text Exception Class: hh

Format 4

PM180 mmmdd hh:mm:ss ssdd TBL PM EXCEPTION REPORT pmid text Exception Class: hh Information Byte: hh

Format 5

PM180 mmmdd hh:mm:ss ssdd TBL PM EXCEPTION REPORT pmid UNIT n Software Exception: Processor ID: Task ID: Time: Data:

Format 6

PM180 mmmdd hh:mm:ss ssdd TBL PM SW EXCEPTION REPORT ILD <site> <frame> <unit> <drawer> TEXT: <swerrtxt> <swerrdata>

#### ATTENTION

The ISDN line drawer for remotes (ILDR) is first available for the following configurations in the NA007/XPM08 timeframe:

-remote switching center-SONET (RSC-S)

-remote switching center (RSC)

The ILDR is first available for the following configurations in the NA008/XPM81 timeframe:

-remote line concentrating module (RLCM)

-outside plant module (OPM)

-outside plant access cabinet (OPAC)

### Example

Examples of log report PM180 follow:

Example 1

```
PM180 APR01 12:00:00 2112 TBL PM EXCEPTION REPORT
DTC 0 UNIT 0 : Act
TASKID : 00210021 TPT, TIME: 0002A83E, COMID: FF NILCID
TEXT: no execs 00 C6 01 00 5F 38 0F
CONTEXT TERMINAL: TID=(24,197), EXTBYTE=0,
AGENT=CKT PXKDKGSICDT 0
```

Example 2

PM180 APR01 12:00:00 2112 TBL PM EXCEPTION REPORT DLM HOST 03 0 UNIT 0 INVALID TERMINAL: 254, UNEQUIPPED

#### Example 3

```
*PM180 JAN01 17:44:11 2106 TBL PM EXCEPTION REPORT
IPE HOST 00 3
MTCE: Illegal Circuit State Rcvd Exception Class: 21
```

#### Example 4

```
*PM180 JAN01 17:44:10 2005 TBL PM EXCEPTION REPORT
IPE HOST 00 3
MTCE: Illegal Destination Rcvd Exception Class: 11
Information Byte: 0D
```

#### Example 5

#### Example 6

#### Example 7

```
PM180 MAY21 16:50:45 0231 TBL PM SW EXCEPTION REPORT
ILD REM1 01 2 4
TEXT: IV FIAT CM
D3BE 0000 4C03 1400 001E A562 99A4 97FE A55D 0000 0000
```

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 3)

| Field                   | Value                                | Description   |
|-------------------------|--------------------------------------|---|
| TBL PM EXCEPTION REPORT | Constant                             | Indicates a PM exception report.  |
| pmid                    | Symbolic text                        | Identifies the affected PM  |
| UNIT                    | Integer (0 or 1)                     | Identifies the PM unit that generates the report  |
| acttxt                  | Act                                  | Indicates that the PM unit is active (Act).<br>Not provided for digital line module (DLM).                    |
|                         | Inact                                | Indicates that the PM unit is inactive (Inact).<br>Not provided for DLM.                                      |
| TASKID                  | Symbolic text                        | Provides identification for suspect task  |
| TIME                    | Hex (0000-FFFF)                      | Indicates time that exception occurred  |
| COMID                   | Hex (0000-FFFF),<br>Character string | Provides communication port identification.<br>Not provided for DLM.  |
| swerrtxt                | Character string                     | Provides the reason that the exeception occurred  |
| hhhh                    | Hex (0000-FFFF)                      | The 14 hexadecimal characters display contents of process status word for DLMs.                               |
|                         |                                      | The hexadecimal characters display more<br>than 14 characters in the hhhh format to<br>display the following: |
|                         |                                      | contents of process status word   |
|                         |                                      | different registers   |
|                         |                                      | <ul> <li>other information used in<br/>troubleshooting</li> </ul>   |

| Field              | Value                        | Description  |
|--------------------|------------------------------|--|
| CONTEXT TERMINAL   | Constant                     | Indicates the information that follows applies<br>to the terminal involved in the transaction<br>that produced the exception condition. Not<br>provided for DLM.   |
| TID                | Integers                     | Provides the node number and terminal number for terminal identification. Not provided for DLM.  |
| EXTBYTE5000        | 0 or 1                       | Identifies the extension byte of the call<br>involved in the exception condition.<br>Electronic business sets use the extension<br>byte to distinguish directory number (DN)<br>keys. For 500 series and 2500 series sets<br>and for trunks, the field does not apply and<br>is set to zero. Not provided for DLM. |
| AGENT              | Symbolic text                | Provides identification for context terminal equipment. Not provided for DLM.  |
| TEXT               | CMR CARD<br>TROUBLE          | Indicates the system detected a problem on<br>the CLASS modem resource (CMR) card.<br>The system attempts to reset the card.<br>Report that this log occurred.   |
|                    | Character string or<br>blank | Provides additional information for operating company personnel to isolate problems  |
| hhhh               | Hex (0000-FFFF)              | Provides a dump of information for operating company personnel to use  |
| Text string        | Alphabetic                   | Provides the reason of the exception   |
| Software Exception | Character string             | Provides the reason for the log  |
| Processor ID       | MP, CP, or PP                | Indicates that the processor in the RLCM-EDC or the UE9000 that generates the report is one of the following:  |
|                    |                              | master processor   |
|                    |                              | control side (C-side)  |
|                    |                              | peripheral processor (P-side   |
| Task ID            | Symbolic text                | Identifies the ID of the RLCM-EDC or the UE9000 task that generated the log  |

#### (Sheet 2 of 3)

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#### PM180 (end)

(Sheet 3 of 3)

| Field     | Value            | Description   |
|-----------|------------------|---|
| Time      | 00 00-2359       | Indicates the RLCM-EDC or the UE9000 time of exception              |
| Data      | Hex (0000-FFFF)  | Identifies the type of hardware exception                           |
| site      | 0000-ZZZZ        | Identifies the site to the ILDR                                     |
| frame     | 0 through 99     | Identifies the line concentrating module (LCM) frame number         |
| drawer    | 0 through19      | Identifies the ILDR drawer number in the LCM                        |
| swerrdata | Character string | Provides the exception data from the software error text (swerrtxt) |

# Action

Attempt to interpret swerrdata character string to determine the cause of the exception. If you are not able to interpret swerrdata, contact the next level of support.

If the system indicates a hardware problem, perform diagnostic and maintenance procedures on the suspect equipment.

If the character string indicates a software error, retain the log report for trend analysis. There is no action required.

For formats 3 and 4, save all reports generated during the 5 min before the subsystem generated log report PM180 report. Contact the next level of support.

For format 5, save all reports generated during the 6 h before the subsystem generated log report PM180. Contact the next level of support.

## **Associated OM registers**

There are no associated OM registers.

Log reports

# PM181 (1-Meg Modem Service)

### **Explanation**

#### ATTENTION

This section provides PM181 information specific to the 1-Meg Modem Service. PM181 is a Succession-specific log. Refer to the *Succession Fault Management Logs Reference (volume 1), NN10275-909,* for a complete description of PM181.

The peripheral module (PM) subsystem generates PM181 when an indicated step occurs in a PM function. The PM181 reports the occurrence of a PM exception.

#### Format

The format of the PM181 log report follows:

PM181 mmmdd hh:mm:ss ssdd INFO pmid Node: statxt opttxt

### Example

Examples of PM181 log reports related to 1-Meg Modem Service functions follow:

#### Example 1

In the following example, an xDSL line card (xLC) was added to table LNINV. The drawer for the table does not support the high speed data traffic of the 1-Meg Modem Service. The line installed functions as a standard voice line only.

PM181 JUL17 21:24:40 5700 INFO LCM HOST 00 1 Unit 0 xDSL ENGINEERING RULES VIOLATED LEN = HOST 00 1 00 12 PHYSICAL DRWR 0 DOES NOT SUPPORT xDSL DATA TRAFFIC

#### Example 2

In the following example, an xLC was added to table LNINV. The drawer for the table supports the high speed data traffic of the 1 MMS. The line drawer

#### PM181 (1-Meg Modem Service) (continued)

contains more xLCs than the xDSL engineering rules allow. The installed xLC functions as an xDSL line.

PM181 JUL17 21:24:40 5700 INFO LCM HOST 00 1 Unit 0 xDSL ENGINEERING RULES VIOLATED LEN = HOST 00 1 00 12 MAXIMUM NO (30) OF xDSL LINES PER PHYSICAL DRWR EXCEEDED MEMBERS PER PHYSICAL DRWR EXCEEDED

#### Example 3

In the following example, an xLC was added to table LNINV. The drawer contains more xLCs in a vertical row than the xDSL engineering rules allow. The installed xLC functions as an xDSL line.

PM181 JUL17 21:24:40 5700 INFOLCM HOST 00 1 Unit 0xDSL ENGINEERING RULES VIOLATEDLEN = HOST 00 1 00 12 MAXIMUM NO OF xDSL LINES PER VERT ROWEXCEEDED MAX MEMBERS (2) of xDSL LINES PER VERT ROW EXCEEDED

#### Example 4

In the following example, an NTEX22 ASU processor card has had at least 10 "ASU no reply threshold" faults in the past 12 hours against the ASU or NIU unit. This indicates that the card may cause F-Buses to go out of service resulting in brief CCS7 outages. The card should be replaced.

PM181 AUG28 18:48:14 7013 INFO LIM 0 FBus 0 Tap 0 THIS TAP HAS EXPERIENCED AT LEAST TEN ASU NO REPLY THRESHOLD FAULTS OVER THE PAST TWELVE HOURS. PROCESSOR CARD ON LIU7 101 IS SUSPECTED OF BEING FAULTY ACTION: REPLACE THE FOLLOWING PROCESSOR CARD AS PER THE CARD REPLACEMENT PROCEDURES NTP Site Flr RPos Bay\_id Shf Description Slot EqPEC HOST 00 Z02 LIM500 01 09 EX22HB FRNT

#### Example 5

In the following example, the system could not configure a DP Digit Reception Control for unit 1.

RSNW3J07AV PM181 JUL24 08:42:00 5700 INFO PLGC Node: ISTb, Unit 0 ACT: ISTb, Unit 1 Inact: ManB Could not configure DP Digit Reception Control for unit 1

# **Field descriptions**

The following table explains each of the fields in the log report:

Fields in PM181 log report (Sheet 1 of 2)

| Field  | Value                               | Description   |
|--------|-------------------------------------|---|
| pmid   | alphanumeric                        | Identifies the PM.  |
| Unit n | 0 or 1                              | Identifies the PM unit that generates the report.   |
| statxt | InSv, ISTb, Cbsy,<br>SysB, and ManB | Defines the current state of the PM node.<br>Examples are: C-side busy (Cbsy), system<br>busy (SysB), manual busy (ManB).   |
| opttxt | Character string                    | Provides additional information to help software troubleshooting technicians isolate problems.  |
| LIM    | Integer, 2 digits                   | Link Interface Module. A peripheral module<br>(PM) that controls messaging between link<br>interface units (LIU) in a link peripheral<br>processor (LPP) and between the LPP, and<br>the DMS-bus. A LIM includes two LIM units<br>and two frame transport buses (F-bus). the<br>two LIM units operate in a load- sharing<br>mode with each other. |
| FBus   | Integer                             | Frame Transport Bus. An 8-bit bus that<br>provides communications between a link<br>interface module (LIM) and the<br>application-specific units (ASU). The LIM<br>and ASU must be in a link peripheral<br>processor (LPP) cabinet of frame.  |
| Тар    | Integer                             | Link between the F-bus and the card.  |
| ASU    | Integer                             | Application-specific unit (ASU) or network<br>interface unit (NIU). Example of ASUs are<br>Ethernet interface units (EIU), CCS7 link<br>interface units (LIU7) and network interface<br>units (NIU). NIU provides access with the<br>channel bus (C-bus).   |
| Site   | Character string                    | Switching office designator.  |
| Fir    | Integer, 2 digits                   | Floor designator.   |
| RPos   | Integer, 2 digits                   | Row Position designator.  |

# PM181 (1-Meg Modem Service) (continued)

| Field       | Value             | Description   |
|-------------|-------------------|---|
|             | Value             | Description   |
| Bay_id      | Alphanumeric      | Bay identifier designator.                            |
| Shf         | Integer, 2 digits | Shelf location designator.                            |
| Description | Character string  | Card description/identifier or name.                  |
| Slot        | Integer, 2 digits | Slot designator.                                      |
| EqPEC       | Alphanumeric      | Equipment Product Engineering Code-<br>Equipment PEC. |

#### Fields in PM181 log report (Sheet 2 of 2)

# Action

Actions for each log example related to 1-Meg Modem Service functions follow:

#### Example 1

This example requires no action.

#### Example 2

The whole line drawer is at risk of failure because the drawer is operating beyond its thermal and electrical limits. Operating company personnel receive warning of the xDSL engineering rules breach at the time of the addition. You can perform the following actions to correct the condition:

- Use the **QXNET EXPANDALL** command to locate another LCM that supports xDSL and has room for expansion
- Upgrade another LCM line drawer with a data-enhanced bus interface card (DBIC) and move this xDSL line card to that drawer
- Use the **QXNET VERIFY <site> <frame> <unit> <drawer>** command to verify the xDSL line card assignments

#### Example 3

The whole line drawer is at risk of failure because the drawer is operating beyond the thermal and electrical limits. Operating company personnel receive warning of the xDSL engineering rules breach at the time of the addition. These personnel can perform the following actions to correct the condition:

- Use the **QXNET EXPAND <site> <frame> <unit> <drawer>** command to locate another row in the same drawer for the xDSL line card
- Use the **QXNET QXNET EXPANDALL** command to locate another LCM that supports xDSL

## PM181 (1-Meg Modem Service) (end)

#### Example 4

When this logs occurs, follow the standard procedure for replacement of an NTEX22 processor card as outlined in the *Card Replacement Procedures NTP* 297-8021-547.

# **Associated OM registers**

None

### **Additional information**

None

# **Release history**

#### SN07 (DMS)

Feature A00003147 introduces a new reason string for reporting in log PM181.

Document amended to refer to main description of PM181 in Succession Fault Management Logs Reference (volume 1), NN10275-909.

#### NA016

Feature 59027196 will add functionality to count 'ASU no reply threshold' logs against each ASU and NIU unit and it will output a warning log if tap faults occur on one ASU or NIU unit in a twelve hour period.

### PM182

### **Explanation**

Log report PM182 associates with a major PM alarm. The peripheral module (PM) subsystem generates PM182. PM 182 reports that either an F-bus or one or more LIM F-bus taps changed state to manual busy in the last 3 s. It is possible that operating personnel must manually busy a LIM F-bus to perform maintenance tasks.

### Format

The log report format for PM182 is as follows:

<node> <Alarm\_ind> PM182 mmmdd hh:mm:ss<seqnbr>ManB LIM <LIM\_number> LIS <LIS\_number> FBus <F-bus\_number> <tap header> FROM: <From\_s> TO: ManB TAP : <Tap\_number>

## Example

An example of log report PM182 follows:

PM182 SEP05 18:14:33 8100 MANB LIM 0 LIS 2 FBus 1 Tap From: InSv To: ManB (NA) : Tap 7

### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 3)

| Field     | Value   | Description   |
|-----------|---------|---|
| node      |         |   |
| Alarm_ind |         | Optional field. Indicates the type of alarm that accompanied the change of state. |
|           | ***     | Indicates a critical alarm.   |
|           | **      | Indicates a major alarm.  |
|           | *       | Indicates a minor alarm.  |
|           | (blank) | Indicates alarm did not occur.  |

| Field      | Value                         | Description  |
|------------|-------------------------------|--|
| pmid       | alphanumeric                  | Indicates the PM affected.   |
|            |                               | <i>Note:</i> A change of state in the FBus taps in<br>an LIM causes the subsystem to generate a<br>PM183 log report. When the subsystem<br>generates PM183, the pmid field appears in<br>the form: LIM nn FBus n TAP. The subfield<br>FBus n Tap indicates the specified F-bus<br>tap. |
| seqnbr     | four-digit number             | Identifies the sequence number of the log.   |
| Unit n     | 0 or 1                        | Identifies the PM unit that generates the report. If the PM that generates the report is an emergency standalone (ESA), there is no unit specified.  |
| statxt     | InSv, ISTb, SysB,<br>and ManB | Specifies the state of the F-bus or tap, for<br>example, in service (InSv), system busy<br>(SysB), manual busy (ManB), or in service<br>trouble (Istb)   |
| FBus       | 0 or 1                        | Identifies the F-bus affected by the change of state.  |
| LIS header | LIS                           | Optional field. This field appears when the LIM is in triple F-bus configuration.  |
| LIS number | 1, 2, or 3                    | Optional field. Specifies the LIS that the log refers to.  |
| Tap header | Тар                           | Optional field. Specifies the tap, if any, that the log refers to.   |
| Tap number | 0 to 35                       | Optional field. Specifies the tap, if any, that<br>the log refers to. The tap number is 0 to 11<br>if the LIM is in the triple F-bus configuration<br>and 0 to 35 if the LIM is in single F-bus<br>configuration.  |
| opttxt     | Character string              | Optional field. Provides additional information. Maintenance personnel can use this information for problem solving.   |

#### (Sheet 2 of 3)

#### (Sheet 3 of 3)

| Field | Value  | Description   |
|-------|--|---|
|       | FROM: <state></state>  | The subfields appear earlier in this table.   |
|       | (sq)<br>TO: <statxt> (sq)<br/>TAP:<tap_number< td=""><td>The optional subfield (sq) provides the status qualifier. The system prints this subfield only when the PM in question is one of the following:</td></tap_number<></statxt> | The optional subfield (sq) provides the status qualifier. The system prints this subfield only when the PM in question is one of the following:   |
|       | _set>  | • an LIM  |
|       |  | • an application processing unit (APU)  |
|       |  | <ul> <li>an application processing unit with<br/>UNIX (APUX)</li> </ul>   |
|       |  | • a data communication processor (DCP)  |
|       |  | an LIU datacom (LCOM)   |
|       |  | an external node (EXND)   |
|       |  | a service peripheral module (SPM)   |
|       |  | a voice processing unit (VPU)   |
|       |  | The subfield tap_number_set identifies a group of F-bus tap numbers. For example, TAP10-12, 15, 19-21, 23 indicates that the state change that this log reports affected taps 10, 11, 12, 15, 19, 20, 21, and 23. |
|       |  | The subfield (sq) can have one of the following values:   |
|       |  | • (NA) - Not accessible means all links to<br>the PM unit are closed or physically out<br>of service. Messaging between the PM<br>and the computing module (CM) is not<br>possible.                               |
|       |  | <ul> <li>(RU) - Resources unavailable means<br/>external resources are out of service.<br/>The subsystem requires these<br/>resources to keep the PM unit in<br/>service.</li> </ul>                              |

# Action

Return the LIM F-bus to service when maintenance action is complete.

# Associated OM registers

There are no associated OM registers.

# **Additional information**

Refer to the procedure "Clearing a PM LIMF major alarm" in *Alarm and Performance Monitoring Procedures* 

### PM183

### **Explanation**

This log is associated with a critical or major PM alarm. The peripheral module (PM) subsystem generates log report PM183 when either an F-bus or one or more LIM F-bus taps have changed state to system busy within the last 3 s. If the state change is not from system busy, the log is generated immediately.

### Format

The format for log report PM183 follows:

<node> <Alarm\_ind> PM183 mmmdd hh:mm:ss<seqnbr>ManB LIM <LIM\_number> LIS <LIS\_number> FBus <F-bus\_number> <tap header> FROM: <From\_s> TO: ManB : Tap <tap\_number>

### **Examples**

An example of log report PM183 follows:

PM183 SEP05 18:14:33 8200 SYSB LIM 0 LIS 2 FBus 1 TAP FROM: InSv TO: SysB : Tap 7

### **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 3)

| Field      | Value             | Description  |
|------------|-------------------|--|
| Alarm_ind  |                   | Optional field. Specifies the type of alarm, if any, that accompanied the change of state. |
|            | ***               | Specifies a critical alarm.  |
|            | **                | Specifies a major alarm.   |
|            | *                 | Specifies a minor alarm.   |
|            | (blank)           | Specifies no alarm.  |
| Log header |                   | Specifies the log ID, time and date of occurrence, log type, and log name.                 |
| seqnbr     | four-digit number | Identifies the sequence number of the log.   |

# PM183 (continued)

| Field      | Value                         | Description   |
|------------|-------------------------------|---|
| pmid       | alphanumeric                  | Indicates the PM affected.  |
|            |                               | <i>Note:</i> When a PM183 log report is generated by a change of state in the F-bus taps in a LIM, the PMID field is displayed as LIM nn F-bus n TAP. Subfield F-bus n Tap specifies the F-bus tap.                     |
| Unit n     | 0 or 1                        | Identifies the PM unit generating the report.<br>If the PM is an emergency standalone<br>(ESA), no unit is specified.   |
| statxt     | InSv, ISTb, SysB,<br>and ManB | Specifies the state of the F-bus or tap, for<br>example, in service (InSv), system busy<br>(SysB), manual busy (ManB), or in service<br>trouble (ISTb).   |
| FBus       | 0 or 1                        | Identifies the F-bus affected by the change of state.   |
| LIS header | LIS                           | Optional field. Displays only if the LIM is a triple F-bus configuration.   |
| LIS number | 1, 2, or 3                    | Optional field. Specifies the LIS to which the log refers.  |
| Tap header | Тар                           | Optional field. Specifies the particular tap, if any, to which the log refers.  |
| Tap number | 0 to 35                       | Optional field. Specifies the particular tap, if<br>any, to which the log refers. The tap number<br>is 0 to 11 if the LIM is a triple F-bus<br>configuration and 0 to 35 if the LIM is a<br>single F-bus configuration. |
| opttxt     | Character string              | Optional field. Provides additional information for trouble isolation by software troubleshooting personnel.  |

#### (Sheet 2 of 3)

### PM183 (continued)

#### (Sheet 3 of 3)

| Field | Value                                 | Description   |
|-------|---------------------------------------|---|
|       | FROM: <statxt><br/>(sq)</statxt>      | The subfield statxt is defined earlier in this table.   |
|       | TO: <statxt> (sq)</statxt>            | Optional subfield (sq) provides the status qualifier. Displays only when the PM is one of the following:  |
|       |                                       | • LIM   |
|       |                                       | <ul> <li>application processing unit (APU)</li> </ul>   |
|       |                                       | APU with UNIX (APUX)  |
|       |                                       | • data communications processor (DCP)   |
|       |                                       | LIU datacom (LCOM)  |
|       |                                       | external node (EXND)  |
|       |                                       | • service peripheral module (SPM)   |
|       |                                       | <ul> <li>voice processing unit (VPU)</li> </ul>   |
|       | TAP: <tap<br>_number_set&gt;</tap<br> | Specifies a group of F-bus tap numbers. For<br>example, tap 10-12, 15, 19-21, 23 indicates<br>that taps 10, 11, 12, 15, 19, 20, 21, and 23<br>are affected by the state change reported by<br>the log.                      |
|       |                                       | Subfield (sq) can have one of the following values:   |
|       |                                       | <ul> <li>(NA)—Not accessible means that all<br/>links to the PM unit are either logically<br/>closed or physically out of service.<br/>Messaging between the PM and the<br/>computing module (CM) is impossible.</li> </ul> |
|       |                                       | <ul> <li>(RU)—Resources unavailable means<br/>that the required external resources are<br/>out of service.</li> </ul>   |

## Action

Identify the system-busy LIM F-bus or tap from the first line of the log report. Post the LIM associated with the system-busy F-bus or tap. Access the F-bus MAP level (for single F-bus configuration) or LIS MAP level (for triple F-bus configuration). If both F-buses are system busy, perform the procedure "Clearing a PM LIMF critical alarm" in *Alarm and Performance Monitoring* 

## PM183 (end)

*Procedures.* If only one F-bus is system busy, perform the procedure "Cleaing a PM LIMF major alarm" in *Alarm and Performance Monitoring Procedures.* 

### **Associated OM registers**

Not applicable.

### **Additional information**

For more information, refer to the procedure "Cleaing a PM LIMF major alarm" in *Alarm and Performance Monitoring Procedures*.

#### **PM184**

## Explanation

The system generates PM184 when the switch or a manual request returns the P-side link to service.

#### Format

The log report format for PM184 is as follows:

<node> <Alarm\_ind> PM184 mmmdd hh:mm:ss<seqnbr>RTS
LIM <LIM\_number> LIS <LIS\_number> FBus <F-bus\_number> <tap header>
FROM: <From\_s> TO: InSv : Tap <tap\_number>

#### Example

An example of log report PM184 follows:

PM184 SEP05 18:14:33 8200 RTS LIM 0 LIS 2 FBus 1 Tap From: ISTb To: InSv : Tap 7

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 3)

| Field      | Value             | Description  |
|------------|-------------------|--|
| Alarm_ind  |                   | Optional field. Specifies the type of alarm, if any, that accompanied the change of state. |
|            | ***               | Specifies a critical alarm.  |
|            | **                | Specifies a major alarm.   |
|            | *                 | Specifies a minor alarm.   |
|            | (blank)           | Specifies no alarm.  |
| Log header |                   | Specifies the log ID, time and date of occurrence, log type, and log name.                 |
| seqnbr     | four-digit number | Identifies the sequence number of the log.   |

# PM184 (continued)

| Field      | Value                         | Description   |
|------------|-------------------------------|---|
| pmid       | alphanumeric                  | Indicates the PM affected.  |
|            |                               | <i>Note:</i> When a PM184 log report is generated by a change of state in the F-bus taps in a LIM, the PMID field is displayed as LIM nn F-bus n TAP. Subfield F-bus n Tap specifies the F-bus tap.                     |
| Unit n     | 0 or 1                        | Identifies the PM unit generating the report.<br>If the PM is an emergency standalone<br>(ESA), no unit is specified.   |
| statxt     | InSv, ISTb, SysB,<br>and ManB | Specifies the state of the F-bus or tap, for<br>example, in service (InSv), system busy<br>(SysB), manual busy (ManB), or in service<br>trouble (ISTb).   |
| FBus       | 0 or 1                        | Identifies the F-bus affected by the change of state.   |
| LIS header | LIS                           | Optional field. Displays only if the LIM is a triple F-bus configuration.   |
| LIS number | 1, 2, or 3                    | Optional field. Specifies the LIS to which the log refers.  |
| Tap header | Тар                           | Optional field. Specifies the particular tap, if any, to which the log refers.  |
| Tap number | 0 to 35                       | Optional field. Specifies the particular tap, if<br>any, to which the log refers. The tap number<br>is 0 to 11 if the LIM is a triple F-bus<br>configuration and 0 to 35 if the LIM is a<br>single F-bus configuration. |

(Sheet 2 of 3)

### PM184 (continued)

#### (Sheet 3 of 3)

| Field | Value                                 | Description   |
|-------|---------------------------------------|---|
|       | FROM: <statxt><br/>(sq)</statxt>      | The subfield statxt is defined earlier in this table.   |
|       | TO: <statxt> (sq)</statxt>            | Optional subfield (sq) provides the status<br>qualifier. Displays only when the PM is one<br>of the following:  |
|       |                                       | • LIM   |
|       |                                       | application processing unit (APU)   |
|       |                                       | APU with UNIX (APUX)  |
|       |                                       | • data communications processor (DCP)   |
|       |                                       | LIU datacom (LCOM)  |
|       |                                       | external node (EXND)  |
|       |                                       | service peripheral module (SPM)   |
|       |                                       | <ul> <li>voice processing unit (VPU)</li> </ul>   |
|       | TAP: <tap<br>_number_set&gt;</tap<br> | Specifies a group of F-bus tap numbers. For<br>example, tap 10-12, 15, 19-21, 23 indicates<br>that taps 10, 11, 12, 15, 19, 20, 21, and 23<br>are affected by the state change reported by<br>the log.                      |
|       |                                       | Subfield (sq) can have one of the following values:   |
|       |                                       | <ul> <li>(NA)—Not accessible means that all<br/>links to the PM unit are either logically<br/>closed or physically out of service.<br/>Messaging between the PM and the<br/>computing module (CM) is impossible.</li> </ul> |
|       |                                       | <ul> <li>(RU)—Resources unavailable means<br/>that the required external resources are<br/>out of service.</li> </ul>   |

## Action

There is no action required. This log is an information log.

## Associated OM registers

## Additional information

There is no additional information.

#### PM185

### **Explanation**

The PM185 log gives the trace back of the last trap that caused a peripheral to start again.

#### Format

The log report format for PM185 is as follows:

PM185 date time seqnbr TBL PM TRAP pmtype pmnbr

#### Example

An example of log report PM185 follows:

PM185 MAY16 09:13:53 4588 TBL PM TRAP DCM 7

### **Field descriptions**

The following table describes each field in the log report:

| Field  | Value      | Description                   |
|--------|------------|-------------------------------|
| pmtype | alphabetic | The peripheral module type.   |
| pmnbr  | 0000-9999  | The peripheral module number. |

## Action

There is no action required. This log only provides information.

### Associated OM registers

There are no associated OM registers.

### **Additional information**

There is no additional information.

The Peripheral Module (PM) subsystem generates PM186 as general information for carriers. This log identifies problems that the carrier audit detects.

#### Format

The log report format for PM186 is as follows:

PM186 date time seqnbr INFO CARRIER pmtype pmnbr CARRIER\_NO: nbr, REASON: reason, optional text

### Example

An example of log report PM186 follows:

PM186 MAY16 09:13:53 4588 INFO CARRIER DCM 7 CARRIER\_NO: 3
 REASON: <text>

## **Field descriptions**

The following table describes each field in the log report:

| Field        | Value      | Description   |
|--------------|------------|---|
| pmtype       | alphabetic | The peripheral module type.   |
| pmnbr        | 0000-9999  | The peripheral module number.   |
| reason       | alphabetic | The reason that the system generated the log.   |
| (blank line) | constant   | Consists of a blank line, 64 characters in<br>length. The Blanks can only be overwritten<br>by MSL layer procedures if the specific PM<br>and carrier exists in table CARID. Refer to<br>Table CARID in the data schema section of<br>the <i>Translations Guide</i> . |

## Action

There is no action required. This log only provides information.

## **Associated OM registers**

1-700 Log reports

PM186 (end)

## Additional information

There is no additional information.

The Peripheral Module (PM) subsystem generates PM187 when a PM carrier state changes to system busy (SysB).

### Format

The log report format for PM187 is as follows:

PM187 mmmdd hh:mm:ss ssdd SYSB CARRIER pmid CARRIER–NO: nn

### Example

An example of log report PM187 follows:

PM187 APR01 12:00:00 2112 SYSB CARRIER DCM 7 CARRIER-NO: 23

## **Field descriptions**

The following table describes each field in the log report:

| Field        | Value         | Description   |
|--------------|---------------|---|
| SYSB CARRIER | Constant      | Indicates that log report supplies information that concerns carrier. |
| pmid         | Symbolic text | Indicates the peripheral module identification.                       |
| CARRIER-NO   | 0 -9999       | Provides equipment identification for carrier.                        |

## Action

Perform testing and diagnostics for carrier.

If you cannot determine error condition, return carrier to service.

If you cannot determine and correct error condition, contact the next level of support.

## Associated OM registers

#### PM188

#### **Explanation**

The Peripheral Module (PM) subsystem generates PM188 when:

- the DMS system automatically protection switches a carrier.
- the switch operator manually switches a carrier with a Map command.
- a carrier is entered on disabled for protection switching.
- the switch operator manually returns a carrier to service through the MAP return-to-service (RTS) command.

The subsystem generates PM188 to notify of a carrier protection switch. Log report PM188 helps evaluate system activity.

### Format

The log report format for PM188 is as follows:

PM188 mmmdd hh:mm:ss ssdd INFO CARRIER pmid CARRIER\_NO nn sitenm PROTLINE: nn REASON: reastxt

### Example

An example of log report PM188 follows:

PM188 APR01 12:00:00 2112 INFO CARRIER SMS 0 CARRIER\_NO: 2
 REM1 4 1 PROTLINE: 6 REASON: AUTO SWITCH

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field         | Value         | Description   |
|---------------|---------------|---|
| CARRIER pmid  | Symbolic text | Identifies PM involved in protection switch.<br>Refer to Table I.   |
| CARRIER-NO nn | 0-20          | Indicates the carrier number that was protection switched.  |
| sitenm        | Symbolic text | Identifies remote site. List SITE from CI MAP<br>level for correct office remote sites. Refer to<br>Customer Data Table SITE. |

## **PM188** (end)

#### (Sheet 2 of 2)

| Field           | Value          | Description   |
|-----------------|----------------|---|
| PROTLINE nn     | 0-20           | Identifies protection line involved in protection switch.           |
| REASON: reastxt | Symbolic text. | Identifies reason report the system generated.<br>Refer to Table I. |

## Action

There is no action required.

### **Associated OM registers**

### PM189

## Information-only log

This log is an information log for Nortel Networks use only. This log does not require any operating company action. The operating company can suppress or threshold this log.

The Peripheral Module (PM) subsystem generates PM190 when the signaling terminal controller (STC) changes state to system busy (SysB) caused by a system request. The signaling terminal (ST) identified in the report is made SysB as a result of the specified change of state for the STC.

When the D-channel handler (DCH) changes state to SysB, the subsystem generates Format 2. A fault detected in the DCH makes the DCH SysB. The services that the ISDN service group (ISG) defines are switched to a spare DCH to prevent the loss of service. The services that the ISG defines are switched to a spare DCH only when a DCH is available.

#### Format

The log report formats for PM190 are as follows:

Format 1

\*\*PM190 mmmdd hh:mm:ssss ssdd SYSB ST ST nnn: Bsy from sttxt STC: SysB from sttxt

Format 2

\*\*PM190 mmmdd hh:mm:ss ssdd SYSB ST DCH nnn: SYSB from dchstate ISG nnn

### Example

Examples of log report PM190 follow:

Format 1

\*\*PM190 APR01 12:00:00 2112 SYSB ST ST 20: Bsy from CPB STC: SysB from InSv

#### Format 2

\*\*PM190 APR27 12:00:22 2112 SYSB ST DCH 235: SYSB from INSV ISG 210

#### **PM190** (end)

### Field descriptions

The following table describes each field in the log report:

| Field          | Value         | Description   |
|----------------|---------------|---|
| SYSB ST        | Constant      | Indicates ST was made SysB.   |
| ST             | 0-127         | Provides equipment identification for ST.<br>Refer to customer data Table STINV for<br>values.            |
| Bsy from       | Symbolic text | Defines signaling terminal state before<br>SysB. (Previous state may not be<br>central-side busy [CBSY].) |
| STC: SysB from | Symbolic text | Identifies STC state before SysB.   |
| DCH            | 0-255         | Identifies the DCH.   |
| SysB from      | Symbolic text | Indicates previous state of the DCH.  |
| ISG            | 0-255         | Identifies services in the ISG that this action affects.  |

### Action

If the peripheral does not recover, perform diagnostics on the suspect STC or DCH. The system displays a circuit pack list on the terminal if a failure occurs. Proceed as follows:

- If the test passes but the STC or DCH is not returned-to-service, contact the next level of maintenance immediately.
- If the test fails, change out the first circuit pack listed and run the test again. If the test fails again, change the second circuit pack on the list and run the test again. Continue until the test passes or the list is exhausted.
- If the test passes, but the STC or DCH is not returned-to-service, contact the next level of maintenance immediately.
- If the list is exhausted but the test did not pass, and the STC or DCH is not returned-to-service, contact the next level of maintenance immediately.

### **Associated OM registers**

The following pegs and usage counters correlate with this log: PM1SBU (system busy usage counter), PM1ERR (error counter), and PM2FLT (fault counter).

The Peripheral Module (PM) subsystem generates PM191 when the signaling terminal controller (STC) changes state to manual busy (ManB) because of a manual request. The signaling terminal (ST) identified in the report is made ManB in response to the specified change of state for the STC.

The subsystem generates Format 2 when a manual request changes the D-channel handler (DCH) changes state to manual busy. The ISDN service group (ISG) identifies the services this action affects.

### Format

The log report format for PM191 is as follows:

Format 1

\*\*PM191 mmmdd hh:mm:ss ssdd MANB ST ST nnn: Bsy from sttxt STC: ManB from sttxt

Format 2

\*\*PM191 mmmdd hh:mm:ss ssdd MANB ST DCH nnn: MANB from dchstate ISG nnn

## Example

Examples of log report PM191 follow:

Format 1

\*\*PM191 APR01 12:00:00 2112 MANB ST ST 20: Bsy from Idle STC: ManB from InSv

Format 2

\*\*PM191 APR12 11:23:33 3123 MANB ST DCH 34: MANB from ISTB ISG 201

### **PM191** (end)

## **Field descriptions**

The following table describes each field in the log report:

| Field                | Value         | Description  |
|----------------------|---------------|--|
| MANB ST              | Constant      | Indicates a manual request made an ST busy.  |
| ST nnn:              | 0-127         | Provides equipment identification for the ST.<br>Refer to customer data Table STINV for<br>values. |
| Bsy from sttxt       | Symbolic text | Identifies ST state before being made ManB.<br>Refer to Table I.                                   |
| STC: ManB from sttxt | Symbolic text | Identifies STC state before being made ManB.<br>Refer to Table I.                                  |
| DCH nnn              | 0-255         | Identifies the D Channel Handler (DCH).  |
| dchstate             | Symbolic text | Indicates previous state of the DCH. Refer to Table I.   |
| ISG nnn              | 0-255         | Identifies services in the ISG that this action affect.  |

## Action

There is no action required.

### **Associated OM registers**

There are no associated OM registers.

### Additional information

The manual busy usage counter, PM1MBU, and the fault counter, PM2FLT, correlate with this log.

The Peripheral Module (PM) subsystem generates PM192 when the signaling terminal controller (STC) is manual busy. The central-side (C-side) node, the ISDN access controller (IAC), is removed from service.

The subsystem generates Format 2 when the C-side node of the D-channel handler (DCH) is removed from service.

#### Format

The log report formats for log PM192 are as follows:

Format 1

\*\*PM192 mmmdd hh:mm:ss ssdd CBSY ST DCH nnn: CBSY from dchstate ISG nnn

Format 2

\*\*PM190 mmmdd hh:mm:ssss ssdd SYSB ST ST nnn: Bsy from sttxt STC: SysB from sttxt

### Example

Examples of log report PM192 follow:

Format 1

\*PM192 APR01 12:00:00 2112 CBSY ST ST 40: Bsy STC: CBsy from ManB

Format 2

\*\*PM192 APR12 11:23:33 3123 CBSY ST DCH 34: CBSY from ISTB ISG 201

### **PM192** (end)

## **Field descriptions**

The following table describes each field in the log report:

| Field          | Value         | Description   |
|----------------|---------------|---|
| CBsy ST        | Constant      | Indicates the system action made the ST busy.   |
| ST             | 0-127         | Provides equipment identification for ST.<br>Refer to customer data Table STINV for values. |
| Bsy            | Constant      | Identifies current ST state.  |
| STC: CBsy from | Symbolic text | Identifies the STC state before being made CBsy.  |
| DCH            | 0-255         | Identifies the DCH.   |
| CBsy from      | Symbolic text | Indicates previous state of the DCH.  |
| ISG            | 0-255         | Identifies services in the ISDN service group (ISG) that this action affects.               |

## Action

The STC or DCH should recover without manual interruption when the C-side node is back in service.

## **Associated OM registers**

The fault counter, PM2FLT, correlates with this log.

The Peripheral Module (PM) subsystem generates PM193 when the signaling terminal controller (STC) is taken offline (OFFL). The signaling terminal (ST) identified in the report is made busy (BSY) because of the specified change of state for the STC.

Format 2 generates when the D-channel handler (DCH) is placed in the OFFL state.

#### Format

The log report formats for PM193 are as follows:

Format 1

PM193 mmmdd hh:mm:ss ssdd OFFL ST ST nnn: Bsy STC: Offl from ManB

Format 2

\*\*PM193 mmmdd hh:mm:ss ssdd OFFL ST DCH nnn: OFFL from dchstate ISG nnn

### **Example**

Examples of log report PM193 follow:

Format 1

PM193 APR01 12:00:00 2112 OFFL ST ST 60: Bsy STC: Offl from ManB

Format 2

\*\*PM193 APR12 11:23:33 3123 OFFL ST DCH 34: OFFL from ISTB ISG 201

### **PM193** (end)

## **Field descriptions**

The following table describes each field in the log report:

| Field               | Value         | Description   |
|---------------------|---------------|---|
| OFFL ST             | Constant      | Indicates a manual request made ST OFFL.  |
| ST nnn:             | 0-127         | Provides equipment identification for ST.<br>Refer to customer data Table STINV for values. |
| Bsy                 | Constant      | Identifies ST state as BSY.   |
| STC: Offl from ManB | Constant      | Identifies STC state before OFFL.   |
| DCH nnn             | 0-255         | Identifies the DCH.   |
| dchstate            | Symbolic text | Indicates the previous state of the DCH. Refer to Table I.                                  |
| ISG nnn             | 0-255         | Identifies services in the ISDN service group (ISG) that this action affects.               |

## Action

There is no action required.

### **Associated OM registers**

The Peripheral Module (PM) subsystem generates this report when the signaling terminal controller (STC) encounters trouble (TBL) during normal operation. The STC state changes to in-service trouble (ISTb) from in-service (InSv). The subsystem makes the signaling terminal (ST) idle as a result of the specified change of state for the STC. The ISTb conditions do not affect service. System action normally solves ISTb conditions.

The subsystem generates format 2 when the D-channel handler (DCH) encounters trouble during normal operation. The DCH changes state from InSv to ISTb.

#### Format

The log report format for PM194 is as follows:

Format 1

\*PM194 mmmdd hh:mm:ss ssdd TBL ST ST nnn: Idle STC: ISTb from InSv Loadname

Format 2

\*\*PM194 mmmdd hh:mm:ss ssdd ISTB ST DCH nnn: ISTB from INSV ISG nnn

### Example

An example of log report PM194 follows:

Format 1

\*PM194 APR01 12:00:00 2112 OFFL ST ST 70: Idle STC: ISTb from InSv

Format 2

\*\*PM194 APR12 11:23:33 3123 ISTB ST DCH 34: ISTB from INSV ISG 201

### **PM194** (end)

### **Field descriptions**

Descriptions for each field in the log report appear in the following table:

| Field               | Value         | Description  |
|---------------------|---------------|--|
| TBL ST              | Constant      | Indicates ST TBL condition during normal operation.  |
| ST                  | 0-127         | Provides equipment identification for ST.<br>Refer to customer data table STINV for<br>values.                           |
| Bsy                 | Constant      | Identifies ST state.   |
| STC: ISTb from InSv | Constant      | Identifies STC state before ISTb.  |
| Loadname            | Symbolic text | Identifies the loadname that was changed in Table STINV. Refer to customer data table STINV.                             |
| DCH                 | 0-255         | Identifies the DCH.  |
| ISTB from INSV      | Constant      | Indicates the DCH changed state from InSv to ISTb.   |
| ISG                 | 0-255         | Identifies services in the Integrated Services<br>Digital Network (ISDN) Service Group (ISG)<br>affected by this action. |

## Action

If system action resolves the trouble, action is not required.

If the system cannot solve the problem the subsystem generates a PM190 report. Follow "Action" for PM190 report.

## **Associated OM registers**

The fault counter, PM1FLT, corresponds to this log.

The Peripheral Module (PM) subsystem generates this report when the signaling terminal (ST) changes state and the Signalling Terminal Controller (STC) state remains the same.

### Format

The log report format for PM197 is as follows:

FP503 mmmdd hh:mm:ss ssdd INFO ST ST nnn: sttxt1 from sttxt2 STC:sttxt3

### Example

An example of log report PM197 follows:

PM197 SEP05 18:14:33 2112 INFO ST ST 60: CPB from Bsy STC: InSv

## **Field descriptions**

Descriptions for each field in the log report appear in the following table:

| Field       | Value         | Description   |
|-------------|---------------|---|
| INFO ST     | Constant      | Indicates ST state was changed.   |
| ST nnn:     | 0-127         | Provides equipment identification for ST.<br>Refer to customer data Table STINV in the<br>data schema section of the Translations<br>Guide. |
| sttxt1      | Symbolic text | Identifies current ST state. Refer to Table E.  |
| from sttxt2 | Symbolic text | Identifies previous ST state. Refer to Table E.   |
| sttxt3      | Symbolic text | Identifies new STC state. Refer Table E.  |

## Action

There is no action required.

## **Associated OM registers**

1-716 Log reports

PM197 (end)

## Additional information

There is no additional information.

The Peripheral Module (PM) subsystem generates PM198 when the signaling terminal controller (STC) sends an unsolicited message. The message contains a valid fault condition. This condition does not affect service and must be resolved through system action.

The system generates format 2 when a D-channel handler (DCH) sends an unsolicited message that contains a valid fault condition. This condition does not affect service.

### Format

The log report formats for PM198 are as follows:

Format 1

PM198 mmmdd hh:mm:ss ssdd INFO ST ST nnn: reastxt

Format 2

\*\*PM198 mmmdd hh:mm:ss ssdd INFO ST DCH nnn: infotxt ISG nnn

## Example

An example of log report PM198 follows:

Format 1

PM198 APR01 12:00:00 2112 INFO ST ST 60: STC DLP Invalid Message STD ID

Format 2

\*\*PM198 JAN88 11:23:33 1122 INFO ST DCH 23: Swerr ISG nnn

#### PM198 (continued)

#### **Field descriptions**

The following table describes each field in the log report:

| Field   | Value   | Description   |
|---------|---|---|
| INFO ST | Constant  | Indicates information about the ST follows.   |
| ST      | 0-127   | Provides equipment identification for ST.<br>Refer to customer data Table STINV for values. |
| reastxt | STC DLP Invalid<br>Message STD ID                                   | Indicates that the STC sent an unsolicited message that contains a valid fault condition.   |
|         | STC interface<br>memory (no<br>message)                             | Indicates the STC Interface has a memory error.   |
|         | STC access error<br>parity error                                    | Indicates the system cannot access the STC because of a parity error.                       |
|         | STC interface<br>memory message,<br>where STC is not<br>initialized | Indicates the STC has a memory error. The memory for the STC is not initialized.            |
| DCH     | 0-255   | Identifies the DCH.   |
| infotxt | Symbolic text   | Indicates the message that the DCH generates.   |
| ISG     | 0-255   | Identifies services in the ISDN service group (ISG) that this action affects.               |

## Action

If system action resolves the trouble, action is not required.

If the system sends invalid messages over a maximum of 50 in 1 min, the STC state changes to system busy (SysB). Perform diagnostics on the suspect STC. A circuit pack list displays on the terminal if a failure occurs.

- If the test passes, but the STC does not return-to-service (RTS), contact the next level of maintenance.
- If the test fails, change the first circuit pack on the list and run the test again. If the test fails again, change the second circuit pack on the list and

run the test again. Continue until the test passes or the number of circuit packs on the list are exhausted.

— If the list is exhausted, the test did not pass, and the STC is not RTS, contact the next level of maintenance.

### **Associated OM registers**

The OM register PM1ERR of the OM group PM1 and log PM198 have a direct correlation.

#### **PM199**

#### **Explanation**

The Peripheral Module (PM) subsystem generates PM199 when the signaling terminal controller (STC) ends a system diagnostic test. The result of the diagnostic test appears in the log.

The the system generates the second format when the D-channel handler (DCH) ends a system diagnostic test.

#### Format

The log report formats for PM199 are as follows:

PM199 mmmdd hh:mm:ssdd INFO ST ST nnn STC Test tsttxt

PM199 mmmdd hh:mm:ssdd INFO ST DCH nnn on XPM nn: DCH Test tsttxt ISG nnn

#### Example

Examples of log report PM199 follow:

PM199 APR01 12:00:00 2112 INFO ST ST 60: STC Test passed

PM199 JAN88 11:32:33 1122 INFO ST DCH 23 on PLGC 0: DCH Test passed ISG nnn

#### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field   | Value    | Description  |
|---------|----------|--|
| INFO ST | Constant | Indicates information about the signaling terminal (ST) follows.                                     |
| ST      | 0-127    | Provides equipment identification for ST as the identification appears in customer data Table STINV. |

#### **PM199** (end)

#### (Sheet 2 of 2)

| Field        | Value                    | Description   |
|--------------|--------------------------|---|
| DCH          | 0-255                    | Identifies the DCH number on XPM module number.                                 |
| STC/DCH Test | Constant, passed, failed | Indicates if STC or DCH passed or failed the system diagnostic test.            |
| ISG          | 0-255                    | dentifies services in the ISDN Service<br>Group (ISG) that this action affects. |

#### Action

If the STC or DCH passes system diagnostic test, action is not required.

If the test passes, but the STC or DCH does not return-to-service, contact the next level of maintenance.

If the STC or DCH fails system diagnostic test, perform manual diagnostic tests on the suspect STC or DCH.

A circuit pack list appears on the terminal if a failure occurs. If the test fails, change the first circuit pack on the list and run the test again. If the test fails again, change the second circuit pack on the list and run the test again. Continue until the test passes or the number of circuit packs are exhausted.

If the number of packs are exhausted, the test fails, and the STC or DCH does not return-to-service, contact the next level of maintenance.

### **Associated OM registers**

Log PM199 is a direct correlation of the PM1FLT and PM1ERR counters.

#### PM200

#### Explanation

The Peripheral Module (PM) subsystem generates this report when a file is loaded to the signaling terminal controller (STC).

The system generates format 2 when a file is loaded to the D-channel handler (DCH).

#### Format

The log report formats for PM200 are as follows:

Format 1

PM200 mmmdd hh:mm:ss ssdd INFO ST ST nnn: STC loadtxt from srctxt Load file: fileid

Format 2

PM200 mmmdd hh:mm:ss ssdd INFO ST DCH nnn: DCH loadtxt from srctxt Load file: fileid Elapsed time: hh:mm:ss Summary: dddd plane, bundle size n, FS delays nnn, # re-trans msg nnn, # re-trans blocks nnn List of DCH: DCH nnn isgtxt restxt DCH nnn isgtxt restxt

Format 3

PM200 mmmdd hh:mm:ss ssdd INFO ST DCH nnn: DCH loadtxt from srctxt Load file: fileid Failure reason: reasontxt List of DCH: DCH nnn isgtxt restxt DCH nnn isgtxt restxt

#### Example

An example of log report PM200 follows:

Format 1

PM200 (continued)

```
PM200 APR01 12:00:00 2112 INFO ST
ST 60: STC Load failed from CC Load file: M7FA0241
Format 2
**PM200 JAN23 12:23:33 4334 INFO ST
DCH 123: DCH load passed from CC Load File : DCH29AQ
Elapsed time: 00:20:45
Summary:
   double plane, bundle size 8, FS delays 0,
   # re-trans msg 2, # re-trans blocks 2
List of DCH:
   DCH 0 ISG10
                  passed
   DCH 1 ISG5
                  failed
   DCH 2 SPARE passed
Format 3
```

PM200 JAN11 09:05:44 0910 INFO ST DCH load failed from CC Load file: DCH29AQ Failure reason: No reply from PM List of DCH: DCH 0 ISG 1 failed DCH 1 SPARE failed

DCH 2 SPARE failed

## Field descriptions

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field       | Value       | Description   |
|-------------|-------------|---|
| INFO ST     | Constant    | Indicates that an STC completed an attempt to load a file.                                  |
| ST          | 0-127       | Provides equipment identification for ST.<br>Refer to customer data Table STINV for values. |
| loadtxt     | Load failed | Indicates the load failed.  |
|             | Load passed | Indicates the load passed.  |
| from srctxt | CC, IAC DCH | Indicates the source where the file originated.   |

#### PM200 (end)

(Sheet 2 of 2)

| Field          | Value         | Description  |
|----------------|---------------|--|
| Load file      | Symbolic text | Identifies the file sent to the DCH or the STC.  |
| Summary        | Symbolic text | Provides the summary of the results. The system generates this field when DCH load passes. |
| Failure reason | Text          | Indicates the reason for PM failure. The system generates this field when the load fails.  |
| List of DCH    | Symbolic text | Provides the list of the DCH and ISG. Also provides the status of the load.                |
| DCH            | 0-255         | Identifies the DCH.  |
| isgtxt         | Symbolic text | Identifies services in the ISDN service group (ISG) that this action affects.              |
| restxt         | passed failed | Indicates if the load passed or failed for the specified DCH.                              |

## Action

Action is not required if the file is loaded successfully.

If the load operation fails, perform diagnostics on the suspect DCH or STC.

If a manual test fails, a circuit pack list appears on the terminal.

- If the test passes, and the STC or DCH does not return-to-service (RTS), contact the next level of maintenance.
- If the test fails, change the first circuit pack listed and run the test again. If the test fails again, change the second circuit pack on the list and run the test again. Continue until the test passes or the number of circuit packs on the list are exhausted.
  - If the list is exhausted, the test did not pass, and the STC or DCH is not RTS, contact the next level of maintenance.

If a manual test failure does not occur, perform maintenance on the file source.

## **Associated OM registers**

The Peripheral Module (PM) subsystem generates this report when an inter-peripheral message link (IPML) is not equipped.

#### Format

The log report format for PM217 is as follows:

PM217 mmmdd hh:mm:ss ssdd UNEQ IPML IPMLn: statxt from statxt IPC0: statxt IPC1: statxt IPC0P0: statxt IPC0P1: statxt IPC1P0: statxt IPC1P1: statxt

#### Example

An example of log report PM217 follows:

PM217 JAN01 04:21:05 5391 UNEQ IPML IPML1: UNEQ from OFFL IPC0: UNEQ IPC1: UNEQ IPC0P0: OFFL IPC0P1: OFFL IPC1P0: OFFL IPC1P1: OFFL

#### **Field descriptions**

The following table describes each field in the log report:

| Field     | Value         | Description                                       |
|-----------|---------------|---|
| UNEQ IPML | Constant      | Indicates the IPML is not equipped.               |
| IPML      | 0-240         | Identifies the inter-peripheral message link.     |
| statxt    | Symbolic text | Refer to Table E. Indicates state of the module.  |
| IPC       | 0,1           | Identifies the inter-peripheral connections.      |
| Р         | 0,1           | Identifies the inter-peripheral connection plane. |

## Action

There is no action required.

## **Associated OM registers**

#### PM219

#### **Explanation**

The Peripheral Module (PM) subsystem generates this report when an inter-peripheral message link (IPML) causes an exception report. The system had software or hardware problems during normal call processes that involve an IPML link.

#### Format

The log report PM219 is as follows:

PM219 mmmdd hh:mm:ss ssdd INFO IPML IPMLn: IPCn IPML EXCEPTION REPORT TEXT: aa aa aa Connects: FROM pm type pm num TO pm type pm num

### Example

An example of log report PM219 follows:

PM219 SEP18 08:35:28 9700 TEST IPML IPML: 11 IPC: 0 IPML EXCEPTION REPORT TEXT: 28 0D 26 01 02 Connects: FROM MSB7 1 TO PDTC 1

## **Explanation**

The following table describes each field in the log report:

| Field     | Value                       | Description                                   |
|-----------|-----------------------------|---|
| TEST IPML | Constant                    | Indicates tests were performed on the IPML.   |
| IPML      | 0-240                       | Identifies the inter-peripheral message link. |
| IPCn      | 0,1                         | Identifies the inter-peripheral connections.  |
| pm type   | MSB7, MSB6, DTC, or<br>PDTC | Identifies the peripheral module type.        |
| pm num    | 0-255                       | Indicates the peripheral module number.       |

## Action

Check other logs (for example, PM220) for information about related failures. The system generates these logs on the CCS7 link. Post the peripherals indicated and QUERYPM FLT for problems. Check the IPML links at the

# **PM219** (end)

TRKS; CARRIER level. Document the PM types and numbers, frequency and rate of the exceptions, and other conditions. Provide this information to the next level of maintenance.

# **Associated OM registers**

There are no associated OM registers.

# **Explanation**

The Peripheral Module (PM) subsystem generates PM220 when tests are run on the inter-peripheral message link (IPML).

### Format

The log report format for PM220 is as follows:

PM220 mmmdd hh:mm:ss ssdd TEST IPML IPMLn: IPCn Pn tstxt Reason: rsntxt Connects: FROM pm type pm num TO pm type pm num

# Example

An example of log report PM220 follows:

PM220 SEP18 08:35:28 9700 TEST IPML IPML: 0 IPC: 0 P: 1 Test passed Reason: Connects: FROM MSB7 0 TO DTC 1

# Explanation

The following table describes each field in the log report:

### (Sheet 1 of 2)

| Field     | Value                   | Description   |
|-----------|-------------------------|---|
| TEST IPML | Constant                | Indicates tests were run on the IPML.   |
| IPML      | 0-240                   | Identifies the IPML.  |
| IPCn      | 0,1                     | Identifies the inter-peripheral connections.  |
| Ρ         | 0,1                     | Identifies the inter-peripheral connection plane.                                   |
| tstxt     | Test passed Test failed | Indicates if the test passed or failed.   |
| Reason    | text                    | Indicates the reason for the failure. This field is present only when a test fails. |

# PM220 (end)

### (Sheet 2 of 2)

| Field   | Value       |      | Description              |
|---------|-------------|------|--------------------------|
| pm type | MSB7<br>DTC | MSB6 | Identifies the PM type.  |
| pm num  | 0-127       |      | Indicates the PM number. |

# Action

There is no action required.

# Associated OM registers

There are no associated OM registers.

### **Explanation**

The Peripheral Module (PM) subsystem generates this report when the state of a dual remote cluster controller (RCC) interlink (IRLINK) changes to manual busy (ManB).

### Format

The log report format for PM221 is as follows:

PM221 mmmdd hh:mm:ss ssdd MANB IRLINK PORT: modno C–SIDE LINK linkno PORT: modno C–SIDE LINK linkno IRLINK NO: irlnkno FROM: state

# Example

An example of log report PM221 follows:

PM221 NOV17 19:03:00 5603 MANB IRLINK PORT: RCC 0 C-SIDE LINK 1 PORT: RCC 1 C-SIDE LINK 1 IRLINK NO: 0 FROM: INSV

## **Field descriptions**

The following table describes each field in the log report:

| Field       | Value            | Description  |
|-------------|------------------|--|
| MANB IRLINK | Constant         | Indicates a state change to ManB on an IRLINK.   |
| PORT        | RCC 0 - RCC 127  | Indicates, from the view of the posted RCC,<br>the port number of the interlink. The change<br>of state for the interlink caused the system to<br>generate log report PM221. |
| C-SIDE LINK | 0-15             | Indicates the central side (C-side) link.  |
| IRLINK NO   | 0-13             | Indicates number of interlink. The state of the Interlink changed to ManB.   |
| FROM        | Character string | Indicates interlink state before change to present ManB state.   |

# Action

Forward this log to the traffic administrator or the next level of maintenance.

# **Associated OM registers**

There are no associated OM registers.

## Explanation

The Peripheral Module (PM) subsystem generates PM222 when the state of a dual remote cluster controller (RCC) interlink (IRLINK) changes to system busy (SysB).

### Format

The log report format for PM222 is as follows:

PM222 mmmdd hh:mm:ss ssdd SYSB IRLINK PORT: modno C–SIDE LINK linkno PORT: modno C–SIDE LINK linkno IRLINK NO: irlnkno FROM: state

# Example

An example of log report PM222 follows:

PM222 NOV18 19:03:30 5604 SYSB IRLINK PORT: RCC 0 C-SIDE LINK 1 PORT: RCC 1 C-SIDE LINK 1 IRLINK NO: 0 FROM: INSV

## **Field descriptions**

The following table describes each field in the log report:

| Field       | Value            | Description  |
|-------------|------------------|--|
| SYSB IRLINK | Constant         | Indicates a state change for SysB on an IRLINK.  |
| PORT        | RCC 0 - RCC 127  | Indicates, from the view of the posted RCC,<br>the port number and number of the interlink.<br>The change of state of the interlink caused<br>the system to generate log report PM222. |
| C-SIDE LINK | 0-15             | Indicates the central side (C-side) link.  |
| IRLINK NO   | 0-13             | Indicates number of the interlink. The Interlink state changed to SysB.  |
| FROM        | Character string | Indicates interlink state before change to present SysB state.   |

# Action

Forward this log to the traffic administrator or the next level of maintenance.

# **Associated OM registers**

There are no associated OM registers.

## **Explanation**

The Peripheral Module (PM) subsystem generates PM223 when a dual remote cluster controller (RCC) interlink (IRLINK) is returned to service (RTS).

## Format

The log report format for PM223 is as follows:

PM223 mmmdd hh:mm:ss ssdd RTS IRLINK PORT: modno C–SIDE LINK linkno PORT: modno C–SIDE LINK linkno IRLINK NO: irlnkno FROM: state

# Example

An example of log report PM223 follows:

PM223 NOV18 19:03:40 5604 RTS IRLINK PORT: RCC 0 C-SIDE LINK 3 PORT: RCC 1 C-SIDE LINK 3 IRLINK NO: 1 FROM: MANB

# **Field descriptions**

The following table describes each field in the log report:

| Field       | Value            | Description  |
|-------------|------------------|--|
| RTS IRLINK  | Constant         | Indicates that IRLINK is RTS.  |
| PORT        | RCC 0 - RCC 127  | Indicates, from the view of the posted RCC,<br>the port number and interlink number. The<br>change of state for the interlink caused the<br>system to generate log report PM223. |
| C-SIDE LINK | 0-15             | Indicates the central side (C-side) link.  |
| IRLINK NO   | 0-13             | Indicates number of the interlink. The interlink state changed to in service.  |
| FROM        | Character string | Indicates interlink state before change to present in service state.   |

# Action

Forward this log to the traffic administrator or the next level of maintenance.

# **Associated OM registers**

There are no associated OM registers.

### Explanation

The Peripheral Module (PM) subsystem generates log report PM230. The subsystem generates this report when the system generates or clears one of the following:

- types 1 through 4 line card alarms
- selected type 5 line card carrier alarms
- type 6 configuration alarms
- type 8 coded alarms (some type 8 alarms inhibit call processing for a number of subscriber lines)

When the system generates one of these alarms, the system takes down calls in progress on the affected subscriber lines. When the system generates one of these alarms, the system also blocks new originations from or terminations to these lines.

The system sets the lines to line module busy (LMB). A PM230 log report precedes the log report that the system generates for the type 1 through 6 or coded alarm.

The following faults and associated alarms affect subscriber lines. These alarms appear at the MAP when the user posts the associated remote carrier urban (RCU) and enters the command string QUERYPM FLT. The alarms also appear at the faceplate of the maintenance card on Shelf 3 of the RCU.

- Defective line card (top on line card carrier): type 1 alarm
- Defective line card (second from top on line card carrier): type 2 alarm
- Defective line card (third from top on line card carrier): type 3 alarm
- Defective line card (bottom on line card carrier): type 4 alarm
- Defective line card carrier: type 5 alarm

- Mismatch between entries and hardware for lines: type 6 alarm
- Coded alarm:
  - 190: Defective RCU supervisory card on shelf 4 or line card carrier. This condition causes line card address error on group 1 (shelves 4 and 5).
  - 191: Defective RCU supervisory card on shelf 1 or line card carrier. This condition causes line card address error on group 2 (shelves 1 and 2).
  - 192: Defective supervisory card or line card carrier. This condition causes line card address error on group 1 line shelf (shelf 5).
  - 193: Defective supervisory card or line card carrier. This condition causes line card address error on group 1 control shelf (shelf 4).
  - 194: Defective supervisory card or line card carrier. This condition causes line card address error on group 2 line shelf (shelf 2).
  - 195: Defective supervisory card or line card carrier. This condition causes line card address error on group 2 control shelf (shelf 1).
  - 196: Defective supervisory or switch cards. The system cannot detect line status change in group 1. A lack of common equipment cards prevents full fault diagnostics.
  - 197: Defective supervisory or switch cards. The system cannot detect line status change in group 2. A lack of common equipment cards prevents full fault diagnostics.
  - 306: Power converters 1 (slot 4, shelf 3) and 2 (slot 5, shelf 3), with switched voltage supply, failed. This condition causes group 1 line card power failure.
  - 307: Power converters 3 (slot 2, shelf 3) and 4 (slot 3, shelf 3), with switched voltage supply, failed. This condition causes group 2 line card power failure.
  - 312: Set of common equipment cards in group 2 is not complete.
  - 340: Missing talk battery filter or failure of all line cards in group 1 line shelf. (All line cards fail automatic system testing.)
  - 341: Missing talk battery filter or failure of all line cards in group 1 control shelf. (All line cards fail automatic system testing.)
  - 342: Missing talk battery filter or failure of all line cards in group 2 line shelf. (All line cards fail automatic system testing.)
  - 343: Missing talk battery filter or failure of all line cards in group 2 control shelf. (All line cards fail automatic system testing.)

# PM230 (continued)

|         | <ul> <li>— 344: Missing talk battery filter or failure of all line cards in group 1.</li> <li>(All line cards fail automatic system testing.)</li> </ul> |
|---------|--|
|         | <ul> <li>— 345: Missing talk battery filter or failure of all line cards in group 2.</li> <li>(All line cards fail automatic system testing.)</li> </ul> |
|         | — 600: Special service module (SSM) 1 failure.   |
|         | <ul> <li>601-624: Special service module 1 channel unit mismatch (hardware present/absent on SSM and provisioning data do not agree)</li> </ul>          |
|         | — 625: Total SSM 1 mismatch (missing bus extender)   |
|         | — 700: Special service module 2 failure  |
|         | <ul> <li>701-724: Special service module 2 channel unit mismatch<br/>(hardware present/absent on SSM and provisioning data do not agree)</li> </ul>      |
|         | — 725: Total SSM 2 mismatch (missing bus extender)   |
| Format  |  |
| Format  | The log report format for PM230 is as follows:   |
|         | PM230 mmmdd hh:mm:ss ssdd INFO PP_LINES_ACTION<br>pmid<br>REASON: remote alarm optxt<br>lines lmb: txt1  |
| Example |  |
|         | An example of log report PM230 follows:  |
|         | PM230 APR01 12:00:00 2112 INFO PP_LINES_ACTION<br>RCU RCU0 04 0<br>REASON: remote alarm received   |

### lines lmb: shelf= 4 slot= 12

# **Field descriptions**

The following table describes each field in the log report:

### (Sheet 1 of 2)

| Field                   | Value         | Description  |
|-------------------------|---------------|--|
| INFO<br>PP_LINES_ACTION | Symbolic text | Indicates that some subscriber lines an RCU supports changed states. |
| pmid                    | Symbolic text | Indicates affected PM.   |

# PM230 (end)

(Sheet 2 of 2)

| Field           | Value            | Description  |
|-----------------|------------------|--|
| REASON: reastxt | Symbolic text    | Identifies why the system generates the log.<br>Identifies the product engineering code (PEC)<br>for the suspect circuit pack. |
| optxt           | received         | Indicates the RCU generated an alarm that affects the state of subscriber lines.   |
|                 | cleared          | Indicates the RCU cleared an alarm that affects the state of subscriber lines.   |
| lines Imb       | Constant         | Indicates that the system made some subscriber lines line module busy (LMB).   |
| txt1            | shelf= x slot= y | Identifies the RCU shelf and slot on affected subscriber lines.  |

# Action

For a defective line card, make sure the other cards on the line card carrier of the MAP, pass. Replace the defective card and test the new card for defects. Replace the line card carrier and retest the line. Perform tests on the line cards in the new line card carrier.

# **Associated OM registers**

There are no associated OM registers.

### Explanation

The peripheral module (PM) subsystem generates PM231. This report appears when a PM fails to acknowledge an audit request to add or delete a channel connection. The request is from Integrated Services Digital Network (ISDN) Special Connection Table Control Facility (SPEC.CONN) to add pr delete a channel connection. The subsystem generates the modified log when the tuple fails to update to the correct state.

## Format

Format 1 applies to Example 1 and format 2 applies to Example 2.

The log report formats for PM231 are as follows:

Format 1

PM231 mmmdd hh:mm:ss ssdd TBL <PM\_name><PM\_number> SPEC.CONN <log\_type> Con Type: <con\_type> Status: <con\_status\_delta> EndPt1: <endpt\_1\_of\_the\_connection> EndPt2: <endpt\_2\_of\_the\_connection> SEGMENT INFORMATION:

| SEG | ENDPOINT1ENDPOINT2 | CONTYPE | STATUS                      |
|-----|--------------------|---------|-----------------------------|
|     |                    | endpt2> | <seg_contype></seg_contype> |

Format 2

```
PM231 mmmdd hh:mm:ss ssdd TBL
<PM name><PM number> SPEC.CONN <log type>
Con Type: <con_type>
Status: <con status delta>
EndPt1: ILDCHNL <site> <frame> <unit> <drawer>
                                                   Channel:
<Bd chnl>
EndPt2: <endpt_2_of_the_connection>
SEGMENT INFORMATION:
SEG
        ENDPOINT1ENDPOINT2
                             CONTYPE
                                       STATUS
<seg no> ILDCHNL <site> <frame> <unit> <Bd chnl>
<seg_endpt2><seg_contype> <seg_status_delta>
<seg no> <endpt1> <endpt2> <seg contype>
<seg_status_delta>
<seg_no>
```

### ATTENTION

The ISDN line drawer for remotes (ILDR) is first available for remote switching center-SONET (RSC-S) and remote switching center (RSC) configurations in the NA007/XPM08 timeframe. The ILDR is first available for the following configurations in the NA008/XPM81 timeframe:

- -for remote line concentrating module (RLCM)
- -outside plant module (OPM)
- -outside plant access cabinet (OPAC)

## Example

Example 1 applies to Format 1 and Example 2 applies to Format 2.

Examples of log report PM231 follow:

Example 1

### PM231 (continued)

```
PM231 JAN07 15:16:58 9100 TBL
LTC 10 SPEC.CONN Fail to Add
Con Type: CON
Status: MTC (no change)
EndPt1: ISLC HOST 67 0 07 03 B2
EndPt2: DS1 LTC 10 5 9
SEGMENT INFORMATION:
 SEG ENDPOINT1
            ENDPOINT2 CONTYPE STATUS
_____
0 ISLCHOST 6700703 LCM_CSIDE228 Con InActive from
MTC
1 XPM_PSIDELTC10728 XPM_CSIDELTC101224 Con MTC (No
change)
2 XPM_CSIDELTC10710 DS1LTC1059 Con MTC (No change)
Example 2
PM231 JAN07 15:16:58 9100 TBL
LTC 10 SPEC.CONN Fail to Add
Con Type: CON
Status: Inactive (no change)
EndPt1: ILDCHNL REM1 02 0 2 Channel: Bd1
EndPt2: XSGCHNL 0 5
SEGMENT INFORMATION:
_____
SEG ENDPOINT1
                 ENDPOINT2 CONTYPE STATUS
_____
0 ILDCHNL REM1 02 0 2 Bd1 LCM_CSIDE 1 6 Con InActive
from MTC
  XPM_PSIDE LTC 0 7 6 XPM_CSIDE LTC 0 5 6 Con InActive
1
from MTC
2 JNET 0 5 2 JNET 0 57 6 Con InActive from MTC
  XPM_CSIDE NIU 0 0 2 XSGCHNL 0 5 Con InActive from
3
MTC
```

# **Field descriptions**

The following table describes each field in the log report:

Field descriptions table (Sheet 1 of 2)

| Field            | Value   | Description   |
|------------------|---|---|
| PM_name          | String  | Indicates the name of the involved PM (line trunk controller [LTC], digital trunk controller [DTC], etc.) |
| PM_number        | Integer                                       | Gives the number of the involved PM.  |
| log_type         | Fail to add, Pass, Rep,<br>or Fail to Suspect | Indicates the type or definition of the log.  |
| con_type         | Pend  | Indicates a PENDING connection type. The system does not establish a connection in the PM.                |
|                  | Res   | Indicates the connection reserved in the PM.  |
|                  | Con   | Indicates the connection requested in the PM.   |
| con_status_delta | String  | Refer to Status changes tables at the end of this log report.   |
| endpt n          | String  | Identifies the endpoint types. Refer to endpoint types table at the end of this log report.               |
| seg_no           | Integer                                       | Indicates the number of the segment.  |
| seg_endpt1       | String  | Indicates the endpoint 1 of the segment.  |
| seg_endpt2       | String  | Indicates the endpoint 2 of the segment.  |
| seg_contype      | String  | Indicates connection type of the segment.   |
| seg_status_delta | String  | Indicates previous and current status of the segment.   |
| site             | 0000-ZZZZ                                     | Indicates the site name (abbreviation).   |
| frame            | 0 through 99                                  | Indicates the line concentrating module (LCM) frame number.   |
| unit             | 0 or 1  | Indicates the unit number.  |

# PM231 (continued)

| Field descriptions table | (Sheet 2 of 2) |
|--------------------------|----------------|
|--------------------------|----------------|

| Field   | Value        | Description                                  |
|---------|--------------|--|
| drawer  | 0 through 19 | Indicates the ILDR drawer number in the LCM. |
| Bd_chnl | Bd1 or Bd2   | Indicates the Bd-channel number in the ILDR. |

# Action

There is no action required. Information in this log provides help when you take operational measurements and perform other tasks.

## **Associated OM registers**

There are no associated OM registers.

# **Additional information**

The following table lists status changes.

### Status changes (Sheet 1 of 2)

| Value                 | Description   |
|-----------------------|---|
| Inactive (no change)  | Indicates the PM cannot establish a connection.   |
| Inactive (busy)       | Indicates the PM was busy and cannot establish a connection   |
| Inactive from Active  | Indicates the PM established a connection, but that connection is not established now.                        |
| Inactive from MTC     | Indicates that maintenance used the connection, and the PM cannot establish a connection.                     |
| MTC (no change)       | Indicates that maintenance used the connection, and the PM still cannot establish a connection.               |
| Active (no change)    | Indicates the PM establishes and maintains the connection.  |
| Active from PMBusy    | Indicates the PM is busy and is able to establish a connection.   |
| Active from Active    | Indicates the connection in the PM changed from one established connection to another established connection. |
| Active from MTC       | Indicates that maintenance used the connection in the PM, and now the PM can establish a connection.          |
| MTC for 2 audt.cycles | Indicates the PM is in the maintenance state for one full audit cycle.  |

# **PM231** (end)

# Value Description PMBusy from Active Indicates the PM established a connection, and now the PM is busy. PMBusy from MTC Indicates that maintenance used the PM, and the PM is busy.

The following table lists endpoint types.

### **Endpoint types**

| Endpoint types                                      | Description   |
|---|---|
| ISLC <len> <channel type=""></channel></len>        | Indicates the endpoint is an ISDN subscriber line card.   |
| ST <st number=""></st>                              | Indicates the endpoint is a signalling terminal. Signalling terminal endpoints apply only to ISDN.  |
| DS1 pmid <ds1port> <ds1 channel=""></ds1></ds1port> | Indicates the endpoint is a DS-1 carrier.   |
| DCH <dchno> ChnI <no></no></dchno>                  | Indicates the endpoint is a D-channel handler. The<br>endpoint includes the D-channel handler number and the<br>channel number. The D-channel handler endpoints can<br>apply to ISDN connections on an ISDN line trunk<br>controller, or connections on an ISDN line group<br>controller. |
| A TDM connection                                    | An endpoint can be a time-division multiplexed endpoint   |
| (lists up to four D channels)                       | in a line concentrating module for ISDNs. The system<br>displays a maximum of four line equipment numbers in  |
| ISLC <len> D</len>                                  | the connection. The TDM connections only connect to   |
| ISLC <len> D</len>                                  | DCH endpoints.  |
| ISLC <len> D</len>                                  |   |
| • ISLC <len> D</len>                                |   |

### Explanation

The peripheral module (PM) subsystem generates PM232. This report appears when a PM fails to acknowledge an audit request to add or delete a channel connection. This request is from the integrated services digital network (ISDN) Special Connection Table Control Facility (SPEC.CONN). The system generates the modified log when the tuple updates.

### Format

Format 1 applies to Example 1 and Format 2 applies to Example 2.

The log report formats for PM232 are as follows:

Format 1

PM232 mmmdd hh:mm:ss ssdd INFO <PM\_name><PM\_number> SPEC.CONN <log\_type> Con Type: <con\_type> Status: <con\_status\_delta> EndPt1: <endpt\_1\_of\_the \_connection> EndPt2: <endpt\_2\_of\_the \_connection> SEGMENT INFORMATION:

### SEG ENDPOINT1 ENDPOINT2 CONTYPE STATUS

<seg\_no> <seg\_endpt1> <seg\_endpt2> <seg\_contype> <seg\_status\_delta> <seg\_no> <seg\_endpt1> <seg\_endpt2> <seg\_contype> <seg\_status\_delta> <seg\_no> <seg\_endpt1> <seg\_endpt2> <seg\_contype> <seg\_status\_delta> <seg\_status\_delta>

Format 2

```
PM232 mmmdd hh:mm:ss ssdd INFO

<PM_name><PM_number> SPEC.CONN <log_type>

Con Type: <con_type>

Status: <con_status_delta>

EndPt1: ILDCHNL <site> <frame> <unit> <drawer> Channel:

<Bd_chnl>

EndPt2: <endpt_2_of_the _connection>

SEGMENT INFORMATION:
```

### SEG ENDPOINT1 ENDPOINT2 CONTYPE STATUS

<seg\_no> ILDCHNL <site> <frame> <unit> <Bd\_chnl> <seg\_endpt2> <seg\_contype> <seg\_status\_delta> <seg\_no> <seg\_endpt1> <seg\_endpt2> <seg\_contype> <seg\_no> <seg\_endpt1> <seg\_endpt2> <seg\_contype> <seg\_status\_delta> <seg\_no> <seg\_endpt1> <seg\_endpt2> <seg\_contype>

### Example

Example 1 applies to Format 1 and Example 2 applies to Format 2.

Examples of log report PM232 follow:

Example 1

```
PM232 JAN07 15:16:58 9100 INFO
LTC 10 SPEC.CONN Pass Add
Con Type: CON
Status: MTC (no change)
EndPt1: ISLC HOST 67 0 07 03 B2
EndPt2: DS1 LTC 10 5 9
SEGMENT INFORMATION:
```

| SEG       | ENDPOINT1                      | ENDPOINT2     | C     | ONTYPE S' | TATUS      |
|-----------|--------------------------------|---------------|-------|-----------|------------|
| 0         | ISLCHOST 6700703<br>n Inactive | LCM_CSIDE228  |       | Con       | Active     |
| 1<br>chai | XPM_PSIDELTC10728              | XPM_CSIDELTC1 | 01224 | Con       | Active (No |
| 2         | XPM_CSIDELTC10710              | DS1LTC1059    | Con   | MTC (No   | change)    |

```
Example 2
```

### PM232 (continued)

```
PM232 JAN07 15:16:58 9100 INFO
LTC 10 SPEC.CONN Pass Add
Con Type: CON
Status: Inactive (no change)
EndPt1: ILDCHNL REM1 02 0 2 Channel: Bd1
EndPt2: XSGCHNL 0 5
SEGMENT INFORMATION:
```

| SEG  | ENDPOINT1         | ENDPOINT2      | CC    | ONTYPE ST | TATUS     |
|------|-------------------|----------------|-------|-----------|-----------|
| 0    | ILDCHNL REM1 02 0 | 2 Bd1 LCM_CSID | E 1 6 | Con       | InActive  |
| from | n MTC             |                |       |           |           |
| 1    | XPM_PSIDELTC10728 | XPM_CSIDELTC10 | 1224  | Con       | Active(No |
| char | ige)              |                |       |           |           |
| 2    | XPM_CSIDELTC10710 | DS1LTC1059     | Con   | MTC (No   | change)   |

The ISDN line drawer for remotes (ILDR) is first available for remote switching center-SONET (RSC-S) and remote switching center (RSC) configurations in the NA007/XPM08 timeframe. The ILDR is first available for the following configurations in the NA0008/XPM81 timeframe:

- remote line concentrating module (RLCM)
- outside plant module (OPM)
- outside plant access cabinet module (OPAC)

## **Field descriptions**

The following table describes each field in the log report:

| <b>Field descriptions</b> | table (S | heet 1 of 2) |
|---------------------------|----------|--------------|
|---------------------------|----------|--------------|

| Field            | Value   | Description   |
|------------------|---|---|
| PM_name          | String  | Indicates the name of the involved PM (line trunk controller [LTC], digital trunk controller [DTC], etc.) |
| PM_number        | Integer                                       | Gives the number of the involved PM.  |
| log_type         | Fail to add, Pass, Rep,<br>or Fail to Suspect | Indicates the type or definition of the log.  |
| con_type         | Pend  | Indicates a PENDING connection type. A connection is not established in the PM.                           |
| con_status_delta | Res   | Indicates the connection reserved in the PM.  |

# PM232 (continued)

| Field            | Value        | Description  |
|------------------|--------------|--|
| endpt n          | Con          | Indicates the connection requested in the PM.                |
| seg_no           | String       | Refer to Status changes table at the end of this log report. |
| seg_endpt1       | String       | Indicates the endpoint 1 of the segment.                     |
| seg_endpt2       | String       | Indicates the endpoint 2 of the segment.                     |
| seg_contype      | String       | Indicates connection type of the segment.                    |
| seg_status_delta | String       | Indicates previous and current status of the segment.        |
| site             | 0000-ZZZZ    | Indicates the site name (abbreviation).                      |
| frame            | 0 through 99 | Indicates the line concentrating module (LCM) frame number.  |
| unit             | 0 or 1       | Indicates the unit number.                                   |
| drawer           | 0 through 19 | Indicates the ILDR drawer number in the LCM.                 |
| Bd_chnl          | Bd1 or Bd2   | Indicates the Bd-channel number in the ILDR.                 |

#### Field descriptions table (Sheet 2 of 2)

# Action

There is no action required. This log helps operational measurements and other tasks.

# **Associated OM registers**

There are no associated OM registers.

# **Additional information**

The following table lists status changes.

### Status changes (Sheet 1 of 2)

| Value                | Description   |
|----------------------|---|
| Inactive (no change) | Indicates the PM cannot establish the connection.                   |
| Inactive from PMBusy | Indicates the PM was busy and the PM cannot establish a connection. |

# PM232 (continued)

# Status changes (Sheet 2 of 2)

| Value                 | Description   |
|-----------------------|---|
| Inactive from Active  | Indicates the PM established a connection, but that connection is not established now                         |
| Inactive from MTC     | Indicates maintenance used the connection, and the PM cannot establish a connection.                          |
| MTC (no change)       | Indicates maintenance used the connection, and the PM cannot establish a connection.                          |
| Active (no change)    | Indicates the PM establishes and maintains a connection.  |
| Active from PMBusy    | Indicates the PM was busy and the PM can established a connection now.  |
| Active from Active    | Indicates the connection in the PM changed from one established connection to another established connection. |
| Active from MTC       | Indicates maintenance used the connection in the PM, and the PM established a connection.                     |
| MTC for 2 audt.cycles | Indicates the PM was in the maintenance state for one full audit cycle.                                       |
| PMBusy from Active    | Indicates the PM had an established connection, the PM is busy now.   |
| PMBusy from MTC       | Indicates the maintenance used the PM, the PM is busy now.  |

The following table lists endpoint types.

### Endpoint types (Sheet 1 of 2)

| Value   | Description  |
|---|--|
| ISLC <len> <channel type=""></channel></len>        | Indicates the endpoint is an ISDN subscriber line card.  |
| ST <st number=""></st>                              | Indicates the endpoint is a signaling terminal. Signaling terminal endpoints apply only to ISDN. |
| DS1 pmid <ds1port> <ds1 channel=""></ds1></ds1port> | Indicates the endpoint is a DS-1 carrier.  |

# PM232 (end)

| Value                              | Description   |
|------------------------------------|---|
| DCH <dchno> Chnl <no></no></dchno> | Indicates the endpoint is a D-channel handler. The<br>endpoint includes the D-channel handler number and the<br>channel number. The D-channel handler endpoints apply<br>to ISDN connections on an ISDN line trunk controller or<br>connections on an ISDN line group controller. |
| A TDM connection lists up to four  | An endpoint can be a time-division multiplexed endpoint   |
| D channels                         | in a line concentrating module for ISDNs. The system<br>displays up to four line equipment numbers in the   |
| ISLC <len>D</len>                  | connection. The TDM connections only connect to DCH   |
| ISLC <len> D</len>                 | endpoints.  |
| ISLC <len> D</len>                 |   |
| ISLC <len> D</len>                 |   |

### Endpoint types (Sheet 2 of 2)

### **Explanation**

The peripheral module (PM) subsystem generates log report PM233. This report appears when a PM fails to acknowledge an audit request. This request is from the integrated services digital network (ISDN) Special Connection Table Control Facility (SPEC.CONN) to add or delete a channel connection. The system generates the modified log when the tuple fails to update to the correct status for two consecutive audit cycles.

# Format

Format 1 applies to example 1 and format 2 applies to example 2.

The log report formats for PM233 are as follows:

Format 1

| PM233 mr  | nmdd hh:mm:ss   | ssdd INFO      |  |        |
|---|---|----------------|--|--------|
| <pm_r< td=""><td>ame&gt;<pm_num< td=""><td>ber&gt; SP</td><td>EC.CONN<log_1< td=""><td>type&gt;</td></log_1<></td></pm_num<></td></pm_r<> | ame> <pm_num< td=""><td>ber&gt; SP</td><td>EC.CONN<log_1< td=""><td>type&gt;</td></log_1<></td></pm_num<> | ber> SP        | EC.CONN <log_1< td=""><td>type&gt;</td></log_1<> | type>  |
| Con Ty  | pe: <con_type></con_type>   |                |  |        |
| Status:   | <con_status_del< td=""><td>ta&gt;</td><td></td><td></td></con_status_del<>                                | ta>            |  |        |
| EndPt1  | : <endpt_1_of_tl< td=""><td>he_connection&gt;</td><td>&gt;</td><td></td></endpt_1_of_tl<>                 | he_connection> | >  |        |
| EndPt2  | : <endpt_2_of_tl< td=""><td>he_connection&gt;</td><td>&gt;</td><td></td></endpt_2_of_tl<>                 | he_connection> | >  |        |
| SEGM  | ENT INFORMA   | TION:          |  |        |
|   |   |                |  |        |
| _   |   |                |  |        |
| SEG   | ENDPOINT1   | ENDPOINT2      | CONTYPE  | STATUS |
|   |   |                |  |        |
| -   |   |                |  |        |

<seg\_no> <seg\_endpt1> <seg\_endpt2> <seg\_contype> <seg\_status\_delta> <seg\_no> <seg\_no>

Format 2

|         | PM233 mmmdd hh:mm:ss ssdd INFO<br><pm_name><pm_number> SPEC.CONN<log_type><br/>Con Type: <con_type><br/>Status: <con_status_delta><br/>EndPt1: ILDCHNL <site> <frame/> <unit> <drawer> Ch<br/><bd_chnl><br/>EndPt2: <endpt_2_of_the_connection><br/>SEGMENT INFORMATION:</endpt_2_of_the_connection></bd_chnl></drawer></unit></site></con_status_delta></con_type></log_type></pm_number></pm_name> |   |   | /pe><br>Channel:  |   |
|---------|--|---|---|---|---|
|         | _ SEG  | ENDPOINT1   | ENDPOINT2   | CONTYPE   | STATUS                                  |
|         | <seg_en<br><seg_st<br><seg_n<br>The ISDN li<br/>switching ce<br/>configuration</seg_n<br></seg_st<br></seg_en<br>  | ndpt2> <seg_con<br>catus_delta&gt;<br/>o&gt;<br/>ne drawer for re<br/>enter-SONET (R<br/>ns in the NA007</seg_con<br> | ntype> <seg_sta<br>motes (ILDR) is<br/>SC-S) and remo<br/>/XPM08 timefra</seg_sta<br> | <unit> <bd_chnl><br/>atus_delta&gt;<br/>s first available for<br/>ote switching cente<br/>ame. ILDR is firs<br/>PM81 time frame:</bd_chnl></unit> | r remote<br>er (RSC)<br>t available for |
|         |  | ine concentration   |   |   |   |
|         |  | olant module (Ol  |   | ,   |   |
|         | • outside p  | plant access cabi   | net (OPAC)  |   |   |
| Example | -  | pplies to format<br>log report PM2  | -   | 2 applies to forma  | ut 2.                                   |
|         |  |   |   |   |   |

### PM233 (continued)

```
PM233 JAN07 15:16:58 9100 INFO
  LTC 10
                       SPEC.CONN Fail to Add
  Con Type: CON
  Status: MTC (no change)
  EndPt1: ISLC HOST 67 0 07 03 B2
  EndPt2: DS1 LTC 10 5 9
  SEGMENT INFORMATION:
   _____
  SEG ENDPOINT1 ENDPOINT2 CONTYPE STATUS
   _____
  0 ISLCHOST6700703 LCM_CSIDE228 Con InActive
  from MTC
       XPM_PSIDELTC10728 XPM_CSIDELTC101224 Con MTC
  1
  (No change)
  2 XPM_CSIDELTC10710 DS1LTC1059 Con MTC (No
  change)
Example 2
PM233 JAN07 15:16:58 9100 INFO
  LTC 10
                 SPEC.CONN Fail to Add
  Con Type: CON
  Status: Inactive (no change)
  EndPt1: ILDCHNL REM1 02 0 2 Channel: Bd1
  EndPt2: XSGCHNL 0 5
  SEGMENT INFORMATION:
   _____
  SEG ENDPOINT1 ENDPOINT2 CONTYPE STATUS
     _____
  0 ILDCHNL REM1 02 0 2 Bd1 LCM_CSIDE 1 6 Con
  InActive from MTC
       XPM_PSIDELTC10728 XPM_CSIDELTC101224 Con MTC (No
  1
  change)
       XPM_CSIDELTC10710 DS1LTC1059 Con MTC (No
  2
  change)
```

# **Field descriptions**

The following table describes each field in the log report:

Field descriptions table (Sheet 1 of 2)

| Field            | Value   | Description   |
|------------------|---|---|
| PM_name          | String  | Indicates the name of the PM involved (line trunk controller [LTC], digital trunk controller [DTC], etc.) |
| PM_number        | Integer                                       | Gives the number of the PM involved.  |
| log_type         | Fail to add, Pass, Rep,<br>or Fail to Suspect | Indicates the type or definition of the log.  |
| con_type         | Pend  | Indicates a PENDING connection type. No connection will be established in the PM.                         |
|                  | Res   | Indicates the connection is reserved in the PM.   |
|                  | Con   | Indicates the connection was requested in the PM.   |
| con_status_delta | String  | Refer to Status changes table at the end of this log report.  |
| endpt n          | String  | Identifies the endpoint types. Refer to the Endpoint types table at the end of this log report.           |
| seg_no           | Integer                                       | Indicates the number of the segment.  |
| seg_endpt1       | String  | Indicates the endpoint 1 of the segment.  |
| seg_endpt2       | String  | Indicates the endpoint 2 of the segment.  |
| seg_contype      | String  | Indicates connection type of the segment.   |
| seg_status_delta | String  | Indicates previous and current status of the segment.   |
| site             | 0000-ZZZZ                                     | Indicates the site name (abbreviation).   |
| frame            | 0 through 99                                  | Indicates the line concentrating module (LCM) frame number.   |
| unit             | 0 or 1  | Indicates the unit number.  |

# PM233 (continued)

### Field descriptions table (Sheet 2 of 2)

| Field   | Value        | Description                                  |
|---------|--------------|--|
| drawer  | 0 through 19 | Indicates the ILDR drawer number in the LCM. |
| Bd_chnl | Bd1 or Bd2   | Indicates the Bd-channel number in the ILDR. |

# Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

# **Additional information**

The following table lists status changes:

### Status changes (Sheet 1 of 2)

| Value                | Description   |
|----------------------|---|
| Inactive (no change) | Indicates the connection in the PM remained not established.  |
| Inactive from PMBusy | Indicates the PM was busy and the connection in the PM is now not established.  |
| Inactive from Active | Indicates the PM had an established connection and the connection is now not established.                               |
| Inactive from MTC    | Indicates maintenance used the connection in the PM that was not established and the connection is now not established. |
| MTC (no change)      | Indicates maintenance used the connection in the PM and the connection has remained not established.                    |
| Active (no change)   | Indicates the PM has a connection in the PM that remains established.   |
| Active from PMBusy   | Indicates the PM was busy and the connection in the PM is now established.  |
| Active from Active   | Indicates the connection in the PM changed from one established connection to another.                                  |
| Active from MTC      | Indicates maintenance used the connection in the PM and the connection is now established.                              |

# PM233 (end)

### Status changes (Sheet 2 of 2)

| Value                 | Description  |
|-----------------------|--|
| MTC for 2 audt.cycles | Indicates the PM has been in the maintenance state for one full audit cycle. |
| PMBusy from Active    | Indicates the PM had an established connection and the PM is now busy.       |
| PMBusy from MTC       | Indicates maintenance used the PM and the PM is now busy.                    |

The following table lists endpoint types:

### Endpoint types

| Value   | Description   |
|---|---|
| ISLC <len> <channeltype></channeltype></len>        | Indicates the endpoint is an ISDN subscriber line card.   |
| ST <st number=""></st>                              | Indicates the endpoint is a signaling terminal. Signalling terminal endpoints apply only to ISDN.   |
| DS1 pmid <ds1port> <ds1 channel=""></ds1></ds1port> | Indicates the endpoint is a DS-1 carrier.   |
| DCH <dchno> Chnl <no></no></dchno>                  | Indicates the endpoint is a D-channel handler. The<br>endpoint includes the D-channel handler number and the<br>channel number. D-channel handler endpoints apply to<br>ISDN connections on an ISDN line trunk controller or on<br>an ISDN line group controller. |
| A TDM connection                                    | An endpoint can be a time-division multiplexed endpoint in a line concentrating module for ISDNs. In this case, up  |
| (lists up to four D channels)                       | to four line equipment numbers in the connection are  |
| ISLC <len>D</len>                                   | displayed. The TDM connections are only connected to  |
| ISLC <len>D</len>                                   | DCH endpoints.  |
| ISLC <len>DI</len>                                  |   |
| 1   |   |
| SLC <len>D</len>                                    |   |

# **Explanation**

The peripheral module (PM) subsystem generates log report PM234. This report appears when a PM fails to acknowledge an audit request. This request is from the integrated services digital network (ISDN) Special Connection Table Control Facility (SPEC.CONN) to add or delete a channel connection. The system generates the modified log when segment status is maintenance (MTC) for two consecutive audit cycles.

## Format

Format 1 applies to example 1 and format 2 applies to example 2.

The log report formats for PM234 are as follows:

Format 1

| PM234 mmmdd hh:mm:ss ssdd IN  | FO                              |
|---|---------------------------------|
| <pm_name><pm_number></pm_number></pm_name>                                    | SPEC.CONN <log_type></log_type> |
| Con Type: <con_type></con_type>   |                                 |
| Status: <con_status_delta></con_status_delta>                                 |                                 |
| EndPt1: <endpt_1_of_the _cont<="" td=""><td>nection&gt;</td></endpt_1_of_the> | nection>                        |
| EndPt2: <endpt_2_of_the _cont<="" td=""><td>nection&gt;</td></endpt_2_of_the> | nection>                        |
| SEGMENT INFORMATION:  |                                 |
|   |                                 |

| SEG | ENDPOINT1   | ENDPOINT2                   | CONTYPE                     | STATUS |
|-----|-------------|-----------------------------|-----------------------------|--------|
| U   | atus_delta> | > <seg_endpt2></seg_endpt2> | <seg_contype></seg_contype> |        |

Format 2

| WIZ34 IIIIIII   | ndd hh:mm:ss  | ssdd INFO |   |        |  |
|---|---|-----------|---|--------|--|
| <pm_nar< td=""><td>me&gt;<pm_num< td=""><td>ber&gt; SPEC</td><td>C.CONN<log_ty< td=""><td>pe&gt;</td></log_ty<></td></pm_num<></td></pm_nar<> | me> <pm_num< td=""><td>ber&gt; SPEC</td><td>C.CONN<log_ty< td=""><td>pe&gt;</td></log_ty<></td></pm_num<> | ber> SPEC | C.CONN <log_ty< td=""><td>pe&gt;</td></log_ty<> | pe>    |  |
| Con Type: <con_type></con_type>   |   |           |   |        |  |
| Status: <   | Status: <con_status_delta></con_status_delta>   |           |   |        |  |
| EndPt1: J   | EndPt1: ILDCHNL <site> <frame/> <unit> <drawer> Channel:</drawer></unit></site>                           |           |   |        |  |
| <bd_chn< td=""><td colspan="5"><bd_chnl></bd_chnl></td></bd_chn<>   | <bd_chnl></bd_chnl>   |           |   |        |  |
| EndPt2: <   | EndPt2: <endpt_2_of_the _connection=""></endpt_2_of_the>  |           |   |        |  |
| SEGMEN  | NT INFORMA  | TION:     |   |        |  |
| SEG   | ENDPOINT1   | ENDPOINT2 | CONTYPE   | STATUS |  |
|   |   |           |   |        |  |

The ISDN line drawer for remotes (ILDR) is first available for remote switching center-SONET (RSC-S) and remote switching center (RSC) configurations in the NA007/XPM08 timeframe. ILDR is first available for the following configurations in the NA008/XPM81 timeframe:

- remote line concentrating module (RLCM)
- outside plant module (OPM)
- outside plant concentrating module (OPAC)

# **Example**

Example 1 applies to format 1 and example 2 applies to format 2.

Examples of log report PM234 follow:

Example 1

### PM234 (continued)

```
PM233 JAN07 15:16:58 9100 INFO
   LTC 10
                            SPEC.CONN Fail to Add
   Con Type: CON
   Status: MTC (no change)
   EndPt1: ISLC HOST 67 0 07 03 B2
   EndPt2: DS1 LTC 10 5 9
   SEGMENT INFORMATION:
   SEG ENDPOINT1 ENDPOINT2 CONTYPE STATUS
   0 ISLCHOST6700703 LCM_CSIDE228 Con InActive
   from MTC
   1 XPM_PSIDELTC10728 XPM_CSIDELTC101224 Con MTC (No
   change)
      XPM_CSIDELTC10710 DS1LTC1059 Con MTC (No change)
   2
Example 2
PM233 JAN07 15:16:58 9100 INFO
   LTC 10
                             SPEC.CONN Suspect
   Con Type: CON
   Status: MTC for 2 audt. cycles
   EndPt1: ILDCHNL REM1 02 0 2 Channel: Bd1
   EndPt2: XSGCHNL 0 5
   SEGMENT INFORMATION:
   SEG ENDPOINT1 ENDPOINT2 CONTYPE STATUS
   0 ILDCHNL REM1 02 0 2 Bd1 LCM_CSIDE 1 6 Con
   InActive from MTC
       XPM_PSIDE LTC 0 7 6 XPM_CSIDE LTC1 0 5 6 Con
   1
   InActive from MTC
       JNET 0 5 2 JNET 0 57 6 Con InActive from MTC
   2
       XPM_CSIDE NIU 0 0 2 XSGCHNL 0 5 Con InActive
   3
   from MTC
```

# **Field descriptions**

The following table describes each field in the log report:

Field descriptions table (Sheet 1 of 2)

| Field            | Value   | Description   |
|------------------|---|---|
| PM_name          | String  | Indicates the name of the PM involved (line trunk controller [LTC], digital trunk controller [DTC], etc.) |
| PM_number        | Integer                                       | Gives the number of the PM involved.  |
| log_type         | Fail to Add, Pass, Rep,<br>or Fail to Suspect | Indicates the type or definition of the log.  |
| con_type         | Pend  | Indicates a PENDING connection type. A connection will not be established in the PM.                      |
|                  | Res   | Indicates the connection is reserved in the PM.   |
|                  | Con   | Indicates the connection was requested in the PM.   |
| con_status_delta | String  | Refer to Status changes table at the end of this log report.  |
| endpt n          | string  | Identifies the endpoint types. Refer to the Endpoint types table at the end of this log report.           |
| seg_no           | Integer                                       | Indicates the number of the segment.  |
| seg_endpt1       | String  | Indicates the endpoint 1 of the segment.  |
| seg_endpt2       | String  | Indicates the endpoint 2 of the segment.  |
| seg_contype      | String  | Indicates connection type of the segment.   |
| seg_status_delta | String  | Indicates previous and current status of the segment.   |
| site             | 0000-ZZZZ                                     | Indicates the site name (abbreviation).   |
| frame            | 0 through 99                                  | Indicates the line concentrating module (LCM) frame number.   |
| unit             | 0 or 1  | Indicates the unit number.  |

# PM234 (continued)

### Field descriptions table (Sheet 2 of 2)

| Field   | Value        | Description                                  |
|---------|--------------|--|
| drawer  | 0 through 19 | Indicates the ILDR drawer number in the LCM. |
| Bd_chnl | Bd1 or Bd2   | Indicates the Bd-channel number in the ILDR. |

# Action

There is no action required.

# **Associated OM registers**

There are no associated OM registers.

# **Additional information**

The following table lists status changes:

### Status changes (Sheet 1 of 2)

| Value                | Description   |
|----------------------|---|
| Inactive (no change) | Indicates the connection in the PM remains not established.   |
| Inactive from PMBusy | Indicates the PM was busy and the connection in the PM is now not established.                                      |
| Inactive from Active | Indicates the PM had an established connection and it is now not established.                                       |
| Inactive from MTC    | Indicates that maintenance used the not established connection in the PM and the connection is now not established. |
| MTC (no change)      | Indicates that maintenance used the connection in the PM that remains not established.                              |
| Active (no change)   | Indicates the connection in the PM remains established.   |
| Active from PMBusy   | Indicates the PM was busy and the PM now has an established connection.   |
| Active from Active   | Indicates the connection in the PM changed from one established connection to another.                              |
| Active from MTC      | Indicates that maintenance used the connection in the PM and the PM now has an established connection.              |

# PM234 (end)

### Status changes (Sheet 2 of 2)

| Value                 | Description   |
|-----------------------|---|
| MTC for 2 audt.cycles | Indicates the PM was in the maintenance state for one full audit cycle. |
| PMBusy from Active    | Indicates the PM had an established connection and the PM is now busy.  |
| PMBusy from MTC       | Indicates that maintenance used the PM and the PM is now busy.          |

The following table lists endpoint types:

#### Endpoint types

| Value   | Description   |
|---|---|
| ISLC <len> <channeltype></channeltype></len>  | Indicates the endpoint is an ISDN subscriber line card.   |
| ST <st number=""></st>  | Indicates the endpoint is a signaling terminal. Signalling terminal endpoints apply only to ISDN.   |
| DS1 pmid <ds1port> <ds1<br>channel&gt;</ds1<br></ds1port>   | Indicates the endpoint is a DS-1 carrier.   |
| DCH <dchno> Chnl <no></no></dchno>  | Indicates the endpoint is a D-channel handler. The endpoint<br>includes the D-channel handler number and the channel<br>number. D-channel handler endpoints apply to ISDN<br>connections on an ISDN line trunk controller or on an ISDN line<br>group controller. |
| A TDM connection<br>(lists up to four D channels)<br>ISLC <len>D<br/>ISLC<len>D<br/>ISLC<len>D<br/>ISLC<len>D</len></len></len></len> | An endpoint can be a time-division multiplexed endpoint in a line concentrating module for ISDNs. The system displays up to four line equipment numbers in the connection. The TDM connections only connect to DCH endpoints.                                     |

#### PM235

### **Explanation**

The Peripheral Module (PM) subsystem generates log report PM235 when a D-channel handler (DCH) takeover occurs. The report identifies the source and destination DCHs with the ISDN service group (ISG).

Log PM235 is modified to show that the ISDN signaling preprocessor (ISP) reports an explanation for the DCH takeover failure to the central control (CC). If the DCH passes takeover, the log is not modified.

### Format

The log report format for PM235 is as follows:

\*\*PM235 mmmdd hh: mm: ss ssdd INFO DCH DCH TAKEOVER infotxt : DCH nnn TO DCH nnn ISG nnn Pass/fail message received from PM Reason: Explanation returned by XPM

### Example

An example of log report PM235 follows:

\*\*PM235 DEC24 23: 59: 59 1121 INFO DCH DCH TAKEOVER failed on PLGC 4: DCH 123 TO DCH 45 ISG 27 Fail message received from PM Reason: Spare DCH has incompatible load

### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field              | Value    | Description  |
|--------------------|----------|--|
| INFO DCH           | Constant | Indicates that a DCH takeover occurred.                        |
| DCH TAKEOVER       | passed   | Indicates takeover was successful.                             |
|                    | failed   | Indicates takeover was not successful.                         |
| DCH nnn TO DCH nnn | 0-255    | Identifies the source and destination DCH.                     |
| ISG                | 0-255    | Identifies services in the ISDN ISG that this action affected. |

## PM235 (continued)

#### (Sheet 2 of 2)

| Field                              | Value            | Description  |
|------------------------------------|------------------|--|
| Pass/Fail message received from PM | Constant         | Indicates a pass or fail message was received from the PM. |
| Reason                             | Character string | Indicates the explanation from the PM for the failure.     |

## Action

If the takeover succeeds, there is no action required. If the takeover failed, the system makes the destination DCH that PM235 identifies system busy (SysB) and generates log report PM190.

The ISDN signaling processor (ISP) can report an explanation for the enhanced DCH (EDCH) failed takeover to the CC. The following table contains the possible reasons and their corresponding actions.

#### (Sheet 1 of 2)

| Reason  | Action  |
|---|---|
| Spare DCH has incompatible load.                    | Reload the spare DCH with the correct EDCH load.            |
| Could not convert DCH port number.                  | Do BSY and RTS on the XPM to resend static data to the XPM. |
| Invalid message from initiator.                     | Attempt takeover again.                                     |
| Source DCH already performing takeover.             | Attempt takeover again.                                     |
| Source DCH datafilled as a spare.                   | Check DCH and ISG mapping.                                  |
| Spare DCH not specified in request.                 | Attempt takeover again.                                     |
| Source DCH not in valid state for takeover request. | Check state of source DCH in takeover.                      |
| Spare DCH already performing takover.               | Attempt takeover again.                                     |
| Target DCH not a spare.                             | Check DCH and ISG mapping.                                  |
| Target DCH not in valid state for takeover request. | Check state of destination DCH in takeover.                 |
| No spares available.                                | Check sparing enable flag on destination DCH.               |

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## PM235 (end)

### (Sheet 2 of 2)

| Reason  | Action                  |
|---|-------------------------|
| No resource takeover block allocated for request. | Attempt takeover again. |
| DCH recovery timer has expired.                   | Attempt takeover again. |
| Error recovery sequence initiated.                | Attempt takeover again. |
| Undefined failure reason XX.                      | Attempt takeover again. |

# **Associated OM registers**

There are no associated OM registers.

### Explanation

The peripheral module (PM) subsystem generates log report PM236. This log report appears when the system finds, does not find, or loses integrity. The integrity condition is on one endpoint of the network segment of a special connection (SPECCONN). The system uses an integrated services digital network (ISDN), or other PM and XPM (XMS-based PM) types in this operation. The log has three different meanings, depending on the integrity message type: integrity found, integrity not found, and integrity lost.

The system finds integrity on one endpoint of the network segment of the connection. This log appears after one of the following occurs:

- the system makes a SPECCONN again
- integrity was lost or not found
- the SPECCONN audit acts on a special connection that has the status of NO\_INTEG

The system did not find integrity on one endpoint of the network segment, of the connection. The report appears when the system makes or remakes a SPECCONN. A NET102 integrity failure log always precedes this log.

One endpoint of the network segment of the connection loses integrity. A NET102 integrity failure log always precedes this log.

### Format

Format 1 applies to example 1 and format 2 applies to example 2.

The log report formats for PM236 are as follows:

#### Format 1

PM236 mmmdd hh:mm:ss ssdd INFO <pmid> SPECCONN <Integrity message type> CS Port: <port#> CS Chnl: <chnl#> EndPt1 : <endpt1> EndPt2 : <endpt2>

#### Format 2

#### PM236 (continued)

PM236 mmmdd hh:mm:ss ssdd INFO <pmid> SPECCONN <Integrity message type> CS Port: <port#> CS Chnl: <chnl#> EndPt1 : ILDCHNL <site> <frame> <unit> <drawer> Channel: <Bd\_chnl> EndPt2 : <endpt2>

The ISDN line drawer for remotes (ILDR) is first available for remote switching center-SONET (RSC-S) and remote switching center (RSC) configurations in the NA007/XPM08 time frame. The ILDR is first available for the following configurations in the NA008/XPM81 time frame:

- remote line concentrating module (RLCM)
- outside plant module (OPM)
- outside plant access cabinet (OPAC)

### Example

Example 1 applies to format 1 and example 2 applies to format 2.

Examples of log report PM236 follow:

#### Example 1

```
PM236 APR04 16:48:46 6362 INF0
LTC 2 SPECCON Integrity Lost
CS Port: 6 CS Chnl: 30
EndPt1 : DS1 DTC 0 5 24
EndPt2 : DCHCHNL 100 30
```

#### Example 2

PM236 APR04 16:48:46 6362 INF0 LTC 2 SPECCON Integrity Lost CS Port: 6 CS Chnl: 30 EndPt1 : ILDCHNL REM1 02 0 2 Channel: Bd1 EndPt2 : XSGCHNL 0 5

## **Field descriptions**

The following table describes each field in the log report:

#### Field descriptions table (Sheet 1 of 2)

| Field                  | Value  | Description  |
|------------------------|--|--|
| INFO                   | Constant   | Informs of activity on the PM subsystem.   |
| pmid                   | Alphanumeric                                       | Indicates PM type.   |
| SPECCONN               | Constant   | Indicates an integrated-services digital<br>network special connection table control<br>facility audit.  |
| Integrity message type | Character string                                   | Indicates the type of message and affects the<br>meaning of the log: integrity found, integrity not<br>found, and integrity lost. Refer to<br>"Explanation" in this log report for more<br>detailed information. |
| CS Port                | 0 through 15                                       | Indicates the central side (C-side) port on the peripheral.  |
| CSCHNL                 | 0 through 31                                       | Indicates the C-side channel number on the peripheral.   |
| EndPt1, EndPt2         | DS1, ISLC, or DCHNL                                | Defines endpoint 1 or 2 for the special connection and requires the parameters listed in fields DS1, ISLC, or DCHNL.   |
| DS1                    | PM_TYPE<br>PM_NUMBER<br>P-SIDE PORT<br>P-SIDE CHNL | These values together define the characteristics of the DS1 endpoint #1 or #2 connections.   |
| ISLC                   | LCM_ID1<br>LCM_ID2<br>LEN_ID1<br>LEN_ID2           | These values together define the characteristics of the line concentrating module (LCM) and line equipment number (LEN) involved in the ISLC endpoint 1 or 2 connections.  |
| DCHCHNL                | ISG_NUMBER<br>CHANNEL_NUMBER                       | These values together define the characteristics of the D-channel handler (DCH) involved in the DCHCHNL endpoint 1 or 2 connections.   |
| site                   | 0000-ZZZZ  | Indicates the site name (abbreviation).  |

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## **PM236** (end)

#### Field descriptions table (Sheet 2 of 2)

| Field   | Value        | Description   |
|---------|--------------|---|
| frame   | 0 through 99 | Indicates the line concentrating module (LCM) frame number. |
| unit    | 0 or 1       | Indicates the unit number.                                  |
| drawer  | 0 through 19 | Indicates the ILDR drawer number in the LCM.                |
| Bd_chnl | Bd1 or Bd2   | Indicates the Bd-channel number in the ILDR.                |

## Action

If an integrity found log does not follow an integrity not found or an integrity lost log, consult the *Networks Maintenance Guide*. Refer to the "Network Failures" section or the log is for information only and there is no action required.

## **Associated OM registers**

There are no associated OM registers.

### **Explanation**

This log provides the information of any XLIU sparing attempt. It describes whether the sparing attempt is initiated automatically by the DMS or manually by the craftperson. If sparing fails, the log report provides the reason for the failure and describes any action needed to recover the affected XSG services.

## Format

The log report format for PM250 is as follows:

PM250 mmmdd hh:mm:ss ssdd INFO XLIU SPARING
 XLIU <sparing type> Sparing <result>
 XLIU:<source xliu>to XLIU <target xliu> on XSG <xsg>
 Reason: <reason>
 Action: BSY and then RTS XLIU <target xliu>

## Example

An example of log report PM250 is as follows:

PM250 JAN15 13:05:24 0101 INFO XLIU SPARING
 XLIU Automated Sparing passed: XLIU 300 to 301 on XSG 300

## **Field descriptions**

The following table describes each field in the log report:

| Field        | Value                                      | Description  |
|--------------|--|--|
| Sparing type | Variable length, numeric string            | This field indicates whether the sparing attempt is from DMS (automated) or from the craftperson (manual). |
| Result       | Variable length, numeric string            | This field indicates whether the sparing attempt passed or failed.   |
| Source xliu  | Three-digit integer, in the range 0 to 511 | This field gives the LIU number of the XLIU, where the XSG is assigned before the sparing attempt.         |
| Target xliu  | Three-digit integer, in the range 0 to 511 | This field gives the LIU number of the XLIU, where the XSG is assigned after the sparing attempt.          |

#### PM250 (continued)

| Field  | Value                                      | Description  |
|--------|--|--|
| xsg    | Three-digit integer, in the range 0 to 749 | This field gives the XSG number of the XLIU Service Group, where its services are spared.    |
| Reason | Variable string up to 39 characters.       | This field indicates the reason why the sparing attempt failed, and is one of the following: |
|        |  | System error   |
|        |  | Invalid request  |
|        |  | No spare in-service XLIU found   |
|        |  | Maintenance in progress  |
|        |  | Sparing already in progress  |
|        |  | REX in progress  |
|        |  | Spare SXLIU cannot be disabled from SREX   |
|        |  | Dump and restore in progress   |
|        |  | Failed to reserve spare XLIU   |
|        |  | Failed to transfer CA channels   |
|        |  | Datasync failed  |

### Action

If the sparing is successful, no action is required.

If the sparing failed because of any valid reasons as described above except "Datasync failed", the XSG remains on the source XLIU. Follow the XLIU recovery process to recover the source XLIU.

If the sparing failed because of "Datasync failed", the XSG has already been switched to the target XLIU. The target XLIU will be placed in the system busy (SysB) state and a PM102 log will be generated. The user can BSY (or BSY FORCE) the XLIU, PMRESET it and then RTS it. If the RTS request fails, initiate a manual sparing to move all affected services to another spare XLIU.

If the sparing fails because of reason "No in-service spare XLIU found", this indicates that on the same shelf as the source XLIU, there are auto-sparable spare XLIUs provisioned but they are all not in the in-service (InSv) state. To prevent the auto-sparable spare XLIU from failing any automated sparing attempt, put it back to in-service as soon as possible.

## PM250 (end)

## Associated OM registers

There are no associated OM registers.

# Log history

## SN09 (DMS)

Log PM250 is documented by CR Q01052633.

### **Explanation**

This log identifies that a REX test was executed on an auto-sparable spare XLIU. The log provides the result of the REX test. If the REX test fails, the reason why it fails is also included on the log when the log is generated. When the BSY command is being executed on an XLIU that has SREX data mismatch on it, the PM251 log generated also provides the reason for the mismatch.

## Format

The log report format for PM251 for an XLIU REX result is as follows:

PM251 mmmdd hh:mm:ss ssdd INFO XLIU REX
XLIU REX Test <result>: XLIU <xliu number>
Reason: <reason>

The log report format for PM251 for an XLIU SREX data mismatch is as follows:

PM251 mmmdd hh:mm:ss ssdd INFO XLIU REX XLIU data mismatch: XLIU <xliu number> Reason: <reason>

## Example

An example of log report PM251 is as follows:

PM251 JAN14 14:03:26 8400 INFO XLIU REX XLIU REX Test: XLIU 301

## **Field descriptions**

The following table describes each field in the log report:

| Field  | Value                           | Description  |
|--------|---------------------------------|--|
| Result | Variable length, numeric string | This field indicates whether the XLIU REX test passed or failed. |

### PM251 (continued)

| Field       | Value                                      | Description  |
|-------------|--|--|
| xliu number | Three-digit integer, in the range 0 to 511 | This field gives the LIU number of the XLIU, where the REX test was run.                   |
| Reason      | Variable string up to 45 characters.       | This field indicates the reason why the XLIU REX test failed, and is one of the following: |
|             |  | REX test is aborted by the system  |
|             |  | REX test is aborted manually   |
|             |  | Failed to allocate mailbox   |
|             |  | XLIU is not accessible   |
|             |  | Failed to start in-service test  |
|             |  | In-service test failed   |
|             |  | In-service test timeout  |
|             |  | Failed to make XLIU SysB   |
|             |  | Mailbox error has occurred   |
|             |  | <ul> <li>Timeout waiting for XLIU to go SysB</li> </ul>                                    |
|             |  | <ul> <li>Timeout waiting for XLIU to go InSv</li> </ul>                                    |
|             |  | Sparing is active on XLIU  |
|             |  | Internal error in XLIU REX handler   |
|             |  | XLIU REX handler died unexpectedly   |
|             |  | REX test enabled on a servicing XLIU   |
|             |  | REX test enabled on non auto-sparable XLIU   |
|             |  | REX test disabled on auto-sparable XLIU  |

# Action

When this log is generated with a reason indicating that the XLIU REX test failed, the craftperson must diagnose the XLIU that failed the test and recover any fault. When the fault has been removed, Bring the XLIU back to the in-service (InSv) state.

When this log is generated with a reason indicating that there is a XLIU REX data mismatch, contact the support groups to correct the data mismatch.

When this log is generated with the reason message returned "Rex test enabled on a servicing XLIU", switch the XSG on that XLIU to a spare XLIU.

## PM251 (end)

## Associated OM registers

There are no associated OM registers.

# Log history

## SN09 (DMS)

Log PM251 is documented by CR Q01052633.

### Explanation

The peripheral module (PM) subsystem generates log report PM270. The subsystem generates this report when the congestion state of a D-channel handler (DCH) changes. Congestion can result from:

- a processor blockage that an excess of memory buffers queued for servicing causes
- not enough memory buffers for storage of incoming messages on D-channels or high CPU occupancy in the DCH

The congestion logs indicate when a DCH enters congestion, enters overload, leaves overload, and leaves congestion. Repeated overload and congestion logs indicate that the office ISDN services require maintenance.

## Format

The log report format for PM270 is as follows:

PM270 mmmdd hh:mm:ss ssdd INFO DCH Congestion DCH <d#> on <xpm> <x#>:DCH Congestion: <faulttext> ISG <i#> Cause: <faultcause> <,> <faultcause><,><faultcause>

## **Example**

An example of log report PM270 follows:

PM270 JAN01 12:13:14 1234 INFO DCH Congestion DCH 0 on LTC 10:DCH Congestion: Congestion ISG 3 Cause: FIFO Backed Up, Low CPU

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field          | Value    | Description  |
|----------------|----------|--|
| DCH Congestion | Constant | Indicates the status of the D-channel Handler (DCH). |
| d#             | 0-255    | Identifies the DCH.                                  |

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## PM270 (end)

(Sheet 2 of 2)

| Field       | Value                                  | Description  |
|-------------|--|--|
| xpm         | RCCI, LTC, LGC,                        | Identifies the host XPM type.                                      |
|             | PLGC, TMS,                             |  |
|             | SMA, SMU,                              |  |
|             | PRCC, ALGC,                            |  |
|             | RCC2, SRCC,                            |  |
|             | RC02                                   |  |
| x#          | (0-255)                                | Identifies the host XPM number.                                    |
| faulttext   | Congestion                             | Denotes the change of the DCH into congestion.                     |
|             | Service Affecting State<br>of Overload | Denotes the change of the DCH into overload.                       |
|             | Congestion Abated                      | Denotes the change of the DCH into congestion abated.              |
|             | Overload Abated                        | Denotes the change of the DCH into overload abated.                |
| i#          | 0-255                                  | Identifies ISDN Service Group (ISG) that associates with this DCH. |
| fault_cause | Low Buffer Pool                        | Indicates the reason of the DCH congestion.                        |
|             | FIFO Backed Up                         | Indicates the reason of the DCH congestion.                        |
|             | Low CPU                                | Indicates the reason of the DCH congestion.                        |

# Action

There is no action required.

# Associated OM registers

This log increases the PM1 PM1ERR OM.

### Explanation

The Peripheral Module (PM) subsystem generates report PM300. The subsystem generates PM300 when an error condition causes a TRAP interrupt. One of the following detects the error condition:

- firmware
- hardware
- software

The report includes information like a traceback. A traceback is a record of software execution that shows the sequence in which the system executes instructions. Log PM185 reports a TRAP interrupt. Save PM185 for the next level of maintenance.

## Format

The log report format for PM300 is as follows:

\*PM300 mmmdd hh:mm:ss ssdd TBL PM TRAP pmid Unit n: acttxt Ram Load name = proctxt MP rom name = proctxt, SP rom name = proctxt trap: traptxt Task: tasknm Trap Sequence #: seqtxt CC Time: dd:hh:mm:ssnn PP Time: dd:hh:mm:ssnn <trapinfo>

## Example

An example of log report PM300 follows:

```
*PM300 JUN02 23:08:02 7500 TBL PM TRAP
  SMS 0 Unit 0: Act
  Ram Load name = SS20ZA
  MP rom name = XPMRFA10, SP rom name = XPMRFA10
  trap: Value range err=0
  Task: BASEMON 000A 000A Trap Sequence #: 3 Current load
  CC Time: 02:22:56:11.00
  PP Time: 00:01:09:09.80
  Occurred at:002CB5CE SMSSPMON 116 DISPALM 27 Offset:#8A
  Called from:002CB6BC SMSSPMON 116 DDLTOOBP 28 Offset:#5E
   002CE4B5 SMSSPMON 116 DDLDATAD 55 Offset: #11B
   002CFDA1 SMSSPMON 116 SPMON
                                   77 Offset: #BD
   002F5749 BASEMON 16 TERMDRIV 10 Offset: #14B
  PC:0000159E SR=2000 US=0000EC SS=0007FFF6 TCB=0000DEE0
  D0 =00000A4A D1 =0020F18C D2 =FFFFFFFF D3 =00000001
  D4 =0000060C D5 =FFFFF08 D6 =00002942 D7 =00000000
  A0 =00208492 A1 =0000DEE0 A2 =0000ECA8 A3 =002CB5CE
  A4 =0002CA6A A5 =0000ECBC A6 =000015C6 A7 =0007FFF6
  Stack: 0004 0000 0001 0000 DEE0 000C 000C 000F 0012 ...
```

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field         | Value         | Description  |
|---------------|---------------|--|
| TBL PM TRAP   | Constant      | Identifies the problem that causes a TRAP interrupt.   |
| pmid          | Symbolic text | See descriptions for pmid_1, pmid_2 and pmid_3 in table I.                                   |
| UNIT          | 0 or 1        | Identifies the PM plane.   |
| acttxt        | Act           | Identifies the activity state of PM plane as active (Act).                                   |
|               | Inact         | Identifies the activity state of PM plane as inactive (Inact).                               |
| Ram Load name | Symbolic text | Provides the name of the procedure resident in random access memory (RAM).                   |
| MP rom name   | Symbolic text | Provides the name of the procedure resident in master processor (MP) read only memory (ROM). |

## PM300 (end)

(Sheet 2 of 2)

| Field         | Value         | Description  |
|---------------|---------------|--|
| SP rom name   | Symbolic text | Provides the name of the procedure resident in signaling processor (SP) ROM. |
| trap          | Symbolic text | Indicates the type of TRAP.  |
| Task          | Symbolic text | Identifies the suspect task.   |
| Trap sequence | 0-99          | Provides sequence and load identification for TRAP occurrence.               |
| CC Time       | Integers      | Provides time central control recorded TRAP.                                 |
| PP Time       | Integers      | Provides time peripheral processor (PP) recorded TRAP.                       |
| trapinfo      | Symbolic text | Provides traceback of procedures from where TRAP occurs.                     |

# Action

Save all reports that the system generates one minute before the TRAP report. Contact the next level of maintenance.

# **Associated OM registers**

There are no associated OM registers.

### **PM400**

#### **Explanation**

The peripheral module (PM) subsystem generates report PM400. The subsystem generates PM400 when a failure occurs in the link that associates with the logical terminal. The failure in the link causes the system to take down one or more calls. The Problem Manager also generates PM400. The Problem Manager generates PM400 when the PM subsystem generates 15 or more PM180 reports at the end of the hour.

The PM subsystem generates report PM180 when the system encounters a software exception. A software exception occurs when software does not execute correctly. The subsystem also generates log report PM180 for software exceptions related to hardware problems.

### Format

The log report format for PM400 is as follows:

PM400 mmmdd hh:mm:ss ssdd SUMM PM Exception Report Location: <pmid> <unit\_no> Problem id: <probid> Event : <rsntxt> Initial event time: <initime> Event count : <num\_events> Duration: <eventime>

## Example

An example of log report PM400 follows:

PM400 MAY26 14:56:12 5400 SUMM PM Exception Report Location: RCCI 2 0 Problem id: 7112 Event: PM software exception count Initial event time: 13:51:42 Event count: 19 Duration: 60 min

## **Field descriptions**

The following table describes each field in the log report:

| Field                       | Value                         | Description  |
|-----------------------------|-------------------------------|--|
| SUMM PM Exception<br>Report | Constant                      | Indicates the summary of logs that concern the PM exception report.  |
| pmid                        | Refer to Table I              | Identifies the PM that generates this report.  |
| unit_no                     | 0 or 1                        | Identifies the PM unit that generates this report.   |
| probid                      | nnnnn                         | Provides the problem number. This number<br>associates logs that relate to the same<br>problem. The Problem Viewer also displays<br>this number. |
| rsntxt                      | `PM software exception count' | Identifies the event that caused the subsystem to generate this report.  |
| initime                     | hh:mm:ss                      | Provides the time of the first event.  |
| num_events                  | n,nnnnnnn                     | Provides the number of observed events.  |
| eventime                    | nnnn min                      | Provides the duration of the event.  |

## Action

Inspect the XMS-based peripheral module (XPM) to identify faults. If PM180 indicates a hardware problem, perform diagnostic and maintenance procedures on the suspect equipment.

If PM180 indicates a software error or a problem with the XPM software, reload the software.

## **Associated OM registers**

There are no associated OM registers.

### PM420

### Explanation

Log title:PM420Name:PM P-SIDE Overload reportEvent type:INFO

Description:

Operational measurement MSGPSOC tracks the transfer rate of messages sent and received on the P-side link of the XPM. The system converts the number of messages into the percentage of link capacity used. If the percentage exceeds 60% of link capacity, overload occurs. The system generates and sends you PM420, the PM P-SIDE Overload report.

## Format

The format for log report PM420 follows.

GCSA13AE CMPM420 JAN19 21:26:26 5000 INFOLTC 0Number of overloaded P-side Links: 2Node: ISTb,Unit0 Act: ISTb, Unit1 Inact: ISTbP-side OverloadPercentage : 60-65%Node No : 2Percentage : 85-90%

## Example

The above format example for log report PM420 also reflects a report example.

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field      | Value       | Description   |
|------------|-------------|---|
| Node No    | integer     | the number of the node that is in overload condition                        |
| Percentage | 60% to 100% | the message transfer rate expressed as the percentage of link capacity used |

## Action

None

Log reports 1-779

# PM420 (end)

## Related OM registers MSGPSOC

### **Additional information**

None

#### **PM600**

#### Explanation

The peripheral module (PM) subsystem generates report PM600 when the XMS-based peripheral module (XPM) routine exercise (REX) test fails. The PM600 records the REX test from the start of testing to the test step that fails. The PM600 identifies the recovery actions that the test initiates to determine the cause of the XPM REX test failure. The PM600 replaces the PM181 REX Failed logs and PM181 REX Recovery logs that AF2989 added in BCS32. The PM600 is a trouble log that raises a major alarm for the PM that fails the XPM REX test.

The subsystem generates report Format 2 when the REX test on a line concentrating module (LCM) fails. The LCM test consists of the LCM REX test and the LCM continuity and voltage (LCMCOV) REX test. The system performs the LCMCOV REX test on the LCM power converters and ringing generator. The report contains the name of the REX test and records the status of the nodes and the units. The failure reason indicates the step in which the REX test failed.

*Note:* In NA004 and later, feature AF5898 (LCM REX Controller Enhancement) migrates the LCM REX test. The LCM REX Controller Enhancement migrates the test from the LCM node audit process to the system REX (SREX) controller. The LCM REX Controller Enhancement places the continuity and voltage (COV) portion of the LCM REX test in a separate LCMCOV test.

Log report PM600 includes the maintenance arbitrator (MtcArb) state (either operating or disabled) when MtcArb is present in the XPM load. The subsystem generates report Format 3 when a load that contains MtcArb is present in both XPM units. The subsystem generates report Format 4 when a load that contains MtcArb is present in only one XPM unit.

### Format

The fields and entries associated with maintenance arbitrator are optional (apply only to XPMs). When a load containing MtcArb is present in both XPM units, the MtcArb state is indicated for each unit as either functional or disabled. In XPM81, when a load containing MtcArb is present in only one of the units, the MtcArb state is indicated for that unit only. The state of the of the second unit is not indicated. Beginning in TL09, MtcArb is always functional and the MtcArb state is not indicated in the logs.

The log report formats for PM600 are as follows:

Format 1

 PM600 mmmdd hh:mm:ss ssdd TBL REX Failed <pmid>

 Node:<status>,
 Unit <act>: <state>,
 Unit 1 <act>: <state>

 <u>Rex Step</u>
 <u>Unit</u>
 <u>Start Time</u>
 Failure Reason

 <rex\_step>
 <unit\_no>
 <hh:mm:ss>
 <Failure>

Format 2

PM600 mmmdd hh:mm:ss ssdd TBL REX Failed <lcm\_rex\_name> <lcm\_id> Node: <status>, Unit 0: <state>, Unit 1: <state> <rex\_fail\_reason>

Format 3

PM600 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit0: MtcArb is <state>, Unit1: MtcArb is <state>

Format 4

PM600 mmmdd hh:mm:ss ssdd TBL PP-HARDWARE pmid REASON: reastxt Unit<unit\_no>: MtcArb is <state>

### Example

Examples of log report PM600 follow.

Example 1

| PM600 JUN08 01 | :28 8600 TH  | BL REX FAILED I   | JTC 0                 |
|----------------|--------------|-------------------|-----------------------|
| Node:ISTb, U   | Jnit0 Act: J | InSv, Unitl Ina   | act:SysB(RTS Failed)  |
| REX Step       | <u>Unit</u>  | <u>Start Time</u> | <u>Failure Reason</u> |
| TST Inact      | 0            | 01:20:33          |                       |
| BSY Inact      | 0            | 01:20:47          |                       |
| RTS Inact      | 0            | 01:21:15          |                       |
| Sync Inact     | 0            | 01:24:43          |                       |
| PreSwAct       | 0            | 01:25:51          |                       |
| Warm SwAct     | -            | 01:26:05          |                       |
| BSY Inact      | 1            | 01:26:14          |                       |
| RTS Inact      | 1            | 01:27:18          | REX Failed-RTS of     |
|                |              | Inactiv           | ve Unitl after SwAct  |
| Finished       | - 01:28      | 3:25              |                       |
|                |              |                   |                       |
|                |              |                   |                       |

Diagnostic Failures: UTRDIAG Site Flr RPos Bay\_id Shf Description Slot EqPEC HOST 01 L15 LTE 00 65 LTC : 000 16 6X92

### Example 2

PM600 JUN22 01:05:35 1234 TBL REX Failed LCMCOV\_REX LCM HOST 0 0 Node: ISTb, Unit 0: SysB, Unit 1: InSv LCM REX TEST FAILED.

#### Example 3

PM600 APR01 12:00:00 2112 TBL PP-HARDWARE DTC 1
 REASON: DTC REX TEST FAILED
 Unit0: MtcArb is disabled, Unit1: MtcArb is functional

#### Example 4

PM600 APR01 12:00:00 2112 TBL PP-HARDWARE DTC 1
 REASON: DTC REX TEST FAILED
 Unit0: MtcArb is disabled

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 3)

| Field              | Value  | Description  |
|--------------------|--|--|
| alarm              |  | Optional field. Indicates the type of alarm. Also indicates if an alarm accompanies the change of state.   |
|                    | ***  | Indicates a critical alarm.  |
|                    | **   | Indicates a major alarm.   |
|                    | *  | Indicates a minor alarm.   |
|                    | (blank)  | Indicates no alarm.  |
| TBL<br>PP-HARDWARE | Symbolic text  | Indicates a peripheral processor<br>(PP) hardware error or firmware<br>error.  |
| state              | InSv, ISTb, Manb, SysB, CBsy, Offl                                 | Indicates the node and unit state of the PM that reports the log.  |
| state              | operating or disabled  | Indicates the state of MtcArb in the<br>XPM unit when the subsystem<br>formats the log for display. This<br>state can differ from the state of the<br>log when the subsystem generates<br>the log. The time from when the<br>subsystem generates the log to<br>when the subsystem formats the<br>log indicates a possible<br>discrepancy. The possibility of a<br>discrepancy can increase as the<br>time between the two increases.<br>Beginning in TL09, this field is not<br>present. |
| act                | Act, Inact   | Indicates if the PM unit is active or inactive.  |
| rex_step           | Refer to the table "rex_step and unit_no values" in this document. | Indicates the action the REX test performs at that time.   |
| unit_no            | Refer to the table "rex_step and unit_no values" in this document. | Indicates the unit on which the system performs the rex_step.  |

### (Sheet 2 of 3)

| Field             | Value  | Description  |
|-------------------|--|--|
| Unit 0: MTCARB is | constant   | Indicates the current state of the<br>maintenance arbitrator in XPM unit<br>0 follows. This is an optional field<br>that applies only to digital trunk<br>controllers (DTC), line trunk<br>controllers (LTC) and line group<br>controllers (LGC). If the XPM<br>maintenance arbitrator is not<br>loaded in the unit, the field is blank.<br>Beginning in TL09, this field is not<br>present. |
| Unit 1: MTCARB is | constant   | Indicates the current state of the<br>maintenance arbitrator in XPM unit<br>1 follows. This is an optional field<br>that applies only to DTCs, LTCs,<br>and LGCs. If the XPM maintenance<br>arbitrator is not loaded in the unit,<br>the field is blank. Beginning in<br>TL09, this field is not present.  |
| Start TIme        | hh: 00-24, mm: 00-59, ss: 00-59  | hh: HOUR, mm: MINUTE, ss:<br>SECOND of the rex_step started.   |
| Failure           | Refer to the table "XPM REX logs and<br>associated messages prior to AF5008"<br>on page ten and the table "Revised XPM<br>REX failure reasons" in this document. | Indicates the text specifies REX test failure reasons.   |
| Additional data   | Only present if a diagnostic or<br>PreSwACT failure occurs   | Text identifies additional REX test failure data.  |
| diag_id           | Refer to the table "Diagnostics supported by AF5008" in this document.   | Indicates each Diag_id is a<br>mnemonic for a diagnostic that<br>failed during REX testing.  |
| card_list         | From 1 to 10 suspect cards that the XPM reports.   | Identifies the cards that diagnostic failure indicates can be defective.   |
| history           | Refer to the table "Diagnostics supported by AF5008" in this document.   | Indicates the reasons the central control (CC) gives that indicate you must not attempt a SWACT during the REX test.   |

|  | ( | Sh | eet | 3 | of | 3) |  |
|--|---|----|-----|---|----|----|--|
|--|---|----|-----|---|----|----|--|

| Field           | Value  | Description   |
|-----------------|--|---|
| xpm_text        | Refer to the table "Diagnostics supported by AF5008" in this document.                 | Indicates the reasons the CC gives that indicate you must not attempt an XPM during the REX test. |
| lcm_rex_name    | LCM REX, LCMCOV REX  | Indicates the name of the LCM REX test failure.   |
| lcm_id          | Variable string of up to 13 characters (possible values are office-dependent)          | Indicates the LCM node type on which the REX test failed.   |
| status          | SysB, ISTb, InSv   | Indicates the status of the node or the units on which the REX test failed.                       |
| rex_fail_reason | Refer to the section "LCM and LCMCOV<br>REX test failure reasons" in this<br>document. | Indicates the reason for the LCM or LCMCOV REX test failure.                                      |

## Action

The PM600 report is a record of the maintenance actions that the system performs on the XPM during the REX test failure. The PM600 records maintenance actions from the start of the REX test to the test step that failed. The PM600 includes any recovery actions that the test initiates. This log can identify the source of the REX test failure.

For Format report 2, the system automatically recovers the LCM if the LCM unit is down. If the automatic recovery fails, the technician must bring the unit(s) back into service manually.

If the LCMCOV REX test fails, it is possible that test hardware is not set up correctly. Examples of test hardware are the:

- metallic test unit (MTU)
- line test unit (LTU)
- maintenance line card
- test access bus
- ringing generators
- other connections

The LCMCOV REX test can also fail when MTU/LTU connections in tables MTAVERT or MTAHORIZ do not contain complete data.

## **Associated OM registers**

There are no associated OM registers.

### **Additional information**

The following table provides XPM REX logs and associated messages before AF5008.

| Log   | Message                            |  |
|---|------------------------------------|--|
| REX not performed   | Node ISTb                          |  |
| REX not performed   | Node CBsy                          |  |
| REX not performed   | Node ManB                          |  |
| REX not performed   | Node SysB                          |  |
| REX not performed   | Node Offl                          |  |
| REX not performed   | Node Uneq                          |  |
| REX test Passed   |                                    |  |
| * REX test Failed (Note)                                    | Inactive InSv tests before SwAct   |  |
| * REX test Failed (Note)                                    | Inactive OOS tests                 |  |
| REX test Failed   | Inactive RTS                       |  |
| REX test Failed   | Achieving Superframe/Data Sync     |  |
| REX test Failed   | Warm SwAct                         |  |
| * REX test Failed (Note)                                    | Active InSv tests after SwAct      |  |
| * REX test Failed (Note)                                    | Inactive OOS tests after SwAct     |  |
| REX test Failed   | Inactive RTS after SwAct           |  |
| REX test Failed   | Achieving Superframe SwAct         |  |
| REX test Failed   | Terminated due to WARM SwAct       |  |
| REX test Failed   | Terminated due to Autonomous SwAct |  |
| REX aborted, Reason;  | Various abort messages             |  |
| <i>Note:</i> * indicates a list of 1 to 10 defective cards. |                                    |  |

XPM REX logs and associated messages before AF5008 (Sheet 1 of 2)

| Log   | Message                                      |  |
|---|--|--|
| REX recovery attempt  | BSY both units after fails                   |  |
| REX recovery attempt  | RTS inactive and SwAct back                  |  |
| REX recovery attempt  | RTS original active after fail               |  |
| REX recovery attempt  | RTS original inactive after fail             |  |
| REX recovery result   | RTS inactive successful                      |  |
| REX recovery result   | RTS inactive failed                          |  |
| REX recovery result   | Inactive achieved Superframe/Data Sync       |  |
| REX recovery result   | Inactive cannot achieve Superframe/Data Sync |  |
| REX recovery result   | Warm SwAct successful                        |  |
| REX recovery result   | Both units busied                            |  |
| REX recovery result   | RTS original active request submitted        |  |
| REX recovery result   | Unable to submit RTS request                 |  |
| REX recovery result   | RTS original Inactive request submitted      |  |
| REX recovery result   | Warm SwAct failed                            |  |
| REX recovery result   | Inactive achieved Superframe/Data Sync       |  |
| <i>Note:</i> * indicates a list of 1 to 10 defective cards. |  |  |

#### XPM REX logs and associated messages before AF5008 (Sheet 2 of 2)

The following table provides a revision of the reasons for XPM REX failure:

| Revised | XPM | REX | failure | reasons |
|---------|-----|-----|---------|---------|
|---------|-----|-----|---------|---------|

| Before AF5008  | After AF5008   |  |
|--|--|--|
| Inactive InSv tests before<br>SwACT  | InSv tests of Inactive Unit 0 before SwAct,<br>InSv tests of Inactive Unit 1 before SwAct                          |  |
| Inactive OOS tests   | OOS tests of Inactive Unit 0, OOS tests of Inactive Unit 1   |  |
| Inactive RTS   | RTS of Inactive Unit 0, RTS of Inactive Unit 1   |  |
| Active InSv tests after SwACT  | InSv tests of Active Unit 0 after SwAct, InSv tests of Active Unit 1 after SwAct                                   |  |
| Inactive OOS tests after SwACT<br>(Note 1)   | InSv tests of Inactive Unit 0 after SwAct, InSv tests of Inactive Unit 1 after SwAct                               |  |
| Inactive RTS after SwACT   | RTS of inactive Unit 0 after SwAct, RTS of inactive Unit 1 after SwAct   |  |
| Achieving Superframe/Data<br>Sync  | Achieving Superframe/ Data Sync of Unit 0<br>Achieving Superframe/ Data Sync of Unit 1                             |  |
| Achieving Superframe/Data<br>Sync after SwACT  | Achieving Superframe/ Data Sync of Unit 0<br>after SwAct, Achieving Superframe/ Data<br>Sync of Unit 1 after SwAct |  |
| (Note 2)   | SwAct to Unit 0 refused by SwAct Controller,<br>SwAct to Unit 0 refused by SwAct Controller                        |  |
| (Note 3)   | SwAct Back to Unit 0 occurred, SwAct Back to Unit 1 occurred   |  |
| <i>Note 1:</i> The tests on the inactive unit after SwACT now occur when the unit is InSv, so that the failure string indicates "InSv" instead of "OOS". |  |  |
| <i>Note 2:</i> This is the new failure string that this feature adds to handle when the SwACT Controller (see AF5007) indicates "InSv".                  |  |  |
| <i>Note 3:</i> This is the new failure string that this feature adds when a SwACT back to the original active unit occurs.                               |  |  |

The following table provides rex\_step and unit\_no values.

| rex_step and unit_no value |
|----------------------------|
|----------------------------|

| rex_step   | unit_no | Comment                           |
|------------|---------|-----------------------------------|
| TST INACT  | 0/1     | Test the inactive unit            |
| TST ACT    | 0/1     | Test the active unit              |
| BSY INACT  | 0/1     | Busy the inactive unit            |
| BSY BOTH   | -       | Busy both inactive unit           |
| RTS INACT  | 0/1     | RTS the inactive unit             |
| RTS ACT    | 0/1     | RTS the active unit               |
| Sync Inact | 0/1     | Wait for data and superframe sync |
| PreSwACT   | 0/1     | Perform pre-SwACT audit           |
| Warm SwACT | -       | Perform warm SwACT                |
| Finished   | -       | Rex finished                      |

The following table provides diagnostics that AF5008 supports:

| CC diagnostic name | Description           |
|--------------------|-----------------------|
| AMUDIAG            | SX50 External Loop    |
| CDS1 DG            | CSide DS1             |
| CMRDIAG            | CMR Card              |
| CONT DG            | Continuity Diag       |
| CSMDIAG            | CSM Diag              |
| CS SPCH            | Network Links         |
| DCHIALB            | DCH Inactive Loopback |
| DS1DIAG            | Pside DS1             |
| FORMATR            | Local Formatter       |
| ISPHDLC            | ISP HDLC Diag         |

| CC diagnostic name | Description             |  |
|--------------------|-------------------------|--|
| ISPSPHI            | ISP Speech Bus Internal |  |
| ISPSPHF            | ISP Speech Bus Full     |  |
| MSGDIAG            | 6X69 Messaging Card     |  |
| MSG IMC            | IMC Link                |  |
| MX76 MSG           | MX76 Messaging Card     |  |
| PADRING            | 6X80 Pad/Ring           |  |
| PS LOOP            | PSide Loops             |  |
| PS SPCH            | PSide Speech Links      |  |
| RCC FMT            | Remote Formatter        |  |
| SMS AB             | 6X81 A/B Bits           |  |
| SPCH DG            | Speech Path             |  |
| STRDIAG            | Speech Tone Receiver    |  |
| SYNC DG            | Sync Diag               |  |
| TONE DG            | Tone Diag               |  |
| TS DIAG            | Time Switch Diag        |  |
| UTRDIAG            | UTR Card                |  |

## Diagnostics supported by AF5008 (Sheet 2 of 2)

#### LCM REX and LCMCOV REX test failure reasons

For PM600 report Format 2, the <rex\_fail\_reason> field can contain the following failure reason values:

- LCM REX TEST FAILED indicates failure of the LCM REX test. One of the following strings precedes the test and identifies the step where the failure occurred:
  - SysB Unit x Failed : LCM REX Failed
  - SysB Unit x Failed : LCM REX Incomplete
  - InSv Diag Unit x Failed : LCM REX Failed
  - OOS Diag Unit x Failed : LCM REX Failed
  - RTS Unit x Failed : LCM REX Failed
- LCM REX TEST ABORTED indicates that another task aborted the LCM REX test.
- LCMCOV REX TEST FAILED indicates an LCMCOV REX test failure. One of the following strings precedes the test failure notification and indicates the test step where the failure occurs:
  - COVREX TEST INCOMPLETE : NO TEST LINE DATAFILLED
  - COVREX TEST INCOMPLETE : TEST HARDWARE UNAVAILABLE
  - COVREX TEST: PWR CARD/RING TST: Wrong parameters
  - COVREX TEST: PWR CARD/RING TST: Fail TAN connection
  - COVREX TEST: PWR CARD/RING TST: No MTE for MTC line
  - COVREX TEST: PWR CARD/RING TST: No test equipment available
  - COVREX TEST: Check RING GENs, POWER CARD, T/A BUS or MTC line card
  - PWR CARD/RING GEN TEST: Check test setup
  - SysB Unit 0 Failed : LCMCOV REX Failed
  - RTS Unit 0 Failed : LCMCOV REX Failed
- LCMCOV REX test : Routine Exercise ABORTED indicates that another task aborts the LCMCOV REX test.

### **PM601**

### **Explanation**

The peripheral module (PM) subsystem generates report PM601. The subsystem generates PM601 when the operating company personnel reset the long term failure (LTF) or short term failure (STF) counters to zero for an XMS-based PM (XPM). The operating company personnel reset the LTF or STF counters at the MAP terminal. The LTF counters are reset with the QueryPM DiagHist Reset command. The STF counters are reset when a warm SwAct occurs, only for the unit that is newly active. The subsystem also generates PM601 when an XPM is deleted from datafill. The PM601 log records diagnostic failures. The PM601 records failures from the earlier reset time to the next reset (log time). The PM 601 displays the earlier reset time in the LTF or STF last reset field.

### Format

The log report format for PM601 is as follows:

PM601 mmmdd hh:mm:ss ssdd INFO XPM Diagnostic History pmid Reset Long Term Failure (LTF) counts LTF last reset : yy/mm/dd hh:mm:ss Summary of LTF counts prior to reset : UNIT 0 UNIT 1 DIAGLIST diaglst n n CARDLIST crdlst n n PM601 mmmdd hh:mm:ss ssdd INFO XPM Diagnostic History pmid Reset ShortTerm Failure (STF) counts STF last reset : yy/mm/dd hh:mm:ss

Summary of STF counts prior to reset :

n

UNIT X

## DIAGLIST

diaglst n

CARDLIST

crdlst

# Example

An example of log report PM601 follows:

| 1234 INFO 2 | XPM Diagnostic         | History           |
|-------------|------------------------|-------------------|
| ilure (LTF) | ) counts               |                   |
| /07/01 00   | 6:22:10                |                   |
| nts prior t | to reset:              |                   |
| O TIG       | UNIT 1                 |                   |
|             |                        |                   |
| 1           | 1                      |                   |
|             |                        |                   |
|             |                        |                   |
| 1           | 1                      |                   |
| 0           | 1                      |                   |
| 0           | 2                      |                   |
|             | ilure (LTF<br>/07/01 0 | 1 1<br>1 1<br>0 1 |

# **Field descriptions**

The following table describes each field in the log report:

| ( | Sł | neet | 1 | of | 2) |
|---|----|------|---|----|----|
|   |    | 1001 |   | 5  | ~, |

| Field                                     | Value        | Description   |
|---|--------------|---|
| INFO XPM Diagnostic<br>History            | Constant     | Indicates the history of diagnostic failures on a PM.   |
| pmid                                      | Alphanumeric | Identifies the PM involved.   |
| Reset LTF counts<br>or STF counts         | Constant     | Indicates the LTF or STF counters are reset to zero.  |
| LTF last reset<br>or STF last reset       | Integers     | Indicates the date and time of the last LTF or STF reset (yy/mm/dd hh:mm:ss).                     |
| Summary of LTF or STF counts before reset | Constant     | Indicates the information that follows is the summary of LTF or STF counts from before the reset. |
| UNIT 0                                    | Constant     | Indicates the information that follows is for Unit 0.   |
| UNIT 1                                    | Constant     | Indicates the information that follows is for Unit 1.   |
| UNIT X                                    | Integer      | Indicates the unit number (0 or 1) that has generated the PM601 log after a warm SwAct.           |

### 1-794 Log reports

### **PM601** (end)

(Sheet 2 of 2)

| Field    | Value                   | Description   |
|----------|-------------------------|---|
| DIAGLIST | Symbolic text, Integers | Indicates the list of failed diagnostics on the XPM and the number of failures on each unit.  |
| CARDLIST | Alphanumeric, Integers  | Indicates the list of cards that the system<br>reports as defective during a diagnostic failure.<br>Also indicates the number of failures that the<br>LTF or STF counters record for the unit<br>indicated. |

# Action

Save this report. The Technical Assistance Service (TAS) and field support personnel use this report in the event of a later outage.

# **Associated OM registers**

There are no associated OM registers.

## **Explanation**

The peripheral module (PM) subsystem generates report PM700. The subsystem generates PM700 to record the start time, finish time, and abort time of PM upgrade shifts.

### Format

The log report format for PM700 is as follows:

PM700 mmmdd hh:mm:ss ssdd INFO PM Upgrade <status>

## Example

An example of log report PM700 follows:

PM700 SEP05 18:14:33 4827 INFO PM Upgrade SHIFT STARTED

# **Field descriptions**

The following table describes each field in the log report:

| Field  | Value  | Description   |
|--------|--|---|
| status | SHIFT STARTED<br>SHIFT FINISHED<br>SHIFT ABORTED | Indicates start, finish, or abort of PM upgrade shift |

# Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

### PM701

### **Explanation**

The peripheral module (PM) subsystem generates report PM701. The subsystem generates PM701 to record the time of the start of a PM upgrade task. The PM701 displays the nodes to upgrade and the name of the load used in the upgrade task.

### Format

The log report format for PM701 is as follows:

PM701 mmmdd hh:mm:ss ssdd INFO PM Upgrade TASK: <id> Report <cur\_report> of <max\_report> AUTOMATED:<automation\_flag> STATUS: <status> NODES: <node\_name> LOADS: <load name>

### Example

An example of log report PM701 follows:

PM701 SEP05 18:14:33 4827 INFO PM Upgrade TASK: 5 Report 1 of 1 AUTOMATED: YES STATUS: STARTED NODES: LCM REM4 1 0 LOADS: LCM08AH

### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field           | Value   | Description   |
|-----------------|---------|---|
| id              | integer | Identifies the PM upgrade task  |
| cur_report      | integer | Indicates the number of the log report associated with the start of a task    |
| max_report      | integer | Indicates the total number of log reports associated with the start of a task |
| automation_flag | YES N   | O Indicates if the task is automated  |

# **PM701** (end)

### (Sheet 2 of 2)

| Field     | Value  | Description  |
|-----------|--|--|
| status    | STARTED<br>REQUESTED                             | Indicates if the task starts automatic execution or if a manual upgrade has been requested.  |
| node_name | text string of the format node_type site node_id | Indicates the type of node, the site of the node, and<br>the number of the node. Site is an optional value.<br>The PEC indicates the MS multi-port card. |
| load_name | text string                                      | Indicates the name of the new load associated with the task.   |

# Action

There is no action required.

# **Associated OM registers**

There are no associated OM registers.

# **Additional information**

### PM702

### Explanation

The peripheral module (PM) generates report PM702. The PM702 records the time of the successful completion of a task.

### Format

The log report format for PM702 is as follows:

PM702 mmmdd hh:mm:ss ssdd INFO PM Upgrade TASK: <id> STATUS: <status>

## Example

An example of log report PM702 follows:

PM702 SEP05 18:14:33 4827 INFO PM Upgrade TASK: 5 STATUS: PASSED

# **Field descriptions**

The following table describes field in the log report:

| Field  | Value                    |        | Description                            |
|--------|--------------------------|--------|--|
| id     | integer                  |        | Indicates the PM upgrade task          |
| status | PASSED<br>(WITH WARNING) | PASSED | Indicates the status of completed task |

# Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

# **Additional information**

### **Explanation**

The peripheral module (PM) generates report PM703. The PM703 records the time that an automated PM upgrade task failed. The PM703 also records the completion or failure of each node that the system upgrades during the task.

### Format

The log report format for PM703 is as follows:

PM703 mmmdd hh:mm:ss ssdd INFO PM Upgrade TASK: <id> Report <cur\_report> of <max\_report> AUTOMATED:<automation\_flag> STATUS: <status> NODES: <node\_name> LOADS: <load\_name> PATCHES FOR<load\_name>: <patch\_name>

# Example

An example of log report PM703 follows:

PM703 SEP05 18:14:33 4827 INFO PM Upgrade TASK: 5 Report 1 of 1 AUTOMATED: YES STATUS: FAILED NODES: LGC 0: FAILED, LGC 1: PASSED LOADS: ECL05BC, MX77NB03, CMR03A PATCHES FOR ECL05BC: MMI45BX8 MMI47XB8

# **Field descriptions**

The following table describes each field in the log report:

### (Sheet 1 of 2)

| Field      | Value   | Description   |
|------------|---------|---|
| id         | integer | Indicates the PM upgrade task   |
| cur_report | integer | Indicates the number of this log<br>report associated with the start of a<br>task |

### PM703 (end)

#### (Sheet 2 of 2)

| Field           | Value  | Description  |
|-----------------|--|--|
| max_report      | integer  | Indicates the total number of log reports associated with the start of a task  |
| automation_flag | YES NO   | D Indicates if the task is automated   |
| status          | FAILEDFAILED(INTERNAL SYSTEM ERROR)ABORTEDNOTATTEMPTEDNOTSUPPORTEDUNKNOWNRETURN CODE | is not successful  |
| node_name       | text string of the format<br>node_type site node_id                                  | Indicates the type of node, the site<br>of the node, and the number of the<br>node. Site is an optional value.                                   |
| load_name       | text string  | Indicates the name of the load associated with the task  |
| patch_name      | text string  | Indicates the patches associated<br>with each load in the task. The<br>patch heading is not displayed<br>when the task does not have<br>patches. |

# Action

If the upgrade task fails, examine the nodes that failed. The nodes can have a maintenance problem that does not relate to the PM upgrade. Troubleshoot the problem or contact the next level of support.

## **Associated OM registers**

There are no associated OM registers.

## Additional information

### **Explanation**

The peripheral module (PM) subsystem generates report PM777 when the software detects a hardware defect. The PM777 indicates the source of the hardware defect.

### Format

The log report format for PM777 is as follows:

# **Examples**

Example of log report PM777 follow:

### Example 1

PM777 MAY21 12:39:25 3200 INFO SUSPECTED H/W FAULT RTPK
LTC 0
UNIT NO: 00
PP TIME: 00:32:33.01
Error State: audtfail
Suspected cards:
Site Flr RPos Bay\_id Shf Description Slot Eqpec
HOST 00 L14 LTE 00 18 LTC: 000 18 6X69
DATA: 01 18 84 00 01 00 00 55 50 FF FF FF FF FF FF FF

### (Sheet 1 of 2)

| Data byte # | Reason                                  |
|-------------|---|
| 0           | number of error logs                    |
| 1           | error reason (qualifier) of diagnostics |
| 2           | diagnostic identifier                   |

| (Sheet 2 of 2) |   |
|----------------|---|
| Data byte #    | Reason                                  |
| 3-4            | location msw                            |
| 5-6            | location Isw                            |
| 7              | accurate value                          |
| 8              | expected value                          |
| 9              | number of error logs                    |
| 10             | error reason (qualifier) of diagnostics |
| 11             | diagnostic identifier                   |
| 12-13          | location msw                            |
| 14-15          | location Isw                            |

#### Example 2

PM777 MAY21 13:29:00 3265 INFO SUSPECTED H/W FAULT RTPK LTC 0 UNIT NO: 00 PP TIME: 00:11:16.12 Error State: SPURIOUS L1 INT Suspected cards: Site Flr RPos Bay\_id Shf Description Slot Eqpec HOST 00 L14 LTE 00 18 LTC: 000 18 6X69 DATA: 01 18 84 00 01 00 00 55 50 FF FF FF FF FF FF FF FF

#### Example 3

PM777 APR18 14:31:16 2312 INFO SUSPECTED H/W FAULT RTPK LTC 1 UNIT NO: 01 PP TIME: 00:51:31.16 Error State: MsgCdFailedReset Suspected cards: Site Flr RPos Bay\_id Shf Description Slot Eqpec HOST 00 L14 LTE 00 32 LTC: 000 18 6X69 DATA: OC FF FF FF FF FF FF FF FF FF FF

```
PM777 APR19 12:29:22 4544 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 00:11:21.32
Error State: 6X69hndshkfailed
Suspected cards:
Site Flr RPos Bay_id Shf Description Slot Eqpec
HOST 00 L15 DTE 00 32 LTC: 000 18 6X69
```

#### Example 5

PM777 APR19 12:29:45 4563 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 00:11:21.55
Error State: 6X69hndshkfail2
Suspected cards:
Site Flr RPos Bay\_id Shf Description Slot Eqpec
HOST 00 L15 DTE 00 32 LTC: 000 18 6X69

#### Example 6

PM777 APR19 12:32:16 4112 INFO SUSPECTED H/W FAULT RTPK DTC 0 UNIT NO: 01 PP TIME: 00:01:11.00 Error State: 6X69NoOpcdeArea Suspected cards: Site Flr RPos Bay\_id Shf Description Slot Eqpec HOST 00 L15 LTE 00 32 LTC: 000 18 6X69 DATA: 14 02 00 02 01 FF FF FF FF FF FF FF FF

(Sheet 1 of 2)

| Data byte # | Reason                |
|-------------|-----------------------|
| 0           | opcode                |
| 1           | msb of first TIMESLOT |
| 2           | Isb of first TIMESLOT |

#### (Sheet 2 of 2)

| Data byte # | Reason                      |
|-------------|-----------------------------|
| 3           | number of TIMESLOTS - 1     |
| 4           | increment between TIMESLOTS |

### Example 7

```
PM777 APR19 12:32:26 4132 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 00:01:21.00
Error State: 6X69NoResToOpcde
Suspected cards:
Site Flr RPos Bay_id Shf Description Slot Eqpec
HOST 00 L15 LTE 00 32 LTC: 000 18 6X69
DATA: 14 02 00 02 01 FF FF FF FF FF FF FF FF FF
```

| Data byte # | Reason                      |
|-------------|-----------------------------|
| 0           | opcode                      |
| 1           | msb of first TIMESLOT       |
| 2           | Isb of first TIMESLOT       |
| 3           | number of TIMESLOTS - 1     |
| 4           | increment between TIMESLOTS |

```
PM777 APR20 08:45:16 1089 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 00:13:09.52
Error State: SpeechBusNoResp
Suspected cards:
Site Flr RPos Bay_id Shf Description Slot Eqpec
HOST 00 L15 LTE 00 32 LTC: 000 18 6X69
DATA: 12 02 00 04 01 FF FF FF FF FF FF FF FF
```

| Data byte # | Reason                      |
|-------------|-----------------------------|
| 0           | opcode                      |
| 1           | msb of first TIMESLOT       |
| 2           | Isb of first TIMESLOT       |
| 3           | number of TIMESLOTS - 1     |
| 4           | increment between TIMESLOTS |

Example 9

PM777 APR18 12:59:35 1300 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 00:01:31.16
Error State: Insame 6X69
Suspected cards:
Site Flr RPos Bay\_id Shf Description Slot Eqpec
HOST 00 L15 LTE 00 32 LTC: 000 18 6X69
DATA: F0 AA OF 00 00 00 00 00 21 4B EE 00 21 4B F8

| Data byte # | Reason          |
|-------------|-----------------|
| 0           | PP sync desired |
| 1           | PP sync desired |
| 2           | SP sync desired |
| 3           | SP sync actual  |

### Example 10

PM777 APR18 14:21:02 1653 INFO SUSPECTED H/W FAULT RTPK LTC 0 UNIT NO: 01 PP TIME: 00:55:41.30 Error State: nd\_xfr\_tmo Suspected cards: Site Flr RPos Bay\_id Shf Description Slot Eqpec HOST 00 L15 LTE 00 32 LTC: 000 18 6X69 DATA: 00 02 03 FF FF

| Data byte # | Reason  |
|-------------|---|
| 0           | intermodule communications working (false = 0 / true=<br>1) |
| 1           | ordinal value of link state                                 |
| 2           | number of transfer attempts                                 |

```
PM777 APR19 13:13:21 1414 INFO SUSPECTED H/W FAULT RTPK
LTC 0
UNIT NO: 01
PP TIME: 01:32:18.12
Error State: XLA_FLD
Suspected cards:
Site Flr RPos Bay_id Shf Description Slot Eqpec
HOST 00 L15 LTE 00 32 LTC: 000 18 6X69
DATA: 03 FF FF
```

| Data byte # | Reason                      |
|-------------|-----------------------------|
| 0           | number of transfer attempts |

Example 12

```
PM777 MAY22 13:39:22 6500 INFO SUSPECTED H/W FAULT RTPK
LTC 0
UNIT NO: 01
PP TIME: 01:41:16.28
Error State: BadCdNoUnderTest
Suspected cards: ARE UNDETERMINED
Site Flr RPos Bay_id Shf Description Slot Eqpec
HOST 00 L15 LTE 00 32 LTC: 000 18 6X69
DATA: 05 FF FF
```

| Data byte # | Reason          |
|-------------|-----------------|
| 0           | card under test |

PM777 APR22 09:58:44 0600 INFO SUSPECTED H/W FAULT RTPK LTC 0 UNIT NO: 00 PP TIME: 00:03:18.18 Error State: MEMORY PARITY Suspected cards: ARE UNDETERMINED Site Flr RPos Bay\_id Shf Description Slot Eqpec HOST 00 L15 LTE 00 32 LTC: 000 18 6X69 DATA: 00 02 00 00 00 09 B2 54 00 00 2B 60 00 10 00 1E

| Data byte # | Reason               |
|-------------|----------------------|
| 0           | defect type          |
| 1           | procedure identifier |
| 2-3         | last address msw     |
| 4-5         | last address lsw     |

#### Example 14

PM777 APR23 09:23:21 1213 INFO SUSPECTED H/W FAULT RTPK LTC 0 UNIT NO: 01 PP TIME: 02:32:18.12 Error State: card/date wrong Suspected cards: Site Flr RPos Bay\_id Shf Description Slot Eqpec HOST 00 L15 LTE 00 32 LTC: 000 19 6X79 DATA: 00 02 00 00 00 09 B2 54 00 00 2B 60 00 10 00 1E

#### Example 15

PM777 MAY21 12:32:54 3241 INFO SUSPECTED H/W FAULT RTPK DTC 0 UNIT NO: 01 PP TIME: 09:42:12.21 Error State: STR INSV FAILED Suspected cards: ARE UNDETERMINED DATA: 05 01 02 05 05 FF FF FF FF FF FF FF FF FF

| Data byte # | Reason   |
|-------------|--|
| 0           | length of data that follows this byte            |
| 1           | report code from special tone receiver (STR)     |
| 2           | test result or signal set                        |
| 3           | internal node (valid for digit reports only)     |
| 4-5         | internal terminal (valid for digit reports only) |

#### Example 16

PM777 MAY21 12:01:22 1023 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 12:32:11.43
Error State: STR-RESET FAILED
Suspected cards:
Site Flr RPos Bay\_id Shf Description Slot Eqpec
HOST 00 L15 DTE 00 32 DTC: 000 16 6X62
DATA: 00 02 00 12 11 FF FF FF FF FF FF FF FF FF FF

| Data byte # | Reason                      |
|-------------|-----------------------------|
| 0           | status 1                    |
| 1           | status 2                    |
| 2           | status 3                    |
| 3           | tp revision firmware level  |
| 4           | dsp revision firmware level |

| Data byte # | Reason            |
|-------------|-------------------|
| 0           | action code       |
| 1           | length of message |

#### Example 18

```
PM777 MAY20 10:23:41 1754 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 00:46:10.19
Error State: INSV FAIL-NO STR
Suspected cards: ARE UNDETERMINED
DATA: 01 00 01 10 00 00 00 00 FF FF FF FF FF FF FF
```

#### (Sheet 1 of 2)

| Data byte # | Reason                              |
|-------------|-------------------------------------|
| 0           | UTR card present                    |
| 1-2         | number of UTR cards present         |
| 3           | STR card present (bool)             |
| 3           | spare slot at STR installation (05) |
| 3           | BBF entered (bool)                  |
| 3           | DTRE entered (bool)                 |

#### (Sheet 2 of 2)

| Data byte # | Reason                          |
|-------------|---------------------------------|
| 3           | STR scans speech bus (bool)     |
| 3           | STR scans for N5 signals (bool) |
| 5-6         | STR LP firmware revision        |
| 7-8         | STR DSP firmware revision       |

#### Example 19

```
PM777 MAY20 09:01:22 2015 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 00:46:10.19
Error State: STR NOT RESET
Suspected cards:
Site Flr RPos Bay_id Shf Description Slot Eqpec
HOST 00 L15 DTE 00 32 DTC: 000 16 6X62
DATA: 01 02 FF FF
```

| Data byte # | Reason            |
|-------------|-------------------|
| 0           | action code       |
| 1           | length of message |

#### Example 20

```
PM777 MAY20 10:12:34 2225 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 00:46:10.19
Error State: STR INSANE
Suspected cards:
Site Flr RPos Bay_id Shf Description Slot Eqpec
HOST 00 L15 DTE 00 32 DTC: 000 16 6X62
```

```
PM777 MAY20 10:12:34 2225 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 00:46:10.19
Error State: STR INIT FAIL
Suspected cards:
Site Flr RPos Bay_id Shf Description Slot Eqpec
HOST 00 L15 DTE 00 32 DTC: 000 16 6X62
```

Example 22

| Data byte # | Reason           |
|-------------|------------------|
| 0           | fail/pass sanity |
| 1           | status of STR    |

Example 23

```
PM777 MAY20 13:01:22 4435 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 00:00:12.39
Error State: AUDIT-NO STR CD
Suspected cards:
Site Flr RPos Bay_id Shf Description Slot Eqpec
HOST 00 L15 DTE 00 32 DTC: 000 16 6X62
```

```
PM777 MAY20 12:33:43 2654 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 00:12:22.11
Error State: STR REMOVED
Suspected cards:
Site Flr RPos Bay_id Shf Description Slot Eqpec
HOST 00 L15 DTE 00 32 DTC: 000 16 6X62
DATA: 00 00 00 11 00 00 00 00 FF FF FF FF FF FF FF
```

| Data byte # | Reason                              |
|-------------|-------------------------------------|
| 0           | UTR card present                    |
| 1-2         | number of UTR cards present         |
| 3           | STR card present (bool)             |
| 3           | spare slot where STR installed (05) |
| 3           | BBF entered (bool)                  |
| 3           | DTRE entered (bool)                 |
| 3           | STR scans speech bus (bool)         |
| 3           | STR scans for N5 signals (bool)     |
| 5-6         | STR LP firmware revision            |
| 7-8         | STR DSP firmware revision           |

Example 25

```
PM777 MAY21 13:01:22 4435 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 00:01:12.39
Error State: NO STR HARDWARE
Suspected cards:
Site Flr RPos Bay_id Shf Description Slot Eqpec
HOST 00 L15 DTE 00 32 DTC: 000 16 6X62
```

```
PM777 MAY22 12:13:35 3452 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 01
   PP TIME: 00:36:31.01
   Error State: Unknown UTR addr
   Suspected cards: ARE UNDETERMINED
Example 27
PM777 MAY22 15:22:35 3452 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 01
   PP TIME: 09:36:31.01
   Error State: Too Many UTRs
   Suspected cards: ARE UNDETERMINED
Example 28
PM777 APR19 12:32:26 4132 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
```

| Data byte # | Reason |
|-------------|--------|
| 0           | status |

| Data byte # | Reason |
|-------------|--------|
| 0           | status |

Example 30

| Data byte # | Reason |
|-------------|--------|
| 0           | status |

| Data byte # | Reason                        |
|-------------|-------------------------------|
| 0           | entered UTR spare slot number |

#### Example 32

| Data byte # | Reason                    |
|-------------|---------------------------|
| 0           | card type in spare slot 4 |

#### Example 33

```
PM777 MAY22 12:33:35 4452 INFO SUSPECTED H/W FAULT RTPK
LTC 0
UNIT NO: 01
PP TIME: 00:43:31.01
Error State: SocotelNoSupprtd
Suspected cards: ARE UNDETERMINED
```

```
PM777 MAY22 12:35:25 4352 INFO SUSPECTED H/W FAULT RTPK
LTC 0
UNIT NO: 01
PP TIME: 00:21:31.01
Error State: MfcSugNotSupprtd
Suspected cards: ARE UNDETERMINED
```

Example 35

When the above error message is given for a 7X07 P-side card that is used for the TOPS IP application, datafill may be incomplete. The test for the correct P-side card consists of checking for datafill correlation between tables LTCPSINV and IPINV. Refer to the TOPS IP User Guide, 297-8403-906, and search on PM777.

| Data byte # | Reason            |
|-------------|-------------------|
| 0-1         | port number (ds1) |

| Data byte # | Reason            |
|-------------|-------------------|
| 0-1         | port number (ds0) |

Example 37

```
PM777 APR30 11:53:39 6637 INFO

SUSPECTED H/W FAULT

LTC 2

UNIT NO : 00

PP Time: 00:04:55.56

Error State : C-SIDE FAULT

Suspected Cards :

Site Flr RPos Bay_id Shf Description Slot EqPEC

HOST 01 C00 DTE 00 51 LTC : 002 22 6X40

HOST 01 C00 DTE 00 51 LTC : 002 21 6X41

DATA : 00 01 00 00 00 12 07 FE 00 00 AF C2 00 10 00 1E
```

## **Field descriptions**

The following table describes each field in the log report:

| Field                       | Value         | Description  |
|-----------------------------|---------------|--|
| INFO SUSPECTED<br>H/W FAULT | Symbolic text | Indicates the PM with the suspected hardware defect. |
| unit no.                    | Integers      | Indicates the unit number.                           |
| PP TIME                     | Integers      | Indicates the time of the defect.                    |
| ERROR STATE                 | Symbolic text | Indicates the error state.                           |
| SUSPECTED CARD(S)           | Numeric       | Indicates the suspect cards.                         |
| DATA                        | Alphanumeric  | Indicates more information about the defect.         |

### Action

Follow standard maintenance procedures.

When the "Wrong Pside Card" error message is given for a 7X07 P-side card that is used for the TOPS IP application, refer to the TOPS IP User Guide, 297-8403-906, and search on log PM777.

# **Associated OM registers**

There are no associated OM registers.

### **PM800**

### Explanation

The Problem Manager generates log report PM800. The Program Manager generates this report when the count of incoming PM180 reports for a unit reaches 5 and 15 within one hour.

The PM subsystem generates report PM180 when it encounters a software exception. A software exception is an occurrence of bad software execution. The system also generates log report PM180 because of a software exception that is hardware related.

### Format

The log report format for PM800 is as follows:

PM800 mmmdd hh:mm:ss ssdd THR PM Exception Report Location: <pmid> <unit\_no> Problem id: <probid> Event: <rsntxt> Initial event time: <initime> Event count: <num\_events>

### Example

An example of log report PM800 follows:

PM800 MAY26 14:56:12 5400 THR PM Exception Report Location: RCCI 2 0 Problem id: 7112 Event: PM software exception count Initial event time: 13:50:00 Event count: 5

### Field descriptions

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                      | Value            | Description   |
|----------------------------|------------------|---|
| THR PM Exception<br>Report | Constant         | Indicates that the number of logs that concern<br>a PM exception report exceeds the threshold<br>level. |
| pmid                       | Refer to Table I | Indicates the PM that generates this report.  |

# PM800 (end)

(Sheet 2 of 2)

| Field      | Value                       | Description   |
|------------|-----------------------------|---|
| unit_no    | 0 or 1                      | Indicates the PM unit that generates this report.   |
| probid     | nnnnn                       | Provides the problem number. Use this<br>number to associate the logs that relate to the<br>same problem. The Problem Viewer also<br>displays the number. |
| rsntxt     | PM software exception count | Indicates the purpose for the generation this log report.   |
| initime    | hh:mm:ss                    | Provides the time of the first event.   |
| num_events | n,nnnnnnn                   | Provides the number of observed events.   |

# Action

Inspect the XMS-based peripheral module (XPM) to identify faults. If log a hardware problem is present, perform diagnostic and maintenance procedures on the suspect equipment.

If report PM180 indicates a XPM software error or software problem, the system can require a software reload.

## **Associated OM registers**

There are no associated OM registers.

### Explanation

The Pool manager generates trouble report POOL300. The manager generates the report when the number of free vast areas the server owns are at 30% of server memory. The report indicates when the available free resources begin to run low.

The system raises a minor alarm when the Pool manager generates Trouble report POOL300.

### Format

The log report format for POOL300 is as follows:

LOCATION LOG\_NUMBER TIMESTAMP TITLE

### Example

An example of log report POOL300 follows:

\*POOL300 JUL10 12:49:00 7500 TBL Server at 70% Usage

### **Field descriptions**

There are no fields in the log body of POOL 300.

### Action

Report this log to Northern Telecom personnel to examine the memory provisioning guidelines for this switch.

Verify DYNAMIC\_MEMORY\_SIZE OFCENG parameter is correctly set. You may have to increase this parameter based on the provisioning rules.

### **Associated OM registers**

There are no associated OM registers.

### **Additional information**

### **Explanation**

The Pool manager generates trouble report POOL301. The manager generates the report when the number of free vast areas the server owns are at 20% of server memory. The report POOL301 indicates that the available free resources are running low.

The system raises a major alarm when the Pool manager generates trouble report POOL301.

## Format

The log report format for POOL301 is as follows:

### LOCATION LOG\_NUMBER TIMESTAMP TITLE

# Example

An example of log report POOL301 follows:

\*\*POOL301 JUl10 12:50:18 7700 TBL Server at 80% Usage

### **Field descriptions**

The log body of trouble report POOL 301 does not have fields.

## Action

Report this log to Northern Telecom personnel. Northern Telecom personnel will examine memory provisioning guidelines for this switch.

Verify DYNAMIC\_MEMORY\_SIZE OFCENG parameter is correctly set. The provisioning rules determine if you have to increase this parameter.

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

### Explanation

The Pool manager issues trouble report POOL302 when the free vast areas that the server owns are at 10% of server memory. Report POOL302 indicates that available free resources are critically low.

The system raises a critical alarm when the Pool manager generates trouble report POOL302.

### Format

The log report format for POOL302 is as follows:

LOCATION LOG\_NUMBER TIMESTAMP TITLE

### Example

An example of log report POOL302 follows:

\*\*\*POOL302 JUL10 12:51:10 7900 TBL Server at 90% Usage

### **Field descriptions**

The log body of trouble report POOL302 does not have any fields.

### Action

Report POOL302 to Northern Telecom personnel. Northern Telecom personnel will examine the memory provisioning guidelines for this switch.

Make sure the DYNAMIC\_MEMORY\_SIZE OFCENG parameter is correct. The provisioning rules will determine if you have to increase this parameter.

### **Associated OM registers**

There are no associated OM registers.

### **Additional information**

### Explanation

The system limits each pool that the CPPOOLMGR utility manages to a percentage of server memory. The server limit is 50% of server memory for CCBBLOCKS and 30% server memory for other pools. The CPPOOLMGR utility generates trouble report POOL310 when the amount of memory that a pool uses reaches 70% of the server limit.

The system raises a minor alarm when the CPPOOLMGR utility generates trouble report POOL310.

### Format

The log report format for POOL310 is as follows:

### LOCATION LOG\_NUMBER TIMESTAMP TITLE POOL\_NAME: POOL\_TYPE:

# Example

An example of log report POOL310 follows:

\*POOL310 JUL10 14:02:34 3300 TBL Pool at 70% CPPOOLMGR Limit POOL NAME: FTRQAGENTS POOL TYPE: FTRQAGENTS

## **Field descriptions**

The following table describes each field in the log report:

| Field     | Value  | Description   |
|-----------|--|---|
| POOL_NAME | character string   | Name of the pool that begins to use too much memory |
| POOL TYPE | EXTBLOCK,<br>FTRQAGENT,<br>FTRQAREA,<br>FTRQPERM,<br>GSFBLOCK,<br>CCBBLOCK | Type of pool that begins to use too much memory     |

## POOL310 (end)

### Action

Report POOL310 to Northern Telecom personnel. Northern Telecom personnel will examine the memory provisioning guidelines for this switch.

Make sure DYNAMIC\_MEMORY\_SIZE OFCENG parameter is correctly set. The provisioning rules will determine if you have to increase this parameter.

### **Associated OM registers**

There are no associated OM registers.

## **Additional information**

### Explanation

The system limits each pool that the CPPOOLMGR utility manages to a percentage of server memory. The server limit is 50% of server memory for CCBBLOCKS and 30% server memory for other pools. The CPPOOLMGR utility generates trouble report POOL311 when the amount of memory that a pool uses reaches 80% of the server limit.

The system raises a major alarm when the CPPOOLMGR generates trouble report POOL311.

### Format

The log report format for POOL311 is as follows:

### LOCATION LOG\_NUMBER TIMESTAMP TITLE POOL\_NAME: POOL\_TYPE:

# Example

An example of log report POOL311 follows:

```
**POOL311 JUL10 14:04:46 2800 TBL Pool at 80% CPPOOLMGR
Limit
POOL NAME: FTRQAGENTS
POOL TYPE: FTRQAGENT
```

# **Field descriptions**

The following table describes each field in the log report:

| Field     | Value  | Description  |
|-----------|--|--|
| POOL_NAME | character string   | Name of the pool that begins to use too much memory  |
| POOL TYPE | EXTBLOCK,<br>FTRQAGENT,<br>FTRQAREA,<br>FTRQPERM,<br>GSFBLOCK,<br>CCBBLOCK | Type of pool that that begins to use too much memory |

## POOL311 (end)

### Action

Report POOL311 to Northern Telecom personnel. Northern Telecom personnel will examine the memory provisioning guidelines for this switch.

Make sure the DYNAMIC\_MEMORY\_SIZE OFCENG parameter is correctly set. The provisioning rules determine if you have to increase this parameter.

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

## **POOL312**

### Explanation

The system limits each pool that the CPPOOLMGR utility manages to a percentage of server memory. The server limit is 50% of server memory for CCBBLOCKS and 30% server memory for other pools. The CPPOOLMGR utility generates trouble report POOL312 when the pool uses 90% of the server memory limit.

The system raises a critical alarm when the CPPOOLMGR utility generates POOL312.

### Format

The log report format for POOL312 is as follows:

#### LOCATION LOG\_NUMBER TIMESTAMP TITLE POOL\_NAME: POOL\_TYPE:

## Example

An example of log report POOL312 follows:

\*\*\*POOL312 JUL10 14:08:39 4100 Pool at 90% CPPOOLMGR Limit POOL NAME: FTRQAGENTS POOL TYPE: FTRQAGENT

### **Field descriptions**

The following table describes each field in the log report:

| Field     | Value  | Description   |
|-----------|--|---|
| POOL_NAME | character string   | Name of the pool that begins to use too much memory |
| POOL TYPE | EXTBLOCK,<br>FTRQAGENT,<br>FTRQAREA,<br>FTRQPERM,<br>GSFBLOCK,<br>CCBBLOCK | Type of pool that begins to use too much memory     |

## POOL312 (end)

### Action

Report this log to Northern Telecom personnel. Northern Telecom personnel will examine the memory provisioning guidelines for this switch.

Make sure that DYNAMIC\_MEMORY\_SIZE OFCENG parameter is correctly set. The provisioning rules will determine if you have to increase this parameter.

### **Associated OM registers**

There are no associated OM registers.

## **Additional information**

The POOLMGR generates trouble report POOL320 when the pool uses 90% of the maximum memory available.

The system raises a minor alarm when the POOLMGR generates POOL320.

### Format

The log report format for POOL320 is as follows:

LOCATION LOG\_NUMBER TIMESTAMP TITLE POOL\_NAME: POOL\_TYPE:

## Example

An example of log report POOL320 follows:

\*POOL320 JUL10 14:09:28 5900 TBL Pool at 90% Absolute Size POOL NAME: FTRQAGENTS POOL TYPE: FTRQAGENT

## **Field descriptions**

The following table describes each field in the log report:

| Field     | Value  | Description   |
|-----------|--|---|
| POOL_NAME | character string   | Name of the pool that begins to use too much memory |
| POOL TYPE | EXTBLOCK,<br>FTQRAGENT,<br>FTQRAREA,<br>FTQRPERM,<br>GSFBLOCK,<br>CCBBLOCK | Type of pool that begins to use too much memory     |

## Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

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POOL320 (end)

## **Additional information**

Report POOL 320 to Northern Telecom personnel for examination.

# **POOL321**

## Explanation

The Pool Manager (POOLMGR) generates this information report when a pool reaches 100% of the maximum use level.

The system raises a critical alarm when the system generates POOL321.

### Format

The log report format for POOL321 is as follows:

LOCATION LOG\_NUMBER TIMESTAMP TITLE POOL\_NAME: POOL\_TYPE:

## Example

An example of log report POOL321 follows:

\*\*\*POOL321 JUL10 14:09:28 5900 TBL Pool at 100% Absolute Size POOL NAME: FTRQAGENTS POOL TYPE: FTRQAGENT

## **Field descriptions**

The following table describes each field in the log report:

| Field     | Value  | Description  |
|-----------|--|--|
| POOL_NAME | character string   | Indicates the name of the pool that uses too much memory |
| POOL TYPE | EXTBLOCK,<br>FTRQAGENT,<br>FTRQAREA,<br>FTRQPERM,<br>GSFBLOCK,<br>CCBBLOCK | Indicates type of pool that uses too much memory         |

## Action

You must report this condition to Northern Telecom personnel. This log indicates that more resources are not available to users of this pool.

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POOL321 (end)

# **Associated OM registers**

There are no associated OM registers.

## **Additional information**

## POOL600

### Explanation

The Pool Manager (POOLMGR) generates this information report when operating company personnel enter the DOWNSIZEPOOL command in the CPPOOLMGR CI. Operating company personnel enter this command to reset the memory use of this pool back to zero.

### Format

The log report format for POOL600 is as follows:

LOCATION LOG\_NUMBER TIMESTAMP TITLE POOL\_NAME: POOL\_TYPE:

## Example

An example of log report POOL600 follows:

\*\*POOL 600 APR17 14:36:17 5200 TBL Pool Manually Downsized POOL NAME: FTRQ0WPERMS POOL TYPE: FTQRAGENT

## **Field descriptions**

The following table describes each field in the log report:

| Field     | Value  | Description                                |
|-----------|--|--|
| POOL_NAME | character string   | Name of the pool that uses too much memory |
| POOL TYPE | EXTBLOCK,<br>FTRQAGENT,<br>FTQRAREA,<br>FTQRPERM.<br>GSFBLOCK,<br>CCBBLOCK | Type of pool that uses too much memory     |

## Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

POOL600 (end)

## Additional information

## POOL601

## Explanation

The POOLMGR generates information report POOL601 when operating company personnel change the office parameter DYNAMIC\_MEMORY\_SIZE.

### Format

The log report format for POOL601 is as follows:

LOCATION LOG\_NUMBER TIMESTAMP TITLE OLD\_SIZE NEW\_SIZE

## Example

An example of log report POOL601 follows:

\*\*POOL 601 APR17 14:36:17 5200 INFO DYNAMIC\_MEMORY\_SIZE Office Parameter Changed OLD SIZE: 10MBytes NEW SIZE: 20MBytes

## **Field descriptions**

The following table describes each field in the log report:

| Field     | Value  | Description  |
|-----------|--|--|
| POOL_NAME | character string   | Indicates name of the pool that uses too much memory           |
| POOL TYPE | EXTBLOCK,<br>FTRQAGENT,<br>FTQRAREA,<br>FTQRPERM.<br>GSFBLOCK,<br>CCBBLOCK | Indicates type of pool that uses too much memory               |
| OLD SIZE  | 0-2048 MBytes  | Indicates the old size of the<br>DYNAMIC_MEMORY_SIZE parameter |
| NEW SIZE  | 0-2048 MBytes  | Indicates the new size of the<br>DYNAMIC_MMORY_SIZE parameter  |

## Action

There is no action required.

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POOL601 (end)

# Associated OM registers

There are no associated OM registers.

# Additional information

The Network Primary Rate Access (PRA) Utilities subsystem generates log report PRA20. The subsystem generates PRA200 after each failure to send an originating transaction capability application part (TCAP) message through Table MSGRTE. The Send failure can occur if Table MSGRTE does not contain the route or the route is local.

## Format

The log report format for PRA200 is as follows:

PRA200 mmmdd hh:mm:ss ssdd INFO TCAP FAC SEND FAILED ORG NETID: xxx DN: nnnnnnnn
DST NETID: xxx DN: nnnnnnnnn
PKG TYPE: pkgtyp
REASON: rsntxt hhhh hhhh hhhh ... (message contents)

## Example

An example of log report PRA200 follows:

 PRA200
 MAY11
 12:12:14
 5800
 INFO
 TCAP
 FAC
 SEND
 FAILED

 ORG
 NETID:
 0
 DN:
 6137221121

 DST
 NETID:
 0
 DN:
 6137221123

 PKG
 TYPE:
 QUERY\_W\_PERMISSION

 REASON:
 NO
 ROUTE
 DATAFILLED

 32E2
 04C7
 0000
 0008
 2AE8
 28E9
 01CF
 D101

 7E02
 F203
 AA1F
 841D
 0109
 2100
 160A
 2273

 3211
 CODF
 0949
 00FA
 0A21
 7316
 1122
 DF12

 45C0
 0101
 007F
 EBAD
 CE12
 210A
 000A
 001D

## **Field descriptions**

The following table describes each field in the log report.

| (Sheet | 1 | of | 2) |  |
|--------|---|----|----|--|
|--------|---|----|----|--|

| Field                        | Value    | Description  |
|------------------------------|----------|--|
| INFO TCAP FAC SEND<br>FAILED | Constant | Indicates a report of transaction capabilities application part (TCAP) facility message. |
| ORG NETID                    | 0-255    | Identifies the network identifier of the originating station.                            |
| DN                           | Integers | Identifies the directory number DN of the originating station.                           |

## PRA200 (end)

(Sheet 2 of 2)

| Field     | Value            | Description   |
|-----------|------------------|---|
| DST NETID | 0-255            | Identifies the network identifier of the terminating station. |
| DN        | Integers         | Identifies the DN of the terminating station.                 |
| PKG TYPE  | Symbolic text    | Identifies the TCAP package type.                             |
| REASON    | Character string | Indicates the reason for TCAP failure.                        |
| hhhh hhhh | 0000-FFFF        | Provides the contents the of the TCAP message.                |

## Action

Refer to the reason that the log report indicates, and performs are one of the following actions:

- ROUTE IS LOCAL—correct the datafill.
- NO ROUTE DATAFILLED—enter the required route in Table MSGRTE.

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

The Performance (PRFM) subsystem generates log report PRFM200 to represent activity data for the following peripheral modules (PM):

- PDTC with master processor (MP) and signaling processor (SP).
- PLGC, PDTC, ILGC, IDTC, ALGC, ADTC and ARCC with MP, SP and facility processor (FP)
- PLGC, PDTC, PRCC, RCCI, SMA and TMS with MP, SP and ISDN signaling processor (ISP)

This log report shows the data for 1 min and the last 15 min.

The UTR and CHNL fields record the mean number of channels in use during the minute. The UTRHIGH and PSIDEHIGH fields record the highest number of channels in use during the minute.

You can start PRFM200 from the PMACT sublevel of the MAP display if the system posts the peripheral.

## Format

The log report format for PRFM200 is as follows:

#### PRFM200 mmmdd hh:mm:ss ssdd INFO PMACT\_DATA

pmtxt Unit n : Act Load Name: nmtxt

| MPCP  | MPLP | SPCP | SPLP | XPCP | XPLP | ORIG | TERM | UTR | CHNL |
|-------|------|------|------|------|------|------|------|-----|------|
| 1:nn% | nn%  | nn%  | nn%  | nn%  | nn%  | nnn  | nnn  | nnn | nnn  |
| 2:nn% | nn%  | nn%  | nn%  | nn%  | nn%  | nnn  | nnn  | nnn | nnn  |
| 3:nn% | nn%  | nn%  | nn%  | nn%  | nn%  | nnn  | nnn  | nnn | nnn  |

## **Example**

An example of log report PRFM200 follows:

## PRFM200 (continued)

PRFM200 JAN05 18:20:02 1753 INFO PMACT\_DATA

PLGC 1 Unit 0 : Act Load Name: NPL32AK

| MPCP    | MPLP     | SPCP | SPLP       | FPCP   | FPLP     | ORIG    | TERM  | [ | UTR | CHNL |
|---------|----------|------|------------|--------|----------|---------|-------|---|-----|------|
| 1:21%   | 12%      | 45%  | 18%        | 39%    | 20%      | 10      | 8     |   |     |      |
| 2:24%   | 20%      | 42%  | 20%        | 31%    | 21%      | 8       | 7     |   |     |      |
| 3:25%   | 19%      | 53%  | 11%        | 22%    | 33%      | 12      | 15    |   |     |      |
| 4:28%   | 18%      | 44%  | 13%        | 33%    | 45%      | 13      | 15    |   |     |      |
| 5:23%   | 21%      | 55%  | 21%        | 24%    | 39%      | 0       | 9     |   |     |      |
| 6:22%   | 12%      | 56%  | 12%        | 36%    | 22%      | 1       | 3     |   |     |      |
| 7:30%   | 22%      | 27%  | 23%        | 38%    | 34%      | 10      | 0     |   |     |      |
| 8:23%   | 13%      | 58%  | 24%        | 20%    | 36%      | 8       | 18    |   |     |      |
| 9:33%   | 22%      | 49%  | 13%        | 32%    | 28%      | 5       | 20    |   |     |      |
| 10:24%  | 23%      | 52%  | 22%        | 24%    | 32%      | 4       | 8     |   |     |      |
| 11:23%  | 14%      | 34%  | 33%        | 33%    | 23%      | 8       | 5     |   |     |      |
| 12:37%  | 25%      | 42%  | 24%        | 35%    | 36%      | 20      | 0     |   |     |      |
| 13:28%  | 16%      | 53%  | 25%        | 27%    | 27%      | 21      | 0     |   |     |      |
| 14:39%  | 37%      | 44%  | 16%        | 39%    | 38%      | 5       | 22    | 2 | 5   |      |
| 15:20%  | 30%      | 35%  | 24%        | 23%    | 29%      | 12      | 18    | 5 | 30  |      |
| SUMMARY | 27%      | 20%  | 46%        | 20%    | 30%      | 31      |       | 9 | 10  |      |
| SUMMARY | UTRAVAIL | 32   | UTRHIGH 10 | PSIDEA | VAIL 180 | PSIDEHI | GH 30 |   |     |      |

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field           | Value          | Description  |
|-----------------|----------------|--|
| INFO PMACT_DATA | Constant       | Indicates that PM activity data follows.   |
| pmtxt           | PLGC,PDTC,PRCC | Provides the name and number of the PM that the system reports about.  |
| Unit n:         | 0, 1           | Indicates the side of the PM affected.   |
| Act             | Constant       | Indicates that the system queries the active unit.   |
| Load Name       | Symbolic text  | Identifies the XPM software load.  |
| UTR             | 0-64           | Identifies the total number of universal tone receiver (UTR) channels used.  |
| CHNL            | 0-640          | Identifies the total number of P-side channels used.   |
| MPCP            | 0-100          | Master processor (MP) call processing occupancy. High priority occupancies and the call processing occupancies provide service.  |
| MPLP            | 0-100          | The MP low priority background. Audits and diagnostics use this field.   |
| SPCP            | 0-100          | Signalling processor (SP) call processing occupancy.   |
| SPLP            | 0-100          | The SP low priority background. Audits and diagnostics use this field.   |
| ХРСР            | 0-100          | Facility processor (FP) or ISDN SP (ISP) call<br>processing occupancy. In the log, FPCP replaces<br>XPCP for a PLGC with FP. In the log, ISPCP<br>replaces XPCP for a PLGC, PDTC, or PRCC with<br>ISP.   |
| XPLP            | 0-100          | FP or ISP low priority background are used for<br>audits and diagnostics. In the log, FPLP replaces<br>XPLP for a PLGC with FP. In the log, ISPLP<br>replaces XPLP for a PLGC, PDTC or PRCC with<br>ISP. |
| ORIG            | 0-999          | Number of originations.  |

## PRFM200 (end)

(Sheet 2 of 2)

| Field          | Value    | Description  |
|----------------|----------|--|
| TERM           | 0-999    | Terminations. Calls that cause physical or visual ringing. Origination and termination counts help determine the call rate for the peripheral. |
| SUMMARY        | Constant | The summary line is an average of the samples for the last entry in the ten columns from MPCP to CHNL.   |
| SUMMARY        | Constant | Indicates that a summary follows.  |
| UTRAVAIL nn    | 0-64     | The summary line UTRAVAIL is the highest number of UTRs available.   |
| UTRHIGH nn     | 0-64     | The summary line UTRHIGH is the highest number of UTRs in use during the sample period.  |
| PSIDEAVAIL nnn | 0-640    | The summary line PSIDEAVIL is the highest number of P-side channels available to call processing during the sample period.                     |
| PSIDEHIGH nnn  | 0-640    | The summary line PSIDEHIGH is the highest number of P-side channels used.  |

# Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

## **Additional Information**

The Performance (PRFM) subsystem generates log report PRFM201 to provide information on call processing delays. Log report PRFM201 starts from the DELAYS sublevel of the MAP display.

The log report PRFM subsystem provides values for the last 15 min period.

### Format

The log report format for PRFM201 is as follows:

PRFM201 mmmdd hh:mm:ss ssdd INFO DELAYS\_DATA pmid Unitn : Act Load Name: nmtxt

|       |     | DIAL | TONE | L L | 051   |     |               |     |
|-------|-----|------|------|-----|-------|-----|---------------|-----|
| DIALT | ONE | REM  | OVAL | D   | IALIN | G   | CUTTHROUGH    |     |
| DP    | DT  | DP   | DT   | DP  | DT    | ANS | SWER SPEECHPA | ATF |

- AVG nnnms nnnms nnnms nnnms nnnms nnnms
- 50% nnnms nnms nnms nnms nnms nnms nnnms nnnms nnnms nnnms nnnms nnnms nnnms nnnms nnnm
- 95% < nnnms nnnms nnnms nnnms nnnms nnnms

## Example

An example of log report PRFM201 follows:

PRFM201 SEP23 17:40:44 2883 INFO DELAYS\_DATA LGC 1 Unit 1 : Act Load Name: NLG24BK DIALTONE ₽OST DIALTONE REMOVAL DIALING CUTTHROUGH DT ANSWER SPEECHPATH DT DTDP DP DP AVG 374ms 693ms 69ms 157ms 458ms 1128ms 59ms 131ms 50%< 288ms 480ms 32ms 96ms 416ms 864ms 32ms 288ms 95%< 864ms 1824ms 224ms 352ms 672ms 2656ms 160ms 96ms

## PRFM201 (continued)

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field            | Value                 | Description  |
|------------------|-----------------------|--|
| INFO DELAYS_DATA | Constant              | Indicates that data from the DELAYS level of the MAP follows.  |
| pmid             | LGC, LTC, DTC,<br>RCC | Provides the name and number of the PM that the system reports about.  |
| Unitn :          | 0,1                   | Indicates the side of the PM affected.   |
| Act              | Constant              | Indicates that the system queries the active unit.   |
| Load Name        | Symbolic text         | Identifies the XPM software load.  |
| DIALTONE         | 0-9999 secs           | Indicates the delay between the time when PM detects the off hook and the time of the application of dial tone.                                |
| DIALTONE REMOVAL |                       | Specifies delay between the time the peripheral detects the first digit, and the IDLE tone application and the dial tone removal.              |
| POST DIALLING    |                       | Specifies delay between the time when the last digit dialed, and the application of audible ringing.   |
| CUTTHROUGH       |                       | Specifies the combination of answer and speech_path. This field represents the time the system takes to connect speech path from the off hook. |
| DT               | 0-9999 secs           | Indicates digitone lines or universal tone receiver lines.   |
| DP               | 0-9999 secs           | Indicates digipulse lines or electronic business set lines.  |
| ANSWER           | 0-9999 secs           | Specifies delay between the time the peripheral detects an answer, and the transmission of the off hook to the originating end.                |

## PRFM201 (end)

#### (Sheet 2 of 2)

| Field      | Value       | Description   |
|------------|-------------|---|
| SPEECHPATH | 0-9999 secs | Specifies delay between the time the originating party detects the offhook, and the application of speech path between the two parties. |
| AVG        | 0-9999 secs | Specifies the average delay for the category.   |
| 50%        | 0-9999 secs | The 50th percent mark for the category indicates that 50 percent of the delays are less than this value.                                |
| 95%        | 0-9999 secs | The 95th percent mark for the category indicates that 95 percent of the delays are less than this value.                                |

## Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

#### **PRFM204**

### Explanation

The Performance (PRFM) subsystem generates log report PRFM204. This report displays PM activity data for a specified PM. The report indicates data for 1 min and a summary from the last 15 min. When the system posts data channel handler (DCH), PRFM204 can start from the ISGACT sublevel of the MAP display.

### Format

The log report format for PRFM204 is as follows:

PRFM204 mmmdd hh: mm: ss ssdd INFO ISGACT\_DATA

pmtxt n Unit n : Act Load Name: nmtxt

DCH\_LOAD\_NAME :nmtxt1 ISG NUMBER :nnn DCH NUMBER :

| nnn |  |
|-----|--|

| CPU   | TX    | RX    | TX     | RX     | TX        | RX        | ΤX    | RX    |
|-------|-------|-------|--------|--------|-----------|-----------|-------|-------|
| OCCUP | SAPI0 | SAPI0 | SAPI16 | SAPI16 | SAPI17/63 | SAPI17/63 | FRAME |       |
| FRAME |       |       |        |        |           |           |       |       |
|       |       |       |        |        |           |           | ERROR | ERROR |

|        |    |    |    |    |    |    | ERROR | ERROR |
|--------|----|----|----|----|----|----|-------|-------|
| 1:nn%  | nn    | nn    |
| 2:nn%  | nn    | nn    |
| 3:nn%  | nn    | nn    |
| 4:nn%  | nn    | nn    |
| 5:nn%  | nn    | nn    |
| 6:nn%  | nn    | nn    |
| 7:nn%  | nn    | nn    |
| 8:nn%  | nn    | nn    |
| 9:nn%  | nn    | nn    |
| 10:nn% | nn    | nn    |
| 11:nn% | nn    | nn    |
| 12:nn% | nn    | nn    |
| 13:nn% | nn    | nn    |
| 14:nn% | nn    | nn    |
| 15:nn% | nn    | nn    |
| 16:nn% | nn    | nn    |
| 17:nn% | nn    | nn    |
| SUMMA  | RY |    |    |    |    |    |       |       |
| nn%    | nn    | nn    |
|        |    |    |    |    |    |    |       |       |

# Example

An example of log report PRFM204 follows:

| PRFM204 JAN05 18:20:02 1753 INFO PMACT_DATA<br>LTCI 1 Unit 0 : Act |         |        |        |         |              |       |       |  |  |  |  |  |
|--|---------|--------|--------|---------|--------------|-------|-------|--|--|--|--|--|
| Load Name: LTI29AA   |         |        |        |         |              |       |       |  |  |  |  |  |
| DCH_LOAD_NAME : DCH29AA ISG_NUMBER : 6 DCH_NUMBER : 3              |         |        |        |         |              |       |       |  |  |  |  |  |
|  |         |        |        |         |              |       |       |  |  |  |  |  |
| CPU TX   |         | TX     | RX     | TX      | RX           | TX    | RX    |  |  |  |  |  |
| OCCUP SAPI   | 0 SAPIO | SAPI16 | SAPI16 | SAPI17/ | 63 SAPI17/63 | FRAME | FRAME |  |  |  |  |  |
| 1:21% 3  | 3       | 3      | 3      | 3       | 3            | 3     | 3     |  |  |  |  |  |
| 2:24% 23   | 23      | 23     | 23     | 23      | 23           | 23    | 23    |  |  |  |  |  |
| 3:25% 14   | 14      | 14     | 14     | 14      | 14           | 14    | 14    |  |  |  |  |  |
| 4:28% 4  | 4       | 4      | 4      | 4       | 4            | 4     | 4     |  |  |  |  |  |
| 5:25% 12   | 12      | 12     | 12     | 12      | 12           | 12    | 12    |  |  |  |  |  |
| 6:22% 11   | 1       | 11     | 11     | 11      | 11           | 11    | 11    |  |  |  |  |  |
| 7:30% 15   | 15      | 15     | 15     | 15      | 15           | 15    | 15    |  |  |  |  |  |
| 8:23% 12   | 12      | 12     | 12     | 12      | 12           | 12    | 12    |  |  |  |  |  |
| 9:33% 15   | 15      | 15     | 15     | 15      | 15           | 15    | 15    |  |  |  |  |  |
| 10:24%16   | 16      | 16     | 16     | 16      | 16           | 16    | 16    |  |  |  |  |  |
| 11:23% 5   | 5       | 5      | 5      | 5       | 5            | 5     | 5     |  |  |  |  |  |
| 12:23% 8   | 8       | 8      | 8      | 8       | 8            | 8     | 8     |  |  |  |  |  |
| 13:28% 12  | 12      | 12     | 12     | 12      | 12           | 12    | 12    |  |  |  |  |  |
| 14:39% 14  | 14      | 14     | 14     | 14      | 14           | 14    | 14    |  |  |  |  |  |
| 15:20% 17  | 17      | 17     | 17     | 17      | 17           | 1     | 17    |  |  |  |  |  |
| SUMMARY:   |         |        |        |         |              |       |       |  |  |  |  |  |
| 27% 1  | 1 11    | 11     | 11     | 11      | 11           | 11    | 11    |  |  |  |  |  |

# **Field descriptions**

The following table describes each field in the log report:

| Field            | Value         | Description  |
|------------------|---------------|--|
| INFO ISGACT_DATA | Constant      | Indicates PM activity data follows.  |
| pmid             | LGCI LTCI     | Provides the name and number of the PM.<br>The system reports on the activity of this<br>PM. |
| Unit             | 0 or 1        | Indicates the side of the PM affected.   |
| Act              | Constant      | Indicates the system queried the active unit.  |
| Load Name        | Symbolic text | Identifies the LTCI software load.   |
| DCH_LOAD_NAME    | Symbolic text | Identifies the DCH software load.  |

## PRFM204 (end)

#### (Sheet 2 of 2)

| Field          | Value    | Description   |
|----------------|----------|---|
| ISG NUMBER     | 0-255    | Identifies the ISG.   |
| DCH NUMBER     | 0-255    | Identifies the data channel handler (DCH).  |
| CPU OCCUP      | 0-100    | Indicates the percentage of DCH occupancy.  |
| TX SAPIO       | 0 -32767 | Indicates the number of SAPI0 frames the DCH transmits.                                   |
| RX SAPIO       | 0-32767  | Indicates the number of SAPI0 frames the DCH receives.                                    |
| TX SAPI16      | 0-32767  | Indicates the number of SAPI16 frames the DCH transmits.                                  |
| RX SAPI16      | 0-32767  | Indicates the number of SAPI16 frames the DCH receives.                                   |
| TX SAPI17/63   | 0-32767  | Indicates the number of SAPI17 and SAPI63 frames the DCH transmits.                       |
| RX SAPI17/63   | 0-32767  | Indicates the number of SAPI17 and SAPI63 frames the DCH receives.                        |
| TX FRAME ERROR | 0-32767  | Indicates the total of (SAPI0 + SAPI16 + SAPI17 + SAPI63) error frames the DCH transmits. |
| RX FRAME ERROR | 0-32767  | Indicates the total of (SAPI0 + SAPI16 + SAPI17 + SAPI63) error frames the DCH receives.  |
| SUMMARY        | Constant | Indicates that a summary follows.   |

# Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

The Performance (PRFM) subsystem generates log report PRFM210. This report displays PM activity data for a PM. The data for 1 min appears on each line. The log is a summary of the last 15 min. If the log stop under 15 min after the last log, PRFM210 summarizes the time after the last log.

When the system posts an LGCI or LTCI, this log can start from the PMACTI sublevel of the MAP terminal.

## Format

The log report format for PRFM210 is as follows:

#### PRFM210 mmmdd hh:mm:ss ssdd INFO PMACT\_DATA

pmid: n Unit n : Act Load Name: nmtxt

| Load N  | Load Name: nmtxt |         |        |          |        |        |         |       |      |  |  |
|---------|------------------|---------|--------|----------|--------|--------|---------|-------|------|--|--|
| MPCP    | MPLP             | SPCP    | SPLP   | ISPCP    | ISPLP  | ORIG   | TERM    | UTR   | CHNI |  |  |
| 1:nn%   | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 2:nn%   | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 3:nn%   | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 4:nn%   | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 5:nn%   | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 6:nn%   | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 7:nn%   | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 8:nn%   | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 9:nn%   | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 10:nn%  | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 11:nn%  | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 12:nn%  | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 13:nn%  | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 14:nn%  | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| 15:nn%  | nn%              | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| SUMMARY | r nn%            | nn%     | nn%    | nn%      | nn%    | nnn    | nnn     | nn    | nnn  |  |  |
| SUMMARY | UTRA             | VAIL nn | UTRHIG | H nn PSI | DEAVAI | Lnnn P | SIDEHIG | H nnn |      |  |  |
|         |                  |         |        |          |        |        |         |       |      |  |  |

# PRFM210 (continued)

# Example

An example of log report PRFM210 follows:

| PRFM210 JAN05 18:20:02 1753 INFO PMACT_DATA<br>LGCI 1 Unit 0 : Act<br>Load Name: LTI27AA |      |     |     |      |       |       |      |      |     |      |  |
|--|------|-----|-----|------|-------|-------|------|------|-----|------|--|
|  | MPCP |     |     | SPLP | ISPCP | ISPLP | ORIG | TERM | UTR | CHNL |  |
| 1:   | 21%  | 12% | 45% | 18%  | 0%    | 00%   | 10   | 8    | б   | 18   |  |
| 2:   | 24%  | 20% | 42% | 20%  | 0%    | 00%   | 8    | 7    | 8   | 14   |  |
| 3:   | 25%  | 19% | 53% | 11%  | 0%    | 00%   | 12   | 15   | 10  | 20   |  |
| 4:   | 28%  | 18% | 44% | 13%  | 0%    | 00%   | 13   | 15   | 3   | 24   |  |
| 5:   | 23%  | 21% | 55% | 21%  | 0%    | 00%   | 0    | 9    | 0   | 9    |  |
| 6:   | 22%  | 12% | 56% | 12%  | 0%    | 00%   | 1    | 3    | 0   | 3-   |  |
| 7:   | 30%  | 22% | 27% | 23%  | 0%    | 00%   | 10   | 0    | б   | 5-   |  |
| 8:   | 23%  | 13% | 58% | 24%  | 0%    | 00%   | 8    | 18   | 4   | 26   |  |
| 9:   | 33%  | 22% | 49% | 13%  | 0%    | 00%   | 5    | 20   | 3   | 25   |  |
| 10:  | 24%  | 23% | 52% | 22%  | 0%    | 00%   | 4    | 8    | 0   | 12   |  |
| 11:  | 23%  | 14% | 34% | 33%  | 0%    | 00%   | 8    | 5    | 1   | 11   |  |
| 12:  | 37%  | 25% | 42% | 24%  | 0%    | 00%   | 20   | 0    | 10  | 18   |  |
| 13:  | 28%  | 16% | 53% | 25%  | 0%    | 00%   | 21   | 0    | 2   | 22   |  |
| 14:  | 39%  | 37% | 44% | 16%  | 0%    | 00%   | 5    | 22   | 2   | 5    |  |
| 15:  | 20%  | 30% | 35% | 24%  | 0%    | 00%   | 12   | 18   | 5   | 30   |  |
| SUMMARY  | 27%  | 20% | 46% | 20%  | 0%    | 00%   | 9    | 10   | 4   | 16   |  |

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field           | Value         | Description   |
|-----------------|---------------|---|
| INFO PMACT_DATA | Constant      | Indicates that PM activity data follows.  |
| pmid            | LGCI or LTCI  | Provides the name and number of the peripheral module that the system reports about.                                  |
| Unit n          | 0 or 1        | Indicates the affected side of the PM.  |
| Act             | Constant      | Indicates that the active unit is queried.  |
| Load Name       | Symbolic text | Identifies the XPM software load.   |
| МРСР            | 0-100         | Indicates master processor (MP) call processing occupancy.  |
| MPLP            | 0-100         | Indicates MP low priority background. Audits and diagnostics use MP low priority background.                          |
| SPCP            | 0-100         | Indicates SP call processing occupancy.   |
| SPLP            | 0-100         | Indicates SP low priority background. Audits and tests use SP low priority background.                                |
| ISPLP           | 0-100         | Indicates ISDN pre-processor (ISP) call processing occupancy.   |
| ISPLP           | 0-100         | Indicates ISP low priority background. Audits and tests use ISP low priority background.                              |
| ORIG            | 0-999         | Indicates number of originations.   |
| TERM            | 0-999         | Indicates number of terminations. Origination and termination counts help determine the call rate for the peripheral. |
| UTR             | 0-64          | Indicates the number of universal tone receiver (UTR) channels used.  |
| CHNL            | 0-640         | Indicates the number of P-side channels used.   |
| SUMMARY         | Constant      | Indicates that a summary follows. The summary line is an average of the samples from MPCP to CHNL in the example.     |

## PRFM210 (end)

#### (Sheet 2 of 2)

| Field      | Value | Description  |
|------------|-------|--|
| UTRAVAIL   | 0-64  | The summary line UTRAVAIL is the highest number of UTRs available.   |
| UTRHIGH    | 0-64  | The summary line UTRHIGH is the highest number of UTRs used at the same time during the sample period.                     |
| PSIDEAVAIL | 0-640 | The summary line PSIDEAVIL is the highest number of P-side channels available to call processing during the sample period. |
| PSIDEHIGH  | 0-640 | The summary line PSIDEHIGH is the highest number of P-side channels used at the same time during the sample period.        |

## Action

There is no action required. This log is for information only.

## Associated OM registers

There are no associated OM registers.

# Additional information

The Post-Release Software Manager (PRSM) subsystem generates the PRSM300 log report. This log report is a trouble log that lists general problems that could affect service.

### Format

The format for log report PRSM300 follows:

PRSM300 mmmdd hh:mm:ss ssdd TBL General Trouble User Class: <user> User Identity <user\_id> <problem\_txt>

## Example

An example of log report PRSM300 follows:

PRSM300 APR18 13:46:58 0800 TBL General Trouble
User Class: CI\_USER User Identity: TEAM20
ERROR: Could not create disconnected user to
execute CI commands for PRSUs.
PRSM user is OPERATOR.

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field                              | Value                    | Description                                   |
|------------------------------------|--------------------------|---|
| TBL General Trouble                | Constant                 | Indicates a general problem                   |
| User Class: <user></user>          | Any valid PRSM user      | The PRSM user type of the user                |
| User Identity: <user_id></user_id> | Any valid userid         | The name of the user                          |
| <problem_txt></problem_txt>        | Up to five lines of text | The general problem that could affect service |

## Action

Follow office policy. Correct the problem or contact the next level of support.

## **Associated OM registers**

1-856 Log reports

## PRSM300 (end)

## Additional information

## **PRSM301**

### **Explanation**

The Post-Release Software Manager (PRSM) subsystem generates the PRSM301 log report. This log report is a trouble log that lists failures when the switch locates or reads post-release software update (PRSU) files.

### Format

The format for log report PRSM301 follows:

PRSM301 mmmdd hh:mm:ss ssdd TBL PRSM File Failure <failure\_txt>

## **Example**

An example of log report PRSM301 follows:

PRSM301 APR27 12:04:16 1800 TBL PRSM File Failure Corrupt PRSU file with the reason of 601. PRSU: ABC05CB5 File: ABC05CB5\$PATCH Device: S00DTEST

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field                       | Value                    | Description  |
|-----------------------------|--------------------------|--|
| TBL PRSM File Failure       | Constant                 | Indicates a PRSM file failure  |
| <failure_txt></failure_txt> | Up to five lines of text | The failure the switch encountered when it located or read the PRSU file |

## Action

Refer to "PRSM301 log reason interpretation" in the *Post-Release Software Manager Reference Guide*, 297-8991-540, for a list of reasons, explanations, and actions for PRSM301.

## **Associated OM registers**

None

## **Additional information**

### PRSM302

### Explanation

The Post-Release Software Manager (PRSM) subsystem generates the PRSM302 log report. This log report is a trouble log that lists problems related to post-release software update (PRSU) file management. These problems can occur if the switch cannot open, read, manipulate, or manage a PRSU file.

### Format

Following are the formats for log report PRSM302:

Format 1

PRSM302 mmmdd hh:mm:ss ssdd TBL PRSM File Control Problem Command: <command> Action: <action> Device: <device\_id> <problem\_txt>

#### Format 2

PRSM302 mmmdd hh:mm:ss ssdd TBL PRSM File Control Problem Command: <command> Action: <action> PRSU: <prsuid> <problem\_txt>

#### Format 3

PRSM302 mmmdd hh:mm:ss ssdd TBL PRSM File Control Problem Command: <command> Action: <action> Filename: <file\_name> <problem\_txt>

### Example

Following are examples of log report PRSM302:

Example 1

## PRSM302 (continued)

```
1.PRSM302 MAY01 10:27:23 7700 TBL PRSM File Control
Problem
2. Command: prsu file search
3. Action: scan all files
4. Device:SFDEV
5. Device error
6. *** There may be other logs, please check. ***
Example 2
1.PRSM302 MAY02 15:42:39 3400 TBL PRSM File Control
Problem
2. Command: VALIDATE
3. Action: get file information
4. PRSU:GNA07CB9
5. Table 1.51
```

5. Illegal file system operation requested6. \*\*\* There may be other logs, please check. \*\*\*

#### Example 3

1.PRSM302 JAN08 00:01:34 9400 TBL PRSM File Control
Problem
2. Command: prsu file compare
3. Action: close a file
4. Filename: JED31BB9\$PATCH
5. File not open
6. \*\*\* There may be other logs, please check. \*\*\*

### **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                           | Value            | Description   |
|---------------------------------|------------------|---|
| TBL PRSM File Control Problem   | Constant         | Indicates a PRSM file control problem                 |
| Command: <command/>             | Any PRSM command | The PRSM command that detected the problem            |
| Action: <action></action>       | Any PRSM action  | The PRSM action performed by the command              |
| Device: <device_id></device_id> | Any device id    | The name of the device with the file with the problem |

## PRSM302 (end)

(Sheet 2 of 2)

| Field                             | Value            | Description                           |
|-----------------------------------|------------------|---------------------------------------|
| PRSU: <prsuid></prsuid>           | Any valid prsuid | The name of the PRSU with the problem |
| Filename: <file_name></file_name> | Any file name    | The name of the file with the problem |
| <problem_txt></problem_txt>       | Text string      | The file management problem           |

## Action

Follow office policy. Troubleshoot the problem or contact the next level of support.

# **Associated OM registers**

None

## **Additional information**

The Post-Release Software Manager (PRSM) subsystem generates the PRSM360 log report. This log report is a trouble log that indicates a problem with the nightly PRSM File Audit. The following problems can cause this log.

- The PRSM File Audit aborts.
- The PRSM File Audit detects a missing XPM post-release software update (PRSU) file.
- The PRSM File Audit finds more than one unequal \$PATCH file for a PRSU.

The log lists the ids of up to 10 PRSUs. If the switch detects a missing PRSU file, the log lists the last device where the PRSU was found. If the switch finds multiple unequal \$PATCH files, the log lists all devices associated with the file.

### Format

The format for log report PRSM360 follows:

PRSM360 mmmdd hh:mm:ss ssdd TBL File Audit Failure Files Not Found Last device

ound La

<file\_id> Unequal Files <device\_id> Devices

<file\_id>

<device\_id>>

### Example

An example of log report PRSM360 follows:

PRSM360 FEB12 23:09:17 2000 TBL File Audit Failure <u>Files Not Found</u> <u>Last device</u> (no missing XPM PRSU files) Unequal Files Devices \_\_\_\_\_\_BAL00BB8\$PATCH SFDEV S00DSCRATCH PRSM360 (end)

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field                   | Value                    | Description  |
|-------------------------|--------------------------|--|
| TBL File Audit Failure  | Constant                 | Indicates a file audit failure   |
| <file_id></file_id>     | Any file identifier      | The name of the missing PRSU file, unequal<br>\$PATCH file   |
| <device_id></device_id> | Any device<br>identifier | The name of the device that last contained the missing PRSU file or the device with the unequal \$PATCH file |

## Action

Follow office policy. Troubleshoot the problem or contact the next level of support.

## **Associated OM registers**

None

**Additional information** 

The Post-Release Software Manager (PRSM) subsystem generates the PRSM380 log report. This log report is a trouble log that lists problems encountered during the execution of PRSM automated processes. The following situations are examples of possible causes of a PRSM380 log.

- The switch cannot drop sync during an automated process because the switch is already out of sync.
- The switch cannot establish a connection with the PRSM Request Router to execute PRSM maintenance commands.

## Format

The format for log report PRSM380 follows:

PRSM380 mmmdd hh:mm:ss ssdd TRBL AUTOMATED PROCESS FAIL Automated process: <process> <action>

## Example

An example of log report PRSM380 follows:

PRSM380 OCT1 01:03:17 8900 TRBL AUTOMATED PROCESS FAILURE Automated Process: AUTOAPP Process aborted: Switch is out-of-sync.

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field                                  | Value                                   | Description   |
|--|---|---|
| TRBL AUTOMATED PROCESS FAILURE         | Constant                                | Indicates the failure of a PRSM automated process       |
| Automated process: <process></process> | AUTOAPP,<br>FILE_AUDIT,<br>STATUS_AUDIT | The PRSM automated process that encountered the problem |
| <action></action>                      | Text string                             | The action of the process and the reason for the action |

## PRSM380 (end)

## Action

Follow office policy. Correct the error condition or contact the next level of support.

## **Associated OM registers**

None

## **Additional information**

#### **PRSM381**

#### Explanation

The Post-Release Software Manager (PRSM) subsystem generates the PRSM 381 log report. This log report is a trouble log that indicates a switch sanity failure based on table AUTOMON. Table AUTOMON lists the number of allowable logs during a log monitoring period before or after a PRSM Autoapply or Autoinstall process. PREMON is the log monitoring period before the process begins. POSTMON is the log monitoring period after the process finishes.

#### Format

The format for log report PRSM381 follows:

PRSM381 mmmdd hh:mm:ss ssdd TBL SWITCH SANITY FAILURE <failure txt>

| Log         | Allowed         | Exceeded        | Log         | Allowed         | Exceeded        |
|-------------|-----------------|-----------------|-------------|-----------------|-----------------|
|             |                 |                 |             |                 |                 |
| <log></log> | <al_no></al_no> | <ex_no></ex_no> | <log></log> | <al_no></al_no> | <ex_no></ex_no> |

## Example

An example of log report PRSM381 follows:

| PRSM381 OCT1 | 01:03:17 8 | 900 TRBL SW | ITCH SANI | TY FAILURE  |              |
|--------------|------------|-------------|-----------|-------------|--------------|
| Switch Sa    | nity limit | exceeded be | efore app | lying/insta | lling PRSUs. |
| Log          | Allowed    | Exceeded    | Log       | Allowed     | Exceeded     |
|              |            |             |           |             |              |
| CM115:       | 1          | 4           | CM119:    | 24          | 40           |
| SWER:        | 5          | б           |           |             |              |

# **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                       | Value               | Description                                       |
|-----------------------------|---------------------|---|
| TBL SWITCH SANITY FAILURE   | Constant            | Indicates the switch failed sanity                |
| <failure_txt></failure_txt> | Text string         | The problem that caused the switch sanity failure |
| <log></log>                 | The name of any log | The log that exceeded the allowed number          |

#### PRSM381 (end)

#### (Sheet 2 of 2)

| Field           | Value   | Description                  |
|-----------------|---------|------------------------------|
| <al_no></al_no> | Numeric | The number of allowed logs   |
| <ex_no></ex_no> | Numeric | The number of generated logs |

# Action

Follow office policy. Correct the error condition or contact the next level of support.

# Associated OM registers

None

## **Additional information**

The Post-Release Software Manager (PRSM) subsystem generates the PRSM400 log report. This log report is a service summary log that lists the actions taken in response to the following PRSM commands:

- APPLY
- REMOVE
- VALIDATE
- FREEMEM
- DBAUDIT
- ASSIGN, when used to install increment post-release software updates (PRSU)

The PRSM400 command summary log generates for a Spectrum Peripheral Module (SPM) destination when an SPM loadfile (containing SPM PRSU fixes) is datafilled in table PMLOADS. The PRSM400 summary log is generated for any DBAUDITs performed on any SPM destinations.

Each PRSM400 log report lists up to 15 actions. A single command can create multiple actions and multiple PRSM400 logs. For example, you could apply an XPM PRSU to a DEST set of 30 XPMs. PRSM will perform 30 actions, and the switch will generate two PRSM400 logs.

The switch generates the log after 15 actions or when the user quits PRSM.

## Format

The format for log report PRSM400 follows:

PRSM400 mmmdd hh:mm:ss ssdd INFO COMMAND SUMMARY User-Class: <user> User Identity: <userid> REASON: <change reason>

| PRSU id           |                   | Command<br>Method |  |                 |
|-------------------|-------------------|-------------------|--|-----------------|
| <prsuid></prsuid> | <destid></destid> | <br><command/>    | <br><status< td=""><td>&gt; <time></time></td></status<> | > <time></time> |

## **Example**

An example of log report PRSM400 follows:

#### PRSM400 (continued)

| PRSM400 DEC11 10:30:58 8200 INFO | COMMAND SUMMARY |          |       |          |
|----------------------------------|-----------------|----------|-------|----------|
| User Class: CI_USER              | User Identity:  | OPERATOR |       |          |
|                                  | Destination     | Command  | Pass/ | Time     |
| PRSU id                          | (DEST)          | Method   | Fail  | Complete |
|                                  |                 |          |       |          |
| CAL22CB8                         | NONE            | APPLY    | Fail  | 09:52:32 |
| CAL22CB8                         | NONE            | APPLY    | Fail  | 09:53:12 |
| BAS07AL                          | SITE            | APPLY    | Pass  | 10:30:16 |
| CAL22CB7                         | CM              | VALIDATE | Pass  | 10:30:26 |
| CAL22CB7                         | CM              | APPLY    | Pass  | 10:30:39 |
| CAL22CB7                         | CM              | REMOVE   | Pass  | 10:30:47 |

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field                              | Value   | Description  |
|------------------------------------|---|--|
| INFO COMMAND SUMMARY               | Constant  | Indicates that a PRSM command has been performed   |
| User Class: <user></user>          | Any valid PRSM<br>user  | The PRSM user type of the user                     |
| User Identity: <user_id></user_id> | Any valid userid  | The name of the user                               |
| <prsuid></prsuid>                  | Any valid prsuid  | The name of the PRSU affected by the action        |
| <destid></destid>                  | Any valid destid  | The name of the destination affected by the action |
| <command/>                         | APPLY, REMOVE,<br>VALIDATE,<br>FREEMEM,<br>DBAUDIT,<br>ASSIGN | The PRSM command that initiated the action         |
| <status></status>                  | Pass, Fail  | The status of the action                           |
| <time></time>                      | Time  | The time the action completed                      |

# Action

Check office policy. The contents of the log and office policy determines the need for additional action. For example, action needs to be taken if a PRSU or destination reports a "Fail" value in the log. If a "Fail" value is reported, monitor other logs generated by PRSM for further action.

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# PRSM400 (end)

# Associated OM registers

None

## **Additional information**

#### PRSM400

#### Explanation

The PRSM400 command summary log generates for an SPM destination when an SPM loadfile (containing SPM PRSU fixes) is datafilled in table PMLOADS. The PRSM400 summary log is generated for any DBAUDITs performed on any SPM destinations.

#### ATTENTION

Only information specific to the Spectrum-Peripheral Module (SPM) is included here.

#### Format

The format for log report PRSM400 for SPM follows:

#### Example

An example of log report PRSM400 for SPM follows:

\*\* PRSM400 DEC11 10:30:58 8200 INFO COMMAND SUMMARY User-Class: CI\_USER User Identity: OPERATOR

|          | Destination | Command  | Pass/ | Time     |
|----------|-------------|----------|-------|----------|
| PRSU id  | (DEST)      | Method   | Fail  | Complete |
|          |             |          |       |          |
| CAL22CB8 | NONE        | APPLY    | Fail  | 09:52:32 |
| CAL22CB8 | NONE        | APPLY    | Fail  | 09:53:12 |
| BAS07AL  | SITE        | APPLY    | Pass  | 10:30:16 |
| CAL22CB7 | CM          | VALIDATE | Pass  | 10:30:26 |
| CAL22CB7 | CM          | APPLY    | Pass  | 10:30:39 |
| CAL22CB7 | CM          | REMOVE   | Pass  | 10:30:47 |

# **Field descriptions**

The following table explains each of the fields specific to the SPM in the log report:

| Field             | Value                    | Description                              |
|-------------------|--------------------------|--|
| User Class        | User Class               | Field heading, 11 characters             |
| user_class        | ci_user                  | Class of user, 16 characters             |
|                   | padn_use                 |  |
|                   | autoapply_user           |  |
|                   | file_audit_user          |  |
|                   | status_audit_user        |  |
|                   | xpm_reload_user          |  |
|                   | onp_user, reporting_user |  |
|                   | misc_user                |  |
|                   | communication_pipe       |  |
|                   | comm_pipe_pal            |  |
|                   | dmscom_user              |  |
|                   | autoinstall_user         |  |
|                   | autoproc_user            |  |
| User Identity     | User Class               | Field heading, 14 characters             |
| user_ident        | mapci userid             | Identity of user, 16 characters          |
| PRSUid            | PRSUid                   | Field heading, 6 characters              |
| Destination       | Destination              | Field heading, 11 characters             |
| Command           | Command                  | Field heading, 7 characters              |
| Pass/Fail         | Pass/Fail                | Field heading, 9 characters              |
| Time Complete     | Pass/Fail                | Field heading, 13 characters             |
| <prsuid></prsuid> | PRSU name                | Field value for PRSU name, 32 characters |

#### (Sheet 1 of 2)

## PRSM400 (end)

| (Sheet 2 of 2)          |   |   |  |  |  |  |
|-------------------------|---|---|--|--|--|--|
| Field                   | Value   | Description                                       |  |  |  |  |
| <destname></destname>   | destination name<br>UNKNOWN<br>NONE                         | Field value for destination name, 32 characters   |  |  |  |  |
| <com_name></com_name>   | APPLY<br>REMOVE<br>VALIDATE<br>DBAUDIT<br>FREEMEM<br>ASSIGN | Command name for the given action, 16 characters  |  |  |  |  |
| <pass_fail></pass_fail> | Pass<br>Fail  | Success value of the action, 4 characters         |  |  |  |  |
| <timestamp></timestamp> | 00:00:00-24:00:00   | Timestamp when the action occurred, 16 characters |  |  |  |  |

# Action

Action only needs to be taken if a PRSU or destination reports a "Fail" value in the log. If a "Fail" value is reported, monitor other logs generated by PRSM for further action.

# **Associated OM registers**

Not applicable

#### **Additional information**

Not applicable

The Post-Release Software Manager (PRSM) subsystem generates the PRSM401 log report. This log report is an assignment summary log that lists each activatable post-release software update (PRSU) that has been activated or deactivated. The command ASSIGN ACTIVE Y activates the PRSU, and the command ASSIGN ACTIVE N deactivates the PRSU. The subsystem generates the log after the user quits PRSM or the log records 15 PRSUs that have been activated or deactivated.

## Format

The format for log report PRSM401 follows:

#### PRSM401 mmmdd hh:mm:ss ssdd INFO ASSIGN SUMMARY

| User Class:       | <user></user> | User Ide | entity <usei< th=""><th>rid&gt;</th><th></th></usei<> | rid>         |               |
|-------------------|---------------|----------|---|--------------|---------------|
|                   | Destination   |          |   | Pass/        | Time          |
| PRSU id           | (DEST)        | Assign   | Action  | Fail         | Complete      |
|                   |               |          |   |              |               |
| <prsuid></prsuid> | destid        | ACTIV    | E <y n=""></y>  | <p f=""></p> | <time></time> |

# Example

An example of log report PRSM401 follows:

| PRSM401 JAN10 10:34:<br>User Class: CI | 33 1900 INFO ASSIGN<br>JSER User Ider |               |       |          |
|--|---------------------------------------|---------------|-------|----------|
|  | Destination                           |               | Pass/ | Time     |
| PRSU id                                | (DEST)                                | Assign Action | Fail  | Complete |
|  |                                       |               |       |          |
| PLR01BB9                               | CM                                    | ACTIVE Y      | Pass  | 10:24:59 |
| PLR01BB9                               | CM                                    | ACTIVE Y      | Pass  | 10:24:59 |
| PLR01BB9                               | CM                                    | ACTIVE N      | Pass  | 10:25:02 |
|  |                                       |               |       |          |

# **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                              | Value                  | Description  |
|------------------------------------|------------------------|--|
| INFO ASSIGN SUMMARY                | Constant               | Indicates that an activatable PRSU has been activated or deactivated |
| User Class: <user></user>          | Any valid PRSM<br>user | The PRSM user type of the user                                       |
| User Identity: <user_id></user_id> | Any valid userid       | The name of the user   |

# PRSM401 (end)

(Sheet 2 of 2)

| Field             | Value                        | Description  |
|-------------------|------------------------------|--|
| <prsuid></prsuid> | Any valid prsuid             | The name of the PRSU that was activated or deactivated                               |
| <destid></destid> | Any valid destid             | The name of the destination that contains the PRSU that was activated or deactivated |
| ACTIVE            | Constant                     | Indicates that the PRSU is activatable   |
| <y n=""></y>      | Y, N                         | Identifies whether the PRSU was activated or deactivated                             |
| <p f=""></p>      | PASS , FAIL                  | The status of the ASSIGN action  |
| <time></time>     | Any valid time in the office | The time the ASSIGN command was completed  |

# Action

This log only provides information. No action is required.

# **Associated OM registers**

None

## **Additional information**

#### PRSM470

#### **Explanation**

The Post-Release Software Manager (PRSM) subsystem generates the PRSM470 log report. This log report is a service summary log that lists the results of the nightly PRSM Status Audit. The log lists the following information:

- each post-release software update (PRSU) alarm condition
- the number of PRSUs in each alarm condition
- the PRSUs in each alarm condition

#### Format

The format for log report PRSM470 follows:

PRSM470 mmmdd hh:mm:ss ssdd INFO Status Audit Summary

| PRSU Condition   | Definition                | Number of PRSUs   |
|--|---------------------------|-------------------|
| <alrm_condtn><br/>PRSU Condition Details</alrm_condtn> | <definition></definition> | <number></number> |

<alrm\_condtn> <prsu>

## Example

An example of log report PRSM470 follows:

# PRSM470 (continued)

| PRSU Condition D  |  | lumber                     |
|---|--|----------------------------|
|   | of   | PRSUs                      |
|   |  |                            |
|   |  | 0                          |
|   | ACT PRSUs not applied  | 0                          |
|   | ACT PRSUs not activated  | 89                         |
|   | ACT PRSUs with password not activated  |                            |
|   | Debug PRSUs applied  | 0                          |
|   | Debug PRSUs not applied  | 0                          |
|   | Do Not Reapply PRSUs not applied   | 0                          |
|   | Emergency PRSUs not applied  | 0                          |
|   | General PRSUs not applied  | 0                          |
|   | Limited PRSUs not applied  | 0                          |
|   | Manual PRSUs not applied   | 0                          |
|   | Source (XPM) PRSUs not applied   | 0                          |
|   | Dbsoleted PRSUs not applied  | 0                          |
|   | Dbsoleted Emergency PRSUs not removed  | 0                          |
|   | Removed PRSUs  | 0                          |
|   | Applied Not Installed (Not Used)   | 0                          |
|   | Denotes a patch or patched whose   | 0                          |
|   | state is not equal between the units   |                            |
| 0   | of a given destination. (Shows XPM   |                            |
| u   | unit with patch status mismatches.)  |                            |
|   | Group Mismatch (Not Used)  | 0                          |
| ENTRYNVALID P   | PRSUS that are applied but the actual  |                            |
|   |  |                            |
| P   | PRSU file does not exist on the syste  |                            |
| P<br>Note that Debug, O<br>when applied, can  | PRSU file does not exist on the syste<br>Obsolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>Is category must be applied as soon a   | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.   | Obsolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>Is category must be applied as soon a  | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v   | Dbsolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>Is category must be applied as soon a<br>view patched in each category   | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v   | Obsolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>Is category must be applied as soon a  | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v   | Dbsolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>Is category must be applied as soon a<br>view patched in each category   | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br>   | Dbsolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>Is category must be applied as soon a<br>view patched in each category<br>Select act_not_app   | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br><br>ACT_NOT_APP S<br>NOTACTIVATED S  | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>Is category must be applied as soon a<br>view patched in each category<br>Select act_not_app<br>Select notactivated  | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br><br>ACT_NOT_APP S<br>NOTACTIVATED S<br>ACTPW_NOTACT S  | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>Is category must be applied as soon a<br>view patched in each category<br>Select act_not_app<br>Select notactivated<br>Select actpw_notact   | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br><br>ACT_NOT_APP S<br>NOTACTIVATED S<br>ACTPW_NOTACT S<br>DBG_APP S   | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>Is category must be applied as soon a<br>view patched in each category<br>Select act_not_app<br>Select notactivated<br>Select actpw_notact<br>Select dbg_app   | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br><br>ACT_NOT_APP S<br>NOTACTIVATED S<br>ACTPW_NOTACT S<br>DBG_APP S<br>DBG_NOT_APP S  | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>Is category must be applied as soon a<br>view patched in each category<br>Select act_not_app<br>Select notactivated<br>Select actpw_notact<br>Select dbg_app<br>Select dbg_not_app   | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br>   | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>As category must be applied as soon a<br>view patched in each category<br>Select act_not_app<br>Select notactivated<br>Select actpw_notact<br>Select dbg_app<br>Select dbg_not_app<br>Select dnr_not_app   | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br>   | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>As category must be applied as soon a<br>view patched in each category<br>Select act_not_app<br>Select notactivated<br>Select actpw_notact<br>Select dbg_app<br>Select dbg_not_app<br>Select dnr_not_app<br>Select emg_not_app   | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br>   | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>As category must be applied as soon a<br>view patched in each category<br>Select act_not_app<br>Select notactivated<br>Select actpw_notact<br>Select dbg_app<br>Select dbg_not_app<br>Select dnr_not_app<br>Select emg_not_app<br>Select gen not app   | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br>   | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>As category must be applied as soon a<br>view patched in each category<br>Select act_not_app<br>Select notactivated<br>Select actpw_notact<br>Select dbg_app<br>Select dbg_not_app<br>Select dnr_not_app<br>Select emg_not_app<br>Select gen_not_app<br>Select 1td_not_app   | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br>   | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>As category must be applied as soon a<br>view patched in each category<br>Select act_not_app<br>Select notactivated<br>Select actpw_notact<br>Select dbg_app<br>Select dbg_not_app<br>Select dnr_not_app<br>Select emg_not_app<br>Select gen_not_app<br>Select 1td_not_app<br>Select man_not_app   | les,                       |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br>   | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>As category must be applied as soon a<br>view patched in each category<br>Gelect act_not_app<br>Gelect notactivated<br>Gelect actpw_notact<br>Gelect dbg_app<br>Gelect dbg_not_app<br>Gelect dbg_not_app<br>Gelect emg_not_app<br>Gelect gen_not_app<br>Gelect 1td_not_app<br>Gelect man_not_app<br>Gelect src_not_app   | les,<br>.s                 |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br>   | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>As category must be applied as soon a<br>view patched in each category<br>Gelect act_not_app<br>Gelect notactivated<br>Gelect actpw_notact<br>Gelect dbg_app<br>Gelect dbg_not_app<br>Gelect dbg_not_app<br>Gelect dmr_not_app<br>Gelect gen_not_app<br>Gelect ltd_not_app<br>Gelect man_not_app<br>Gelect src_not_app<br>Gelect src_not_app<br>Gelect src_not_app   | .s<br>Report               |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br>   | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>As category must be applied as soon a<br>view patched in each category<br>Gelect act_not_app<br>Gelect notactivated<br>Gelect actpw_notact<br>Gelect dbg_app<br>Gelect dbg_not_app<br>Gelect dbg_not_app<br>Gelect dmr_not_app<br>Gelect gen_not_app<br>Gelect ltd_not_app<br>Gelect man_not_app<br>Gelect src_not_app<br>Gelect src_not_app<br>Gelect obsoleted, and then perform a<br>PRSU on each one, and it is applied,   | .s<br>Report               |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br>   | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>As category must be applied as soon a<br>view patched in each category<br>Gelect act_not_app<br>Gelect notactivated<br>Gelect actpw_notact<br>Gelect dbg_app<br>Gelect dbg_not_app<br>Gelect dbg_not_app<br>Gelect dmr_not_app<br>Gelect gen_not_app<br>Gelect gen_not_app<br>Gelect man_not_app<br>Gelect src_not_app<br>Gelect src_not_app<br>Gelect obsoleted, and then perform a<br>PRSU on each one, and it is applied,<br>Gemove it  | Report<br>please           |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br>   | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>As category must be applied as soon a<br>view patched in each category<br>Gelect act_not_app<br>Gelect notactivated<br>Gelect actpw_notact<br>Gelect dbg_app<br>Gelect dbg_not_app<br>Gelect dbg_not_app<br>Gelect dmr_not_app<br>Gelect gen_not_app<br>Gelect gen_not_app<br>Gelect src_not_app<br>Gelect src_not_app<br>Gelect src_not_app<br>Gelect src_not_app<br>Gelect obsoleted, and then perform a<br>PRSU on each one, and it is applied,<br>Gelect obsoleted, and then perform a | Report<br>Report<br>Report |
| P<br>Note that Debug, O<br>when applied, can<br>All patches in thi<br>possible.<br>PRSM commands to v<br>ACT_NOT_APP S<br>NOTACTIVATED S<br>ACTPW_NOTACT S<br>DBG_APP S<br>DBG_NOT_APP S<br>DBG_NOT_APP S<br>GEN_NOT_APP S<br>GEN_NOT_APP S<br>SRC_NOT_APP S<br>OBS_NOT_APP S<br>OBS_NOT_APP S<br>P<br>OBE_NOT_APP S<br>P | Desolete and Obsolete Emergency patch<br>cause other patches not to apply.<br>As category must be applied as soon a<br>view patched in each category<br>Gelect act_not_app<br>Gelect notactivated<br>Gelect actpw_notact<br>Gelect dbg_app<br>Gelect dbg_not_app<br>Gelect dbg_not_app<br>Gelect dmr_not_app<br>Gelect gen_not_app<br>Gelect gen_not_app<br>Gelect man_not_app<br>Gelect src_not_app<br>Gelect src_not_app<br>Gelect obsoleted, and then perform a<br>PRSU on each one, and it is applied,<br>Gemove it  | Report<br>Report<br>Report |

#### PRSM470 (continued)

```
Select rem_prsus
Select incnotinst
REM PRSUS
INCNOTINST
                 Select mismatch
UNITMISMATCH
GRPMISMATCH
                 Select grpmismatch
ENTRYNVALID
                  Perform a Report PRSU on the patch(es)
                  denoted under this field in the PRSU
                  Condition Details section, and you will see
                  the 'CATEGORY' is '???'. This means the
                  device patch needs to be spooled back into
                  the PADNDEV device.
PRSU Condition Details
ACT UNAPP
                  (Denotes a field separator.)
NOTACTIVATED
SCE20BBZ
BMA18BBZ
ELD20BTJ
SSG20BTJ
ECU19BHZ
AKC10BM0
JNA01BM0
KKC31BM0
BOY54BM0
BAD96BM0
                    (This denotes that more than 10 PRSUs
(...)
                   meet this alarm condition, and only 10
                   PRSUIDs are displayed.)
ACTPW NOTACT
ELD20BTJ
JNA01BM0
KKC31BM0
CPA83BM0
BOY29BM0
CPA93BM0
JBS14BM0
KKC32BM0
KRS06BM0
TIK42BM0
(...)
*
DBG_APP
DBG_UNAPP
DNR UNAPP
EMG UNAPP
GEN UNAPP
```

## PRSM470 (continued)

```
LTD_UNAPP
*
MAN_UNAPP
*
SRC_UNAPP
*
OBS_NOT_REM
*
OBE_NOT_REM
*
REM_PRSUS
*
INCNOTINST
*
UNITMISMATCH
*
GRPMISMATCH
*
```

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field                       | Value                             | Description   |
|-----------------------------|-----------------------------------|---|
| INFO Status Audit Summary   | Constant                          | Indicates that PRSM has completed a nightly status audit  |
| <alrm_condtn></alrm_condtn> | Any PRSM alarm condition          | The PRSM alarm condition, as entered in table PRSMALRM. If the ENABLED field for the alarm in table PRSMALRM is set to N, the alarm will not be listed in log PRSM470.                                      |
| <number></number>           | Number                            | The number of PRSUs in the alarm<br>condition. A series of periods () indicates<br>more PRSUs than are shown in the alarm<br>condition. PRSM470 displays only the first<br>10 PRSUs in the alarm condition. |
| <prsu></prsu>               | Asterisk (*), any<br>valid prsuid | The PRSUs in the alarm condition. An asterisk (*) indicates no PRSUs.   |

## Action

Check office policy. The contents of the log and office policy will determine if you must perform additional action.

Log reports 1-5

PRSM470 (continued)

# **Associated OM registers**

None

**Additional information** 

None

## **History table**

#### SN07 (DMS)

CR Q00785051 introduced enhancements to Log PRSM470 to ensure optimum patching.

1-6 Log reports

# PRSM470 (end)

#### PRSM600

#### **Explanation**

The Post-Release Software Manager (PRSM) subsystem generates the PRSM600 log report. This log report is an information log that describes an activity that may be beyond normal operating conditions.

#### Format

The format for log report PRSM600 follows:

PRSM600 mmmdd hh:mm:ss ssdd INFO General Info <information\_txt>

#### Example

An example of log report PRSM600 follows:

PRSM600 APR27 11:29:56 1700 INFO General Info
 PRSM CM Statuses have been synced by operator.

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field                               | Value                    | Description   |
|-------------------------------------|--------------------------|---|
| INFO General Info                   | Constant                 | Identifies an activity that may be beyond normal operating conditions |
| <information_txt></information_txt> | Up to five lines of text | The activity that may be beyond normal operating conditions           |

## Action

None

# Associated OM registers

None

#### **Additional information**

The Post-Release Software Manager (PRSM) subsystem generates the PRSM603 log report. This log report is an information log that lists any change to any field in table PRSMOPTS.

#### Format

The format for log report PRSM603 follows:

PRSM603 mmmdd hh:mm:ss ssdd INFO PRSMOPTS Option Change <field> changed from <old\_value> to <new\_value>

## Example

An example of log report PRSM603 follows:

PRSM603 MAY16 15:19:47 8300 INFO PRSMOPTS Option Change DESTMETH changed from BROADCAST to NO\_BROADCAST.

# **Field descriptions**

The following table explains each of the fields in the log report:

| Value  | Description   |
|--|---|
| Constant                                       | Indicates that a field in table PRSMOPTS has changed  |
| DESTMETH,<br>COEXDUR,<br>COEXCMAX,<br>COEXCMIN | Any field in table PRSMOPTS   |
| Constant                                       | Indicates the old value follows   |
| Any acceptable value                           | The previous value in the field in table PRSMOPTS   |
| Constant                                       | Indicates the new value follows   |
| Any acceptable value                           | The new value in the field in table PRSMOPTS  |
|  | Constant<br>DESTMETH,<br>COEXDUR,<br>COEXCMAX,<br>COEXCMIN<br>Constant<br>Any acceptable<br>value<br>Constant<br>Any acceptable |

*Note:* Values COEXDUR, COEXCMAX, and COEXCMIN are available only in offices that use Generic Services Framework (GSF).

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# PRSM603 (end)

# Action

None

# Associated OM registers

None

## **Additional information**

The Post-Release Software Manager (PRSM) subsystem generates the PRSM680 log report. This log report is an information log that lists information on PRSM automated processes.

#### Format

The format for log report PRSM680 follows:

PRSM680 mmmdd hh:mm:ss ssdd INFO Automated Process Info Automated Process: <process> <information\_txt>

# Example

Following are examples of log report PRSM680:

Example 1

PRSM680 OCT1 01:03:17 8900 INFO Automated Process Info Automated Process: AUTOAPP Process started.

Example 2

PRSM680 OCT1 01:03:17 8900 INFO AUTOMATED PROCESS INFO Automated Process: AUTOAPP Process has been manually delayed

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field                                  | Value                                   | Description                                      |
|--|---|--|
| INFO AUTOMATED PROCESS INFO            | Constant                                | Displays information on a PRSM automated process |
| Automated Process: <process></process> | AUTOAPP,<br>FILE_AUDIT,<br>STATUS_AUDIT | The PRSM automated process                       |
| <information_txt></information_txt>    | Text string                             | The information related to the automated process |

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# PRSM680 (end)

# Action

None

# Associated OM registers

None

## **Additional information**

## **PRSM681**

#### Explanation

The Post-Release Software Manager (PRSM) subsystem generates the PRSM681 log report. This log report is an information log that identifies when a PRSM automated process is started, stopped, or delayed. The subsystem generates the log whenever a user performs one of the following commands.

- AUTOPROC <auto\_process> START
- AUTOPROC <auto\_process> STOP
- AUTOPROC <auto\_process> DELAY

#### Format

The format for log report PRSM681 follows:

PRSM681 mmmdd hh:mm:ss ssdd INFO AUTOPROCESS CI COMMAND <command> issued by <user>

## Example

Following are examples of log report PRSM681:

Example 1

PRSM681 OCT1 01:03:17 8900 INFO AUTOPROCESS CI COMMAND AUTOPROC AUTOAPP STOP issued by ADMIN.

#### Example 2

PRSM681 OCT1 01:03:18 8900 INFO AUTOPROCESS CI COMMAND AUTOPROC FILEAUD START issued by ADMIN.

PRSM681 (end)

# Field descriptions

The following table explains each of the fields in the log report:

| Field                       | Value   | Description   |
|-----------------------------|---|---|
| INFO AUTOPROCESS CI COMMAND | Constant  | Indicates that a PRSM<br>automated process has been<br>started, stopped, or delayed |
| <command/>                  | Any AUTOPROC CI<br>command with the<br>START, STOP, or<br>DELAY parameter | The PRSM command that stops, starts,or delays a PRSM automated process              |
| <user></user>               | Any PRSM user   | The PRSM user that started,<br>stopped, or delayed the<br>automated process         |

# Action

None

# Associated OM registers

None

## **Additional information**

The Post-Release Software Manager (PRSM) subsystem generates the PRSM682 log report. This log report is an information log that lists any change to any field in table AUTOOPTS.

#### Format

The format for log report PRSM682 follows:

PRSM682 mmmdd hh:mm:ss ssdd INFO AUTOOPTS OPTION CHANGE

<field> changed from <old\_value> to <new\_value> by <user>.

# Example

Following are examples of log report PRSM682:

Example 1

PRSM682 OCT1 12:15:27 6900 INFO AUTOOPTS OPTION CHANGE MAXATMPT changed from \$ to 4 by ADMIN.

Example 2

PRSM682 OCT1 12:15:27 6900 INFO AUTOOPTS OPTION CHANGE APPROVAL changed from N to Y by ADMIN.

## **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                       | Value                                | Description   |
|-----------------------------|--------------------------------------|---|
| INFO AUTOOPTS OPTION CHANGE | Constant                             | Indicates a field has<br>changed in table<br>AUTOOPTS |
| <field></field>             | Any valid field in table<br>AUTOOPTS | The field in table<br>AUTOOPTS that was<br>changed    |
| changed from                | Constant                             | Indicates the old value follows                       |

# PRSM682 (end)

(Sheet 2 of 2)

| Field                   | Value                   | Description                          |
|-------------------------|-------------------------|--------------------------------------|
| <old_value></old_value> | Any value for the field | The previous value in the field      |
| to                      | Constant                | Indicates the new value follows      |
| <new_value></new_value> | Any value for the field | The new value in the field           |
| by                      | Constant                | Indicates the PRSM user follows      |
| <user></user>           | Any PRSM user           | The PRSM user that changed the value |

# Action

None

# **Associated OM registers**

None

**Additional information** 

## **PRSM683**

#### Explanation

The Post-Release Software Manager (PRSM) subsystem generates the PRSM683 log report. This log report is an information log that lists any option change to table AUTOPRSU.

#### Format

The format for log report PRSM683 follows:

PRSM683 mmmdd hh:mm:ss ssdd INFO AUTOPRSU OPTION CHANGE Automated Process: <process> <field> changed from <old\_value> to <new\_value> by <user>

# Example

An example of log report PRSM683 follows:

PRSM683 OCT1 12:15:28 8900 INFO AUTOPRSU OPTION CHANGE Automated Process: AUTOAPP MTWTFSS changed from NNNNNNN to YYYYYYY by ADMIN

## Field descriptions

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                                  | Value                         | Description  |
|--|-------------------------------|--|
| INFO AUTOPRSU OPTION CHANGE            | Constant                      | Indicates an option has<br>changed in table AUTOPRSU |
| Automated Process: <process></process> | Any PRSM automated<br>process | The PRSM automated process                           |
| <field></field>                        | FIELDNAME,<br>MTWTFSS         | The field in table AUTOPRSU                          |
| changed from                           | Constant                      | Indicates the old value follows                      |
| <old_value></old_value>                | Any acceptable value          | The previous value in the field in table AUTOPRSU    |
| to                                     | Constant                      | Indicates the new value follows                      |
| <new_value></new_value>                | Any acceptable value          | The new value in the field in table AUTOPRSU         |

# PRSM683 (end)

(Sheet 2 of 2)

| Field         | Value         | Description                            |
|---------------|---------------|--|
| by            | Constant      | Indicates the name of the user follows |
| <user></user> | Any PRSM user | The PRSM user that changed the value   |

# Action

None

## **Associated OM registers**

None

# **Additional information**

This log is generated each time an in-service MPC datalink is unable to transmit a TOPS QMIS MIS buffer. The Queue Management System (QMS) detects the link failure. The log indicates the date and time of the transmission failure and the MPC number, link number, and conversation number (MLC) of the link that failed to transmit the buffer. The MLC is datafilled against the TQMSMIS application in table QMSMIS.

A flood of these logs should not occur, since the link is reset after each failure.

#### Format

The format for log report QMIS100 follows:

QMIS100 mmmdd hh:mm:ss ssdd INFO QMS\_MIS\_LINK\_FAIL APPLN = applname MPC = nn LINK = nn CONV = conv

## Example

An example of log report QMIS100 follows:

QMIS100 JAN27 04:03:56 1234 INFO QMS\_MIS\_LINK\_FAIL APPLN = TOPS MPC = 04 LINK = 04 CONV = 5

# **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                         | Value         | Description  |
|-------------------------------|---------------|--|
| INFO<br>QMS_MIS_LINK_<br>FAIL | Constant      | Indicates the QMS CAM detected something in<br>a message received from an application. It<br>indicates an agent or call state mismatch<br>between the application and the CAM has<br>occurred. |
| APPLN                         | Symbolic text | Indicates the name of the application which sent the message. Refer to table QMSMIS.   |
| MPC                           | Integers      | Indicates the Multi-protocol Controller (MPC) number affected. Refer to table QMSMIS.  |

#### QMIS100 (end)

(Sheet 2 of 2)

| Field | Value    | Description  |
|-------|----------|--|
| LINK  | Integers | Indicates the MPC link number affected. Refer to table QMSMIS.                 |
| CONV  | Integers | Indicates the conversation number on the link affected. Refer to table QMSMIS. |

# Action

Busy (Bsy) and return to service (RTS) the link at the maintenance and administration position (MAP) display.

## **Associated OM registers**

When this log is generated, the OM register BUFFAIL within the QMSMIS group is pegged.

The QMIS101 log is generated when an Ethernet connection is unable to transmit a QMIS MIS buffer due to insufficient resources. The log indicates the date and time of the transmission failure and the name and id number of the node with the transmission failure. The node name is datafilled against the TQMSMIS application in table QMSMIS.

Note that this log is only generated when a buffer fails to be transmitted on an in-service connection. Also note that a flood of these logs should not occur, since no attempt to send is made after a failure until a notify message is received saying that resources are now available.

This log is intended to inform the user that MIS buffers will be dropped. Buffers will continue to be lost until resources are available to attempt to send messages again.

#### Format

The format for log report QMIS101 follows:

QMIS101 mmmdd hh:mm:ss ssdd INFO QMS\_ETHERNET\_SEND\_FAIL APPLN = applname NODE = node name NODEID = node id

## **Example**

An example of log report QMIS101 follows:

QMIS101 NOV03 15:45:37 2400 INFO QMS\_MIS\_ETHERNET\_SEND\_FAIL APPLN = OSSAIN NODE = MIS\_NODE NODEID = 42

## **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                                   | Value         | Description  |
|---|---------------|--|
| INFO QMS_MIS_<br>ETHERNET_SEND_F<br>AIL | Constant      | Indicates the QMS CAM detected something in<br>a message received from an application. It<br>indicates an agent or call state mismatch<br>between the application and the CAM has<br>occurred. |
| APPLN                                   | Symbolic text | Indicaates the name of the application which sent the message. Refer to table QMSMIS.  |

#### QMIS101 (end)

(Sheet 2 of 2)

| Field  | Value    | Description  |
|--------|----------|--|
| NODE   | Integers | Indicates the OSSAIN node name affected.<br>Refer to table OANODNAM.   |
| NODEID | Integers | Indicates the OSSAIN node number affected.<br>Refer to table OANODNAM. |

## Action

Investigate the data connectivity between the DMS switch and the node. If required busy (Bsy) and return to service (RTS) the link at the maintenance and administration position (MAP) display.

## **Associated OM registers**

When this log is generated, the OM register BUFFAIL within the QMSMIS group is pegged.

# History

#### TOPS10

This log was created by feature AF7439.

## QMIS102

#### **Explanation**

The QMIS102 log is generated the first time that an IP connection is unable to transmit a TOPS QMS MIS buffer. If the IP connection fails to transmit consecutive buffers, the QMIS102 is not generated again. The log generates the date and time that the transmission failed as well as the COMID (Communication ID) datafilled in table IPCOMID to transmit the buffer..

#### Format

The format for log report QMIS102 follows:

QMIS102 mmmdd hh:mm:ss ssdd INFO QMS\_MIS\_IP\_SEND\_FAIL APPLN = applname COMID = comidno

## Example

An example of log report QMIS102 follows:

QMIS102 NOV03 15:45:37 2400 INFO QMS\_MIS\_MIS\_IP\_SEND\_FAIL APPLN = TOPS COMID = 20

## Field descriptions

The following table explains each of the fields in the log report:

| Field                         | Value                | Description   |
|-------------------------------|----------------------|---|
| INFO QMS_MIS_<br>IP_SEND_FAIL | Constant             | Indicates an IP connection is unable to transmit a TOPS QMS MIS buffer.               |
| APPLN                         | TOPS or OSSAIN       | Indicaates the name of the application which sent the message. Refer to table QMSMIS. |
| COMID                         | Key to table IPCOMID | COMID is the key in table IPCOMID.  |

## Action

Investigate data connectivity between the DMS switch and the MIS Reporting Facility.

# **Associated OM registers**

None.

## QMIS102 (end)

# History

TOPS13

This log was created by feature A59007458.

## **QMIS103**

#### **Explanation**

The QMIS103 log is generated if a Closesocket failure occurs when the TOPS QMS MIS IP application tries to close an established connection. The Log indicates the date and time that the Closesocket failed as well as the COMID (Communication ID) datafilled in table IPCOMID used to open the socket.

#### Format

The format for log report QMIS103 follows:

QMIS102 mmmdd hh:mm:ss ssdd INFO QMS\_MIS\_IP\_CLOSESOCKET\_FAIL APPLN=<APP TYPE> COMID =COMIDNO

# Example

An example of log report QMIS102 follows:

QMIS103 NOV10 20:15:39 2500 INFO QMS\_MIS\_IP\_CLOSESOCKET\_FAIL APPLN=TOPS COMID =20

## Field descriptions

The following table explains each of the fields in the log report:

| Field                                    | Value                | Description   |
|--|----------------------|---|
| INFO QMS_MIS_<br>IP_CLOSESOCKET_<br>FAIL | Constant             | Indicates a Closesocket failure response is received by the TOPS QMS MIS IP application |
| APPLN                                    | TOPS or OSSAIN       | Indicaates the name of the application which sent the message. Refer to table QMSMIS.   |
| COMID                                    | Key to table IPCOMID | COMID is the key in table IPCOMID.  |

# Action

Use the FORCECLOSE command on the XIPVER tool to close the opened socket.

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QMIS103 (end)

# Associated OM registers

None

# History

TOPS13

This log was created by feature A59007458.

The Queue Management System (QMS) subsystem generates this log when the QMS Call and Agent Manager (CAM) detects a logic mismatch while processing a message from an application to the QMS CAM. Logic mismatches typically indicate a call or agent state mismatch between the CAM and the application.

# Format

There are two formats for log report QMS100.

The first format for log report QMS100 follows:

QMS100 mmmdd hh:mm:ss ssdd QMS STATE MISMATCH REASON = reastext APPLN = applname MSGTYPE = inmsgtype LOGINID = nnnnn INTAGNTNUM = nnnnn EXTAGNTNUM = nnnnn CALLID = hhhh hhhh CALLDATA = hhhh hhhh hhhh hhhh

The second format for log report QMS100 follows:

QMS100 mmmdd hh:mm:ss ssdd QMS STATE MISMATCH REASON = reastext APPLN = applname CALLQ = nnnn MSGTYPE = inmsgtype LOGINID = nnnnn INTAGNTNUM = nnnnn EXTAGNTNUM = nnnnn CALLID = hhhh hhhh CALLDATA = hhhh hhhh hhhh hhhh MSG = hhhh hhhh ...

# Example

An example of the first format for log report QMS100 follows:

#### QMS100 (continued)

```
QMS100 SEP10 10:25:12 0987 QMS STATE MISMATCH
REASON = AGENT CURRENTLY AVAILABLE
APPLN = TOPS
MSGTYPE = AGENT_AVAILABLE_MSG
LOGINID = 112
INTAGNTNUM = 13
EXTAGNTNUM = 127
CALLID = 0E2C 001E
CALLDATA = 003C 09B4 CA03 0000 0000
MSG = 0000 0002 0000 0003 000D
```

An example of the second format for log report QMS100 follows:

```
QMS100 SEP10 10:25:12 0987 QMS STATE MISMATCH
REASON = AGENT CURRENTLY AVAILABLE
APPLN = TOPS CALLQ = 8191
MSGTYPE = AGENT_AVAILABLE_MSG LOGINID = 112
INTAGNTNUM = 13 EXTAGNTNUM = 127
CALLID = 0E2C 001E CALLDATA = 003C 09B4 CA03 0000
0000 MSG = 0000 0002 0000 0003 000D
```

### **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                 | Value                            | Description   |
|-----------------------|----------------------------------|---|
| QMS STATE<br>MISMATCH | Constant                         | Indicates the QMS CAM detected something in<br>a message received from an application which<br>indicates an agent or call state mismatch<br>between the application and the CAM has<br>occurred |
| REASON                | AGENT CURRENTLY<br>UNDEFINED     | Indicates the CAM received an agent available,<br>agent not available, or agent undefined<br>message for an agent currently in an undefined<br>state in the CAM                                 |
|                       | AGENT CURRENTLY<br>AVAILABLE     | Indicates the CAM received an agent define or agent available message for an agent currently in an available state in the CAM   |
|                       | AGENT CURRENTLY<br>NOT AVAILABLE | Indicates the CAM received an agent define or agent not available message for an agent currently in an unavailable state in the CAM   |

# QMS100 (end)

| Field      | Value                  | Description  |
|------------|------------------------|--|
|            | CALL UNKNOWN TO<br>CAM | Indicates an application sent a cancel agent<br>request message to the CAM for a call which<br>the CAM could not find in the specified call<br>queue |
| APPLN      | Symbolic text          | Identifies name of the application which sent the message  |
| CALLQ      | 0-8190                 | Indicates the call queue number (if relevant and known, else set to 8191)  |
| MSGTYPE    | Symbolic text          | Indicates the incoming (to the CAM) QMS control message type   |
| LOGINID    | 0-65534                | Indicates the operator number (if it has been specified by the application)  |
| INTAGNTNUM | 0-16383                | Indicates the internal agent number (if it has been specified by the application)  |
| EXTAGNTNUM | 0-65534                | Indicates the external agent number (if it has been specified by the application)  |
| CALLID     | 0000-FFFF              | Indicates the CALLID specified by the application, if applicable   |
| CALLDATA   | 0000-FFFF              | Indicates the call data specified by the application, if applicable  |
| MSG        | 0000-FFFF              | Indicates the message from the application<br>which the CAM was processing when the logic<br>error was detected                                      |

(Sheet 2 of 2)

# Action

Investigate and resolve any associated log reports that are generated in the same time frame as log QMS100. If this report persists after resolving the associated log reports, take the following actions:

- Retain log report QMS100 and all other log reports generated within five minutes of log report QMS100.
- Contact the next level of maintenance.

# **Associated OM registers**

None

#### QMS101

#### Explanation

This log is generated when the Queue Management System Call and Agent Manager (QMS CAM) detects a datafill mismatch while processing a message from an application to the QMS CAM. Datafill mismatches are evident when an application has specified a value in the message which indicates datafill in the application does not match datafill in the CAM (specifically, the boundaries defined for the application in Table QMSCDEF).

#### Format

The format for log report QMS101 follows:

QMS101 mmmdd hh:mm:ss ssdd QMS DATAFILL MISMATCH REASON =reastxt APPLN = aplname CALLQ = nnnn MSGTYPE = inmsgtype LOGINID = nnnnn INTAGNTNUM = nnnnn EXTAGNTNUM = nnnnn CALLID = hhhh hhhh CALLDATA = hhhh hhhh hhhh hhhh MSG = hhhh hhhh ...

#### Example

An example of log report QMS101 follows:

QMS101 SEP10 10:25:12 0987 QMS DATAFILL MISMATCH REASON = AGENT CURRENTLY AVAILABLE APPLN = TOPS CALLQ = 8191 MSGTYPE = AGENT\_AVAILABLE\_MSG LOGINID = 112 INTAGNTNUM = 13 EXTAGNTNUM = 127 CALLID = 0E2C 001E CALLDATA = 003C 09B4 CA03 0000 0000 MSG = 0000 0002 0000 0003 000D

# **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                    | Value                            | Description   |
|--------------------------|----------------------------------|---|
| QMS DATAFILL<br>MISMATCH | Constant                         | Indicates the QMS CAM detected something in<br>a message received from an application which<br>indicates a datafill mismatch exists between the<br>application and the CAM  |
| REASON                   | UNDEFINED CQ IN<br>PROFILE       | Indicates the CAM received an agent define<br>message containing a profile with a queue<br>which is not defined in Table QMSCQDEF   |
|                          | CQ OF CALL IS<br>UNDEFINED       | Indicates the CAM received a message with a reference to a call queue which is not defined in Table QMSCQDEF  |
|                          | INTERN AGENT NUM<br>OUT OF RANGE | Indicates the CAM received a message with a reference to an internal agent number which exceeds the value of the application's NUMAGNTS field in Table QAPLNDEF.  |
|                          | AQ OUT OF RANGE                  | Indicates the CAM received a message with a reference to an agent queue which exceeds the value of the application's AGENTQS field in Table QAPLNDEF  |
|                          | CONTROLLED<br>TRAFFIC DISABLED   | Indicates the CAM received an agent define<br>message for an agent with a controlled traffic<br>profile, but the application's CTSEARCH field in<br>Table QAPLNDEF is set to zero, indicating<br>controlled traffic mode is disabled (i.e., the<br>agent definition must be denied, because the<br>agent would not receive any calls) |
| CALLQ                    | 0-8190                           | Indicates the call queue number (if relevant and known, else set to 8191)   |
| APPLN                    | Symbolic name                    | Indicates the name of the application which sent the message  |
| MSGTYPE                  | Symbolic name                    | Indicates the incoming (to the CAM) QMS control message type  |
| OPRNUM                   | 0-65534                          | Indicates the operator number (if it has been specified by the application)   |

# QMS101 (end)

(Sheet 2 of 2)

| Field      | Value     | Description   |
|------------|-----------|---|
| INTAGNTNUM | 0-16383   | Indicates the internal agent number (if it has been specified by the application)                                     |
| EXTAGNTNUM | 0-65534   |   |
| CALLID     | 0000-FFFF | Indicates the CALLID specified by the application, if applicable  |
| CALLDATA   | 0000-FFFF | Indicates the call data specified by the application, if applicable   |
| MSG        | 0000-FFFF | Indicates the message from the application<br>which the CAM was processing when the<br>datafill mismatch was detected |

# Action

Make datafill changes indicated by the reason field description above.

# **Associated OM registers**

None

#### **Explanation**

This log is generated when the Queue Management System Call and Agent Manager (QMS CAM) receives a message which it cannot interpret, because the data in the message is in an invalid format.

### Format

The format for log report QMS102 follows:

QMS102 mmmdd hh:mm:ss ssdd INVALID MSG FROM APPLN REASON = reastext APPLN = applname MSG = hhhh hhhh ...

# Example

An example of log report QMS102 follows:

QMS102 SEP10 10:25:12 0987 INVALID MSG FROM APPLN REASON = MISC APPLN = TOPS MSG = 0000 0002 0000 0003 000D

# **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                     | Value                   | Description   |
|---------------------------|-------------------------|---|
| INVALID MSG FROM<br>APPLN | Constant                | Indicates the CAM received a message from an application which it is unable to interpret        |
| REASON                    | INVALID PROFILE<br>DATA | Indicates the CAM received an agent define message containing profile data in an invalid format |
|                           | MISC                    | Indicates the CAM received a message which it is unable to interpret in any way                 |

# QMS102 (end)

(Sheet 2 of 2)

| Field | Value                       | Description  |
|-------|-----------------------------|--|
| APPLN | Symbolic text or<br>UNKNOWN | Indicates the name of the application which<br>sent the message (if in range in the incoming<br>message - contents of this field should be<br>viewed as suspect since other parts of the<br>message it comes from could not be<br>interpreted). If the internal application number<br>is out of range, UNKNOWN appears om tjos<br>field. |
| MSG   | 0000-FFFF                   | Indicates the message from the application which the CAM was unable to interpret   |

# Action

Contact the next level of maintenance.

# Associated OM registers

None

## Explanation

This log is generated when the Queue Management System (QMS) Call and Agent Manager (CAM) detects an error condition within the internal CAM data structures.

### Format

The format for log report QMS103 follows:

QMS103 mmmdd hh:mm:ss ssdd QMS EROR CONDITION DETECTED APPLN = applname DATA = hhhh hhhh CONDITION = errcond

# Example

An example of log report QMS103 follows:

QMS103 SEP10 10:25:12 0987 QMS EROR CONDITION DETECTED APPLN = TOPS DATA = 0000 0033 CONDITION = AGENT FOUND IN LIMBO

# Field descriptions

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                              | Value         | Description   |
|------------------------------------|---------------|---|
| QMS ERROR<br>CONDITION<br>DETECTED | Constant      | Indicates the CAM detected an error condition in its internal data structures   |
| APPLN                              | Symbolic text | Indicates the name of the application in whose data the error condition was detected  |
| DATA                               | 0000-FFFF     | If CONDITION = CQ ELEM FOUND IN LIMBO,<br>this field contains the application CALLID<br>originally sent to the CAM when the call was<br>placed in queue |

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# QMS103 (end)

(Sheet 2 of 2)

| Field     | Value                     | Description  |
|-----------|---------------------------|--|
| CONDITION | CQ ELEM FOUND IN<br>LIMBO | Indicates the QMS call queue audit found a call<br>queue element in limbo (for example, in neither<br>a call queue nor the application's free queue),<br>and returned it to the free queue |
|           | AGENT FOUND IN<br>LIMBO   | Indicates the QMS agent queue audit found an agent in limbo (for example, in an available agent queue)   |

# Action

Contact the next level of maintenance.

# **Associated OM registers**

None

## Explanation

This log is generated when the Queue Management System (QMS) Call and Agent Manager (CAM) child process is awakened late by the system wakeup facility because the facility did not procress the wakeup request at the requested wakeup time.

Data accumulated by the QMS child process is used to drive the QNSs predicted wait time mechanism, which in turn drives the decision made each time a call is presented to the QMS CAM by an application as to whether a call should be deflected because the call's predicted wait time exceeds the value datafilled for the call's queue in Table QMSCQDEF field CQCDTIME.

Because timely wakeups are required to drive the accumulation of call throughout data by the QMS child process, this log is produced to track instances when these wakeups are compromised.

# Format

The format for log report QMS104 follows:

QMS104 mmmdd hh:mm:ss ssdd LATE WAKEUP OF QMSCHILD DELTA = hhhh hhhh

# Example

An example of log report QMS104 follows:

QMS104 SEP10 10:25:12 0987 LATE WAKEUP OF QMSCHILD DELTA = 0000 0096

# **Field descriptions**

The following table explains each of the fields in the log report:

| Field                      | Value     | Description   |
|----------------------------|-----------|---|
| LATE WAKEUP OF<br>QMSCHILD | Constant  | Indicates the CAM detected an error condition in its internal data structures |
| DELTA                      | 0000-FFFF | Indicates the length of time, in milliseconds, that the wakeup was late       |

## QMS104 (end)

## Action

Under the extreme loss placed upon the system wakeup facility immediately after a system restart, this log may be generated and can be ignored. However, if this log is generated at any point in time more than ten minutes after a restart, notify NT/BNR field support.

# **Associated OM registers**

None

### **RDT300**

#### Explanation

The subsystem generates the Remote Digital Terminal (RDT) subsystem log RDT300 when the database audit process finds a mismatch. This mismatch occurs between object data in the remote digital terminal (RDT) and the computing module (CM). The system cannot correct the error. Operating company personnel support is required.

## Format

The log report format for RDT300 is as follows:

RDT300 mmmdd hh:mm:ss ssdd TBL Transmission Alarm Location: <site><ff><u> Status: <status> Trouble: Transmission alarm Action: Refer to Trouble recvery documentation Object class: <object class> Description: <descriptive text> Correction procedure: <service\_condition>

## Example

An example of log report RDT300 follows:

\*\*RDT300 FEB25 14:35:10 0123 TBL Mismatch Fault Location: RDT1 00 0 Status: Alarm raised Trouble: Data not synchronized Action: Check datafill and correct if necessary Object class: 500 (equipment) Description: Object data mismatch between RDT and CM Correction procedure: Delete and redatafill this IDT

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                  | Value       | Description   |
|------------------------|-------------|---|
| TBL Mismatch Fault     | Constant    | Indicates the database audit process found a mismatch between the RDT and the CM. |
| Location <site></site> | RDT Integer | Identifies the source RDT site.   |

# RDT300 (continued)

(Sheet 2 of 2)

| Field                | Value                 | Description   |
|----------------------|-----------------------|---|
| <ff></ff>            | 0-99                  | Identifies the source RDT frame.                              |
| <u></u>              | 0-9                   | Identifies the source RDT unit.                               |
| Status               | Alarm raised          | Indicates an alarm raised.                                    |
| Trouble              | Data not synchronized | Indicates data is not in sync.                                |
| Action               | Symbolic text         | Describes the action required.                                |
| Object class         | Symbolic text         | Provides the type of object where the audit finds a mismatch. |
| Description          | Symbolic text         | Indicates where the mismatch occurred.                        |
| Correction procedure | Symbolic text         | Describes the action that corrects the fault.                 |

# Action

Refer to the following table for associated actions to correct the error.

| Objects     | Description  | Correction Procedure   |
|-------------|--|--|
| Inherent    | If the object class is<br>"Equipment," inherent<br>object data is defective.<br>The last line of the log<br>contains the text. | Delete and enter this IDT again. To recover<br>from the database mismatch, delete the<br>integrated digital terminal (IDT) from table<br>RDTINV. Enter table RDTINV again.   |
| Auto-create | For other (auto-create)<br>object classes, the last<br>line of the log contains<br>the text.                                   | Busy (BSY) and return to service (RTS) active<br>and standby EOCs for this IDT. At the IDT<br>level of the MAPCI, set the active embedded<br>operations channel (EOC) and the standby<br>EOC (if available) to ManB. Return to service<br>the active EOC and the standby EOC (if<br>available). The command sequence is: |
|             |  | MAPCI  |
|             |  | МТС  |
|             |  | РМ   |
|             |  | POST IDT n <- where n is the IDT number (0-255)  |
|             |  | BSY EOC1 <- or whatever is the active EOC  |
|             |  | BSY EOC2 <- or whatever is the standby EOC   |
|             |  | RTS EOC1   |
|             |  | RTS EOC2   |
|             |  | This action causes the system to start the auto-create objects in the database again.  |

# **Associated OM registers**

There are no associated OM registers.

### **RDT301**

#### Explanation

The subsystem changes RDT301 for remote digital terminals (RDTs) of type GENTMC or GENCSC. These changes do not affect RDTs of different types of RFT. The RDTs of different types of GENTMC or GENCSC do not contain the RDT primary OPC and RDT backup OPC fields.

The system generates RDT301 when the system receives a facility alarm from an RDT. The field Text of the log can identify the problem. Field Text is optional. The RDT does not always provide Field Text. The asterisks in the log header indicate how important the problem is. The field Service condition of the log also indicates how important the problem is. Field Service condition is optional. The RDT does not always provide field Service condition.

#### Format

The log report for format RDT301 is as follows:

| <sv> RDT301 <da< th=""><th>te/time&gt; <sq> TBL Facility Alarm</sq></th></da<></sv> | te/time> <sq> TBL Facility Alarm</sq>              |
|---|--|
| Location:   | RDT <site><ff><u></u></ff></site>                  |
| Status:   | <status></status>                                  |
| Trouble:  | Facility alarm                                     |
| Action:   | Refer to trouble recovery documentation            |
| Text:   | <text></text>                                      |
| Procedure:  | Clear the alarm condition at the RDT               |
| Associated ID7  | C: <id#>Network element: NEID&gt; NEName&gt;</id#> |
| RDT alarm rec   | ord ID: <rid> RDT primary OPC:</rid>               |
| Correlated reco   | ord ID: <cid> RDT backup OPC:</cid>                |
| Service conditi   | on: <service_condition></service_condition>        |

#### Example

An example of log report RDT301 follows:

\*\*\*RDT301 FEB25 14:35:10 3302 TBL Facility Alarm Location: RDT RDT1 1 0 Status: Alarm raised Trouble: Facility alarm Action: Refer to trouble recovery documentation Text: Faulty path Procedure: Clear the alarm condition at the RDT Associated IDT: 1 Network element: 10 ANODE\_1\_RFT RDT alarm record ID: 289 RDT primary OPC: BRTPY451 Correlated record ID:None RDT backup OPC: Unnamed Service condition: Service affecting

# **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 3)

| Field   | Value  | Description  |
|---|--|--|
| <sv></sv>                                     | *  | Indicates how important the alarm is:  |
|   |  | "" = No alarm  |
|   |  | "*" = Minor alarm  |
|   |  | "**" = Major alarm   |
|   |  | "***" = Critical alarm   |
| TBL Facility Alarm                            | Constant                                       | Indicates the system received a facility alarm from the RDT.   |
| Location RDT<br><site><ff><u></u></ff></site> | Any correct site name as entered in table SITE | Identifies the source RDT area. The source<br>RDT area, the frame, and unit numbers consist<br>the name of the RDT entered in table RDTINV.        |
| <ff></ff>                                     | 0-99   | Identifies the source RDT frame. This field, the area name, and unit number, form the name of the RDT entered in table RDTINV.                     |
| <u></u>                                       | 0-9  | Identifies the source RDT unit. This field, the area name, and frame number form the name of the RDT entered in table RDTINV.                      |
| Status <status></status>                      | Alarm raised, Alarm cleared, or Trouble alert  | Indicates the state of the RFT is one of the following:  |
|   |  | "Alarm raised" indicates the subsystem generates new alarm from the RDT.   |
|   |  | "Alarm cleared" indicates an alarm cleared at the RDT.   |
|   |  | "Trouble alert" indicates an alarm and the value is not known.   |
| Trouble                                       | Facility alarm                                 | Indicates the RDT alarm is a facility alarm.   |
| Action  | Refer to Trouble recovery documentation        | Describes the action. This field does not appear in an Alarm cleared report.   |
| Text <text></text>                            | Any text the RDT received, or None             | Indicates a text string from the alarm and<br>indicates the reason for the problem. A None<br>message appears if the RDT does not provide<br>text. |

# RDT301 (continued)

(Sheet 2 of 3)

| Field                                     | Value   | Description   |
|---|---|---|
| Procedure                                 | Clear the alarm condition at the RDT            | Indicates a technician must connect to the indicated RDT (network element) to clear the alarm. This field does not appear in an Alarm cleared report.   |
| Associated IDT <id#></id#>                | 0-255   | Indicates the IDT the system posts under the PM level of the MAPCI terminal to track this RDT alarm.  |
| Network element ID<br><neid></neid>       | 0-32767   | Indicates the Network element ID of the RDT that originated the alarm report.   |
| Network element name<br><nename></nename> | Any text as entered in table RDTINV, or Unnamed | Indicates the Network element name of the<br>RDT that originated the alarm report. If the<br>NENAME is not set to a text string, Unnamed<br>prints for the Network element name.  |
| RDT alarm record ID<br><rid></rid>        | 0-9999, ????,or None                            | Indicates the record ID of the alarm at the RDT.<br>This integer can be used as a log against the<br>alarm at the RDT. If the system cannot<br>determine the record ID, ???? appears. If RDT<br>does not provide the record ID, None appears<br>in this field.                  |
| RDT primary OPC                           | alphanumeric (up to 20<br>characters) or \$     | Indicates the name of the primary operations controller (OPC) that controls the RDT. If no operations controller controls the RDT, enter \$.  |
| RDT backup OPC                            | alphanumeric (up to 20 characters) or \$        | Indicates the backup OPC name for the RDT.<br>If no OPC is used, enter \$.  |
|   |   | If the backup OPC is entered with no primary OPC, the entry is rejected.  |
|   |   | The default value for this field is \$.   |
| Correlated record ID<br><cid></cid>       | 0-9999, ????, or None                           | If this is an Alarm cleared report, the field<br>indicates the cleared alarm at the RDT. If the<br>correlated record ID is not determined, ????<br>appears. If the RDT does not provide record<br>ID, or this is an Alarm raised report, None<br>message appears in this field. |

### RDT301 (end)

| (Sheet | 3 | of | 3) |  |
|--------|---|----|----|--|
|--------|---|----|----|--|

| Field  | Value  | Description  |
|--|--|--|
| Service condition<br><service_condition></service_condition> | Service-affecting,<br>Non-service affecting, or<br>Unknown   | Indicates when this alarm condition affects<br>subscriber service. This field does not appear<br>if the log report documents an alarm that<br>clears. If the RDT does not provide the service<br>condition, Unknown appears in this field. |
| Object class <object<br>class #&gt;</object<br>              | An object class number<br>of any correct object<br>class for which the<br>subsystem generates<br>alarms at RDT   | Indicates the class number of the object for which the subsystem event report.   |
| Object class <object<br>class name&gt;</object<br>           | An object class name of<br>any correct object class<br>for which the subsystem<br>generates the alarms at<br>RDT | Indicates the class name of the object for which the subsystem generates the event report.   |

### Action

When the subsystem generates log RDT301, perform the following steps:

- 1. Post the associated Integrated Digital Terminal (IDT) at the Peripheral Module (PM) level of the Maintenance and Administration Position command interpreter (MAPCI terminal). This action tracks the alarm.
- 2. To clear the alarm at the RDT, refer to the correct RDT vendor documentation.

# **Associated OM registers**

There are no associated OM registers.

## **Additional information**

Field Correlated record ID of an Alarm cleared report matches the field RDT alarm record ID of the associated Alarm raised report. Field Correlated record ID is optional. The RDT does not always provide the field Correlated record ID.

Module RDTLOG defines the RDT301 log. Establish a maintenance connection to a real or simulated RDT and report an RDT facility alarm to generate this log.

#### **RDT302**

#### **Explanation**

Changes to log report RDT302 are for remote digital terminals (RDTs) of type GENTMC or GENCSC. These changes do not affect RDTs of different type RFT. RDTs of different type GENTMC or GENCSC do not contain the RDT primary OPC and RDT backup OPC fields.

The subsystem generates RDT302 when the system receives an equipment alarm from an RDT. This log indicates a problem detected at the RDT that involves RDT equipment. The field Text of the log identifies the problem. Field Text is optional. The RDT does not always provide the field Text. The asterisks in the log header and field Service condition of the log indicate how important the problem is. Field Service condition is optional. The RDT does not always provide field Service condition.

#### Format

The log report format for RDT302 is as follows:

<sv> RDT302 <date/time> <sq> TBL Equipment Alarm

| Location: <site><ff><u></u></ff></site>   |
|---|
| Status: <status></status>   |
| Trouble: Equipment alarm  |
| Action: Refer to Trouble recovery documentation   |
| Text: <text></text>   |
| Procedure: Clear the alarm condition at the RDT   |
| Associated IDT: <pre><idt#> Network element: <neid> <nename></nename></neid></idt#></pre> |
| RDT alarm record ID: <rid></rid>  |
| Correlated record ID: <cid></cid>   |
| Service condition: <service_condition></service_condition>                                |
| Object class: <object (object="" class="" class#="" name)=""></object>                    |
|   |

#### Example

An example of log report RDT302 follows:

#### RDT302 (continued)

```
**RDT302 FEB25 14:35:10 3403 TBL Equipment Alarm
Location: RDT1 03 0
Status: Alarm raised
Trouble: Equipment Alarm
Action: Refer to Trouble recovery documentation
Text: DS3 MPR Cctpk mismatch
Procedure: Clear the alarm condition at the RDT
Associated IDT: 3 Network element: 3 RALEIGH_AMEX_B13
RDT alarm record ID: 13
Correlated record ID: None
Service condition: Service affecting
Object class: 00A0 (loopStRes_line_termination)
```

# **Field descriptions**

The following table describes each field in the log report:

| (Sheet | 1 | of | 3) |
|--------|---|----|----|
|--------|---|----|----|

| Field                                    | Value  | Description   |  |
|--|--|---|--|
| <sv></sv>                                | *  | Indicates how important the alarm is:   |  |
|  |  | "" = No alarm   |  |
|  |  | "*" = Minor alarm   |  |
|  |  | "**" = Major alarm  |  |
|  |  | "***" = Critical alarm  |  |
| TBL Equipment Alarm                      | Constant                                       | Indicates the system received an Equipment alarm from the RDT.  |  |
| Location <site> <ff> <u></u></ff></site> | Any correct site name as entered in table SITE | Identifies the source RDT area. This field,<br>RDT area, the frame, and unit numbers form<br>the name of the RDT entered in table RDTINV.           |  |
| <ff></ff>                                | 0-99   | Identifies the source RDT frame. This field, the area name, and unit number form the name of the RDT entered in table RDTINV.                       |  |
| <u></u>                                  | 0-9  | Identifies the source RDT unit. This field, RDT<br>unit, the area name, and frame number form<br>the name of the RDT as entered in table<br>RDTINV. |  |

# RDT302 (continued)

### (Sheet 2 of 3)

| Field                                     | Value   | Description  |  |
|---|---|--|--|
| Status <status></status>                  | Alarm raised, Alarm cleared, or Trouble alert   | Indicates the state of the RDT:  |  |
|   |   | "Alarm raised" - indicates new alarm   |  |
|   |   | generates from the RDT.  |  |
|   |   | "Alarm cleared" - log indicates an alarm   |  |
|   |   | cleared at the RDT.  |  |
|   |   | "Trouble alert" - log indicates an alarm of an importance that is not known.   |  |
| Trouble                                   | Equipment alarm                                 | Indicates the RDT alarm is an equipment problem.   |  |
| Action                                    | Refer to Trouble recovery documentation         | Describes the action. This field does not appear in an alarm cleared report.   |  |
| Text <text></text>                        | Any text as received from the RDT, or None      | Indicates a text string from the alarm and indicates the type of problem. A None message appears if the RDT does not provide text.   |  |
| Procedure                                 | Clear the alarm condition at the RDT            | Indicates a technician must connect to the indicated RDT (network element) to clear the alarm. This field does not appear included for an Alarm cleared report.  |  |
| Associated IDT <id#></id#>                | 0-255   | Indicates the IDT the system posts under the PM level of the MAPCI terminal to track this RDT alarm.   |  |
| Network element ID<br><neid></neid>       | 0-32767   | Indicates the Network element ID of the RDT that originated the alarm report.  |  |
| Network element name<br><nename></nename> | Any text as entered in table RDTINV, or Unnamed | Indicates the Network element name of the<br>RDT that started the alarm report. If the<br>NENAME is not set to a text string, the system<br>prints Unnamed for the Network element<br>name.  |  |
| RDT alarm record ID<br><rid></rid>        | 0-999, ????, or None                            | Indicates the record ID of the alarm at the RDT.<br>This integer can be used as a log against the<br>alarm at the RDT. If the record ID is not<br>determined, ???? appears. If the RDT does<br>not provide the record ID, a None message<br>appears in this field. |  |

### RDT302 (continued)

| Field  | Value   | Description  |
|--|---|--|
| Correlated record ID<br><cid></cid>                | 0-9999, ????, or None   | Indicates which alarm at the RDT cleared, if<br>this is an alarm cleared report. If the correlated<br>record ID is not determined, ???? appears. If<br>the RDT does not provide correlated record ID,<br>or this is an alarm raised report, None appears<br>in this field. |
| Service condition                                  | Service-affecting,<br>Non-service affecting, or<br>Unknown  | Indicates when this alarm condition affects<br>subscriber service. This field does not appear<br>if the log report documents an alarm that the<br>subsystem clears. If the RDT does not provide<br>the service condition, Unknown appears in this<br>field.                |
| Object class <object<br>class#&gt;</object<br>     | An object class number<br>of any correct object<br>class for which the<br>subsystem generates<br>the alarms at RDT. | Indicates the class number of the object for<br>which the subsystem generates the event<br>report.   |
| Object class <object<br>class name&gt;</object<br> | An object class name of<br>any correct object class<br>for which the subsystem<br>generates the alarms at<br>RDT.   | Indicates the class name of the object for which the subsystem generates the event report.   |

#### (Sheet 3 of 3)

# Action

When the subsystem generates RDT302, perform the following actions:

- 1. Post the associated Integrated Digital Terminal (IDT) at the Peripheral Module (PM) level of the Maintenance and Administration Position command interpreter (MAPCI) terminal to track the alarm.
- 2. To clear the alarm at the RDT, refer to the correct RDT vendor documentation.

# **Associated OM registers**

There are no associated OM registers.

# Additional information

Field Correlated record ID of an Alarm cleared report matches the field RDT alarm record ID of the associated Alarm raised report. Field Correlated record ID is optional. The RDT does not always provide field Correlated record ID.

# RDT302 (end)

Module RDTLOG defines the RDT302 log. To generate this log, establish a maintenance connection to a real or simulated RDT and report an RDT equipment alarm.

### **Explanation**

Changes to RDT303 are for remote digital terminals (RDTs) of type GENTMC or GENCSC. These changes do not affect RDTs of different types of RFT. The RDTs of different types of GENTMC or GENCSC do not contain the RDT primary OPC and RDT backup OPC fields.

The subsystem generates RDT303 when the subsystem receives an environmental alarm from an RDT. The field Text of the log identifies the problem. Field Text is optional. The RDT does not always provide the field Text. The asterisks in the log header and the field Service condition of the log indicate how important the problem is. Field Service condition is optional. The RDT does not always provide the field Service condition.

### Format

The log report format for RDT303 is as follows:

| <sv> RDT303 <date time=""> <sq> TBL Environmental Alarm</sq></date></sv> |   |  |  |
|--|---|--|--|
| Location:  | <site><ff><u></u></ff></site>   |  |  |
| Status:  | <status></status>   |  |  |
| Trouble:   | Environmental alarm   |  |  |
| Action:  | Refer to Trouble recovery documentation                                   |  |  |
| Text:  | <text></text>   |  |  |
| Procedure:   | Clear the alarm condition at the RDT                                      |  |  |
| Associated IDT   | <pre>' <id#> Network element: <neid> <nename></nename></neid></id#></pre> |  |  |
| RDT alarm reco   | ord ID: <rid></rid>   |  |  |
| Correlated reco  | rd ID: <cid></cid>  |  |  |
| Service condition  | on: <service_condition></service_condition>                               |  |  |
| Object class:  | <object (object="" class="" class#="" name)=""></object>                  |  |  |

# Example

An example of log report RDT303 follows:

# RDT303 (continued)

```
*RDT303 FEB25 14:35:10 3504 TBL Environmental Alarm
Location: RDT1 03 0
Status: Alarm raised
Trouble Environmental Alarm
Action: Refer to Trouble recovery documentation
Text: Fan 2 Fail
Procedure: Clear the alarm condition at the RDT
Associated IDT: 3 Network element: 3 RALEIGH_AMEX_B13
RDT alarm record ID: 15
Correlated record ID: None
Service condition: Service affecting
Object class: 0098 (frame)
```

# **Field descriptions**

The following table describes each field in the log report:

| (Sheet | 1 | of | 3) |
|--------|---|----|----|
|--------|---|----|----|

| Field                                  | Value   | Description   |  |
|--|---|---|--|
| <\$V>                                  | *   | Indicates the how important alarm is:   |  |
|  |   | "" = No alarm   |  |
|  |   | "*" = Minor alarm   |  |
|  |   | "**" = Major alarm  |  |
|  |   | "***" = Critical alarm  |  |
| TBL Environmental<br>Alarm             | Constant  | Indicates the system received an environmental alarm from the RDT.  |  |
| Location <site><ff><u></u></ff></site> | Any correct site name as<br>entered in table SITE | Identifies the source RDT site. This field, the frame, and unit numbers form the name of the RDT entered in table RDTINV.     |  |
| <ff></ff>                              | 0-99  | Identifies the source RDT frame. This field, the area name, and unit number form the name of the RDT entered in table RDTINV. |  |
| <u></u>                                | 0-9   | Identifies the source RDT unit. This field, the area name, and frame number form the name of the RDT entered in table RDTINV. |  |

# RDT303 (continued)

| (Sheet | 2 | of | 3) |
|--------|---|----|----|
|--------|---|----|----|

| Field                                     | Value   | Description  |  |
|---|---|--|--|
| Status <status></status>                  | Alarm raised, Alarm                             | Indicates the state of the RDT:  |  |
|   | cleared, or Trouble alert                       | "Alarm raised" - indicates new alarm generates from the RDT.   |  |
|   |   | "Alarm cleared" - log indicates an alarm<br>cleared at the RDT.  |  |
|   |   | "Trouble alert" - log indicates an alarm of an importance that is not known.   |  |
| Trouble                                   | Environmental alarm                             | Indicates the RDT alarm is an environmental problem.   |  |
| Action                                    | Refer to Trouble recovery documentation         | Describes the action. This field does not appear in an alarm cleared report.   |  |
| Text <text></text>                        | Any text as received from the RDT, or None      | Indicates a text string from the alarm and indicates the reason for the problem. If the RDT does not provide text, a None messag appears.  |  |
| Procedure                                 | Clear the alarm condition at the RDT            | Indicates operating company personnel must<br>connect to the indicated RDT (network<br>element) to clear the alarm. This field does not<br>appear for an Alarm cleared report.   |  |
| Associated IDT <id#></id#>                | 0-255   | Indicates the IDT to post under the PM level of the MAPCI terminal to track this RDT alarm.  |  |
| Network element ID<br><neid></neid>       | 0-32767   | Indicates the Network element ID of the RDT that started the alarm report.   |  |
| Network element name<br><nename></nename> | Any text as entered in table RDTINV, or Unnamed | Indicates the Network element name of the<br>RDT that started the alarm report. If the<br>NENAME is not set to a text string, Unnamed<br>prints for the Network element name.  |  |
| RDT alarm record ID<br><rid></rid>        | 0-9999, "????," or<br>"None"                    | Indicates the record ID of the alarm at the RDT.<br>This integer can be used as a log against the<br>alarm at the RDT. If the record ID is not<br>determined, ???? appears. If the RDT does<br>not provide the record ID, None appears in this<br>field. |  |

#### RDT303 (continued)

#### (Sheet 3 of 3)

| Field  | Value   | Description  |
|--|---|--|
| Correlated record ID<br><cid></cid>                  | 0-9999, "????," or<br>"None"  | Indicates the record ID of the alarm at the RDT.<br>This integer can be used as a log against the<br>alarm at the RDT. If the record ID is not<br>determined, ???? appears. If the RDT does<br>not provide the record ID, None appears in this<br>field. |
| Service condition<br><srvice_condtn></srvice_condtn> | Service affecting,<br>Non-service affecting, or<br>Unknown  | Indicates when this alarm condition affects<br>subscriber service. This field does not appear<br>if the log report documents an alarm that<br>clears. If the RDT does not provide the service<br>condition, Unknown appears in this field.               |
| Object class <object<br>class#&gt;</object<br>       | An object class number<br>of any correct object<br>class for which the<br>subsystem generates<br>alarms at RDT.   | Indicates the class number of the object for which the subsystem generates the event report.   |
| Object class <object<br>class name&gt;</object<br>   | An object class name of<br>any correct object class<br>for which the subsystem<br>generates the alarms at<br>RDT. | Indicates the class name of the object for which the subsystem generates the event report.   |

## Action

When the subsystem generates RDT303, perform the following actions:

- Post the associated Integrated Digital Terminal (IDT) at the Peripheral Module (PM) level of the Maintenance and Administration Position command interpreter (MAPCI) terminal to track the alarm.
- To clear the alarm at the RDT, refer to the correct RDT vendor documentation.

## **Associated OM registers**

There are no associated OM registers.

## Additional information

Field Correlated record ID of an Alarm cleared report matches the field RDT alarm record ID of the associated Alarm raised report. Field Correlated record ID is optional. The RDT does not always provide field Correlated record ID.

# RDT303 (end)

Module RDTLOG defines the RDT303 log. To generate this log, establish a maintenance connection to a real or simulated RDT and report an RDT equipment alarm.

#### **RDT304**

#### **Explanation**

Changes to RDT304 are for remote digital terminals (RDTs) of type GENTMC or GENCSC. These changes do not affect RDTs of different types of RFT. The RDTs of different types of GENTMC or GENCSC do not contain the RDT primary OPC and RDT backup OPC fields.

The subsystem generates RDT304 when the system receives an equipment alarm from an RDT. This log indicates that the subsystem detects a problem that involves RDT equipment at the RDT. The field Text of the log identifies the problem. Field Text is optional. The RDT does not always provide the field Text. The asterisks in the log header and the field Service condition of the log indicate how important the problem is. Field Service condition is optional. The RDT does not always provide field Service condition.

#### Format

The log report format for RDT304 is as follows:

<sv> RDT304 <date/time> <sq> TBL Software Alarm

| Status: <status>Trouble:Software alarmAction:Refer to Trouble recovery documentation</status> |
|---|
|   |
| Action: Refer to Trouble recovery documentation   |
|   |
| Text: <text></text>   |
| Procedure: Clear the alarm condition at the RDT   |
| Associated IDT: <pre><idt#> Network element: <neid> <nename></nename></neid></idt#></pre>     |
| RDT alarm record ID: <rid></rid>  |
| Correlated record ID: < <cid></cid>   |
| Service condition: <service_condition></service_condition>                                    |
| Object class: <object (object="" class="" class#="" name)=""></object>                        |

#### Example

An example of log report RDT304 follows:

### RDT304 (continued)

```
***RDT304 FEB25 14:35:10 3605 TBL Software Alarm
Location: RDT1 03 0
Status: Alarm raised
Trouble: Software Alarm
Action: Refer to Trouble recovery documentation
Text: Storage capacity exceeded
Procedure: Clear the alarm condition at the RDT
Associated IDT: 3 Network element: 3 RALEIGH_AMEX_B13
RDT alarm record ID: 16
Correlated record ID: None
Service condition: Service affecting
Object class: 0093 (network_element)
```

## **Field descriptions**

The following table describes each field in the log report:

| (Sheet | 1 | of | 3) |
|--------|---|----|----|
|--------|---|----|----|

| Field                                    | Value  | Description  |  |
|--|--|--|--|
| <sv></sv>                                | *  | Indicates how important the alarm is:  |  |
|  |  | "" = No alarm  |  |
|  |  | "*" = Minor alarm  |  |
|  |  | "**" = Major alarm   |  |
|  |  | "***" = Critical alarm   |  |
| TBL Equipment Alarm                      | Constant                                     | Indicates the subsystem received an Equipment alarm from the RDT.  |  |
| Location <site> <ff> <u></u></ff></site> | Any valid site name as entered in table SITE | Identifies the source RDT area. This field, the frame and unit numbers form of the name of the RDT entered in table RDTINV.      |  |
| <ff></ff>                                | 0-99   | Identifies the source RDT frame. This field, the area name, and unit number form of the name of the RDT entered in table RDTINV. |  |
| <u></u>                                  | 0-9  | Identifies the source RDT unit. This field, the area name, and Frame number form the name of the RDT entered in table RDTINV.    |  |

# RDT304 (continued)

### (Sheet 2 of 3)

| Field                                     | Value   | Description  |
|---|---|--|
| Status <status></status>                  | Alarm raised, Alarm                             | Indicates the state of the RDT:  |
|   | cleared, or Trouble alert                       | Alarm raised - indicates new alarm   |
|   |   | generates from the RDT.  |
|   |   | Alarm cleared - log indicates an   |
|   |   | alarm cleared at the RDT. Trouble alert - log indicates that it is not known how important the an alarm is.  |
| Trouble                                   | Software alarm                                  | Indicates the RDT alarm is an equipment problem.   |
| Action                                    | Refer to Trouble recovery documentation         | Describes the action. This field does not appear in an alarm cleared report.   |
| Text <text></text>                        | Any text as received from the RDT, or None      | Indicates a text string from the alarm, and indicates the reason for the problem. If the RDT does not provide text, None appears.  |
| Procedure                                 | Clear the alarm condition at the RDT            | Indicates operating company personnel must<br>connect to the indicated RDT (network<br>element) to clear the alarm. This field does not<br>appear for an Alarm cleared report.   |
| Associated IDT <id#></id#>                | 0-255   | Indicates the IDT to post under the PM level of the MAPCI terminal to track this RDT alarm.  |
| Network element ID<br><neid></neid>       | 0-32767   | Indicates the Network element ID of the RDT that started the alarm report.   |
| Network element name<br><nename></nename> | Any text as entered in table RDTINV, or Unnamed | Indicates the Network element name of the<br>RDT that started the alarm report. If the<br>NENAME is not set to a text string, Unnamed<br>prints for the Network element name.  |
| RDT alarm record ID<br><rid></rid>        | 0-999, ????, or None                            | Indicates the record ID of the alarm at the RDT.<br>This integer can be used as a log against the<br>alarm at the RDT. If the record ID is not<br>determined, ???? appears. If the RDT does<br>not provide the record ID, None appears in this<br>field. |

#### RDT304 (continued)

| Field  | Value   | Description  |
|--|---|--|
| Correlated record ID<br><cid></cid>                | 0-9999, ????, or None   | Indicates which alarm at the RDT cleared, if<br>this is an alarm cleared report. If the correlated<br>record ID is not determined, ???? appears. If<br>the RDT does not provide correlated record ID,<br>or this is an alarm raised report, None appears<br>in this field. |
| Service condition                                  | Service-affecting,<br>Non-service affecting, or<br>Unknown  | Indicates when this alarm condition affects<br>subscriber service. This field does not appear<br>if the log report documents an alarm that<br>clears. If the RDT does not provide the service<br>condition, Unknown appears in this field.                                 |
| Object class <object<br>class#&gt;</object<br>     | An object class number<br>of any correct object<br>class for which the<br>subsystem generates<br>alarms at RDT.   | Indicates the class number of the object for which the subsystem generated the event report.   |
| Object class <object<br>class name&gt;</object<br> | An object class name of<br>any correct object class<br>for which the subsystem<br>generates the alarms at<br>RDT. | Indicates the class name of the object for which the subsystem generated the event report.   |

#### (Sheet 3 of 3)

# Action

When the subsystem generates RDT304, perform the following actions:

- 1. Post the associated Integrated Digital Terminal (IDT) at the Peripheral Module (PM) level of the Maintenance and Administration Position command interpreter (MAPCI) terminal to track the alarm.
- 2. To clear the alarm at the RDT, refer to the correct RDT vendor documentation.

# **Associated OM registers**

There are no associated OM registers.

# Additional information

Field Correlated record ID of an Alarm cleared report matches the field RDT alarm record ID of the associated Alarm raised report. Field Correlated record ID is optional. The RDT does not always provide the field Correlated record ID.

# RDT304 (end)

Module RDTLOG defines the RDT304 log. To generate this log, establish a maintenance connection to a real or simulated RDT and report an RDT equipment alarm.

#### Explanation

Changes to RDT305 are for remote digital terminals (RDTs) of type GENTMC or GENCSC. These changes do not affect RDTs of different types of RFT. RDTs of different types of GENTMC or GENCSC do not contain the RDT primary OPC and RDT backup OPC fields.

The subsystem generates RDT305 when the subsystem receives an equipment alarm from an RDT. This log indicates the subsystem detects a problem that involves RDT equipment at the RDT. The field Text of the log identifies the problem. Field Text is optional. The RDT does not always provide the field Text. The asterisks in the log header and the field Service condition of the log indicate how important the problem is. Field Service condition is optional. The RDT does not always provide the field Service condition.

# Format

The log report format for RDT305 is as follows:

<sv> RDT305 <date/time> <sq> TBL Service Alarm

Location: <site><ff><u> Status: <status> Trouble: Service alarm Action: Refer to Trouble recovery documentation Text: <text> Procedure: Clear the alarm condition at the RDT <idt#> Network element: <NEID> <NEName> Associated IDT: RDT alarm record ID: <rID> Correlated record ID: <cID> Service condition: <service\_condition> Object class: <Object class# (Object class name)> Call reference value: <CRV#>

## Example

An example of log report RDT305 follows:

## RDT305 (continued)

```
**RDT305 FEB25 14:35:10 3706 TBL Service Alarm
Location: RDT1 03 0
Status: Alarm raised
Trouble: Service Alarm
Action: Refer to Trouble recovery documentation
Text: None
Procedure: Clear the alarm condition at the RDT
Associated IDT: 3 Network element: 3 RALEIGH_AMEX_B13
RDT alarm record ID: 17
Correlated record ID: 17
Correlated record ID: None
Service condition: Service affecting
Object class: 0093 (network_element)
Call reference value: 30
```

# **Field descriptions**

The following table describes each field in the log report:

| (Sheet | 1 | of | 3) |
|--------|---|----|----|
|--------|---|----|----|

| Field                                    | Value  | Description   |
|--|--|---|
| <sv></sv>                                | *  | Indicates how important the alarm is:   |
|  |  | "" = No alarm   |
|  |  | "*" = Minor alarm   |
|  |  | "**" = Major alarm  |
|  |  | "***" = Critical alarm  |
| TBL Equipment Alarm                      | Constant                                       | Indicates the subsystem received an Equipment alarm from the RDT.   |
| Location <site> <ff> <u></u></ff></site> | Any correct site name as entered in table SITE | Identifies the source RDT area. This field, the frame, and unit numbers form the name of the RDT entered in table RDTINV.     |
| <ff></ff>                                | 0-99   | Identifies the source RDT frame. This field, the area name, and unit number form the name of the RDT entered in table RDTINV. |
| <u></u>                                  | 0-9  | Identifies the source RDT unit. This field, the area name, and frame number form the name of the RDT entered in table RDTINV. |

# RDT305 (continued)

| (Sheet | 2 | of | 3) |
|--------|---|----|----|
|--------|---|----|----|

| Field                                     | Value  | Description  |
|---|--|--|
| Status <status></status>                  | Alarm raised, Alarm<br>cleared, or Trouble alert | Indicates the state of the RDT:  |
|   |  | Alarm raised - indicates new alarm generates from the RDT.   |
|   |  | Alarm cleared - log indicates an   |
|   |  | alarm cleared at the RDT.  |
|   |  | Trouble alert - log indicates that it is not known how important an alarm is.  |
| Trouble                                   | Equipment alarm                                  | Indicates the RDT alarm is an equipment problem.   |
| Action                                    | Refer to Trouble recovery documentation          | Describes the action. This field does not appear in an alarm cleared report.   |
| Text <text></text>                        | Any text as received from the RDT, or None       | Indicates a text string from the alarm and indicates the reason for the problem. If the RDT does not provide text, a None message appears.   |
| Procedure                                 | Clear the alarm condition at the RDT             | Indicates operating company personnel must<br>connect to the indicated RDT (network<br>element) to clear the alarm. This field does not<br>appear for an Alarm cleared report.   |
| Associated IDT <id#></id#>                | 0-255  | Indicates the IDT to post under the PM level of the MAPCI terminal to track this RDT alarm.  |
| Network element ID<br><neid></neid>       | 0-32767  | Indicates the Network element ID of the RDT that started the alarm report.   |
| Network element name<br><nename></nename> | Any text as entered in table RDTINV, or Unnamed  | Indicates the Network element name of the<br>RDT that started the alarm report. If the<br>NENAME is not set to a text string, Unnamed<br>prints for the Network element name.  |
| RDT alarm record ID<br><rid></rid>        | 0-999, ????, or None                             | Indicates the record ID of the alarm at the RDT.<br>This integer can be used as a log against the<br>alarm at the RDT. If the record ID is not<br>determined, ???? appears. If the RDT does<br>not provide the record ID, None appears in this<br>field. |

### RDT305 (continued)

(Sheet 3 of 3)

| Field  | Value   | Description  |
|--|---|--|
| Correlated record ID<br><cid></cid>                | 0-9999, ????, or None   | Indicates which alarm at the RDT cleared, if<br>this is an alarm cleared report. If the correlated<br>record ID is not determined, ???? appears. If<br>the RDT does not provide correlated record ID,<br>or this is an alarm raised report, None appears<br>in this field. |
| Service condition                                  | Service-affecting,<br>Non-service affecting, or<br>Unknown  | Indicates when this alarm condition affects<br>subscriber service. This field does not appear<br>if the log report documents an alarm that<br>clears. If the RDT does not provide the service<br>condition, Unknown appears in this field.                                 |
| Object class <object<br>class#&gt;</object<br>     | An object class number<br>of any correct object<br>class for which the<br>subsystem generates<br>the alarms at RDT. | Indicates the class number of the object for which the subsystem generates the event report.   |
| Object class <object<br>class name&gt;</object<br> | An object class name of<br>any correct object class<br>for which the subsystem<br>generates the alarms at<br>RDT.   | Indicates the class name of the object for which the subsystem generates the event report.   |
| Call reference value<br><crv#></crv#>              | 1-n, where n is the<br>maximum number of<br>circuits in the RDT,<br>normally 2048.                                  | Indicates the logical number equal to the line circuit. The call reference value identifies the wire pair.   |

## Action

When the subsystem generates RDT305, perform the following actions:

- 1. Post the associated Integrated Digital Terminal (IDT) at the Peripheral Module (PM) level of the Maintenance and Administration Position command interpreter (MAPCI) terminal to track the alarm.
- 2. To clear the alarm at the RDT, refer to the correct RDT vendor documentation.

## **Associated OM registers**

There are no associated OM registers.

RDT305 (end)

## **Additional information**

Field Correlated record ID of an Alarm cleared report matches the field RDT alarm record ID of the associated Alarm raised report. Field Correlated record ID is optional. The RDT does not always provide the field Correlated record ID.

Module RDTLOG defines the RDT305 log. To generate this log, establish a maintenance connection to a real or simulated RDT and report an RDT equipment alarm.

#### **RDT306**

#### Explanation

The line provisioning process generates RDT306 when the DMS switch receives an error response. This error response indicates the remote digital terminal (RDT) did not act on the request message sent from the switch. An error or a defective condition at the RDT caused this failure. The failure is not resolved at the switch.

The system also generates this log when the DMS switch does not receive a response from the RDT when a multiple timeout occurs. This log also removes the LINE121 log.

#### Format

The log report format for RDT306 is as follows:

RDT306 mmmdd hh:mm:ss ssdd TBL Line Provisioning Failure Location: <LEN> Status: Trouble alert Trouble: <trouble text> Action: Refer to trouble recovery documentation Associated IDT: nnn Object class: <object text> Operation: <operation text> Problem type: <problem text> Correction procedure: Correct problem at RDT then retry

#### Example

An example of log report RDT306 follows:

RDT306 FEB25 14:35:10 0123 TBL Line Provisioning Failure Location: RDT1 00 0 2 1 Status: Trouble alert Trouble: Error response received from remote Action: Refer to trouble recovery documentation Associated IDT: 100 Object class: 1311 (coin-line-termination) Operation: Create - e Problem type: Internal Error Correction procedure: Correct problem at RDT then retry

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                            | Value                     | Description  |
|----------------------------------|---------------------------|--|
| TBL Line Provisioning<br>Failure | Constant                  | Indicates the fault type.  |
| Location                         | LEN                       | Indicates the line equipment number (LEN).   |
| Status                           | Constant                  | Indicates Problem Alert.   |
| Trouble                          | Constant                  | Either of the following messages appear: error response received from remote, or application failed to respond within expected period. |
| Associated IDT                   | Numeric                   | The IDT number for the LEN.  |
| Object class                     | Constant                  | Indicates the type of object on which the operation is to perform. An example type is isdn-u-path-termination.                         |
| Operation                        | Symbolic text             | Indicates CMIS operation.  |
| Problem type                     | No response from RDT      | The RDT is busy and does not respond in a given time.  |
|                                  | Security violation        | The requested operation cannot perform because of an authorization restriction.  |
|                                  | Class instance conflict   | The object instance is not a part of the given class.  |
|                                  | Complexity limitation     | The system cannot perform the operation at the RDT because of the complicated parameters.  |
|                                  | Application busy error    | The application that must process the message is busy at the RDT.  |
|                                  | Data store update problem | Indicates an error detected when system accesses the database at the RDT.  |
|                                  | Internal error            | Indicates a hardware or software error at the RDT.   |
|                                  | Partial failure           | A provisioning request is partially complete.  |

## RDT306 (end)

#### (Sheet 2 of 2)

| Field                | Value               | Description  |
|----------------------|---------------------|--|
|                      | Unavailable feature | A feature required to process the message is not available at the RDT. |
| Correction procedure | Constant            | "Correct problem at RDT then retry."                                   |

## Action

When RDT line provisioning generates log, stated above, the system deletes all objects at the RDT and in the local object database.

The following table provides problem types and required actions.

| Problem type                          | Action   |
|---------------------------------------|--|
| No Response from RDT                  | Provision the line or delete line in table LNINV. Enter the same tuple again.                            |
| Security Violation<br>(Access Denied) | Check if the request is correct.   |
| Class instance conflict               | Look for more information at the RDT, correct error and try to provision the line again.                 |
| Complexity limitation                 | Look for more information at the RDT, correct error and try to provision the line again.                 |
| Application busy error                | Wait and try to provision the line again. Delete the line in table LNINV and enter the same tuple again. |
| Data store update problem             | Look for more information at the RDT, correct error and try to provision the line again.                 |
| Internal error                        | Look for more information at the RDT, correct error and try to provision the line again.                 |
| Partial failure                       | Look for more information at the RDT, correct error and try to provision the line again.                 |
| Unavailable failure                   | Checks available features to provision line at RDT.  |

## **Associated OM registers**

There are no associated OM registers.

#### Explanation

The system generates log report RCT307. This report indicates when the system assigned the Message Waiting (MWT) option with the Message Waiting Lamp (MWL) notice, to an Epsilon source line card. This card does not support the MWL notice. The system assigns a notice when it cannot check the circuit for compatibility. For example, the system assigns a notice when the maintenance connection is not established or the circuit pack is missing.

The system normally generates this log when one of the following conditions occur:

- The background line audit attempted to return to service (RTS) a system-busied Epsilon card. This attempt occurs with the MWL notice assigned to that line card.
- Operating company personnel attempted to manually RTS a system-busied Epsilon card. This attempt occurs with the MWL notice assigned to that line card.
- The daily audit detected an Epsilon card with the MWL notice. The system generates one log each day for each line that has an MWL notice assigned to an Epsilon card. This audit runs one time every 24 h.

In all of the above conditions, the line remains in service or returns to service. Do not prevent service to a customer because of a problem with a single line option.

## Format

The log report format for RDT307 is as follows:

RDT307 mmmdd hh:mm:ss ssdd <event type> Location: <site> <ff> <u> <sh> <sl> Status: <status> Trouble: <trouble> Action: <action> Assigned IDT: <IDT\_number> Object class: <object class> Description: <problem description> Correction procedure: <steps to correct problem>

## Example

An example of log report RDT307 follows:

## RDT307 (continued)

```
RDT307 SEP1 16:45:10 0003 TBL Datafill Fault
Location: RDT1 04 0 01 24
Status: Trouble alert
Action: Check hardware against datafill
Associated IDT: 104
Object class: 006A (loopStRes_line_termination)
Description: System detected datafill error.
Line card NT4K65 cannot support MWL notice
Correction procedure: Replace card or reprovision service
```

# **Field descriptions**

The following table describes each field in the log report:

| (Sheet | 1 c | of | 2) |
|--------|-----|----|----|
|--------|-----|----|----|

| Field      | Value            | Description   |
|------------|------------------|---|
| event type | Character string | This field identifies the type of fault.                                    |
| site       | Character string | This field identifies the area of the source remote digital terminal (RDT). |
| ff         | Numeric, 0 to 99 | This field identifies the number of the source RDT frame.                   |
| u          | Numeric, 0 to 9  | This field identifies the number of the source RDT unit.                    |
| sh         | Numeric          | This field identifies the shelf number of the line.                         |
| sl         | Numeric          | This field identifies the slot number of the line.                          |
| status     | Alarm raised     | A field with this value indicates that the system raised an alarm.          |
|            | Alarm cleared    | A field with this value indicates that the system cleared an alarm.         |
|            | Trouble alert    | A field with this value indicates a problem condition on the line.          |
| trouble    | Character string | This field describes the trouble condition.                                 |
| action     | Character string | This field describes how to recover from the problem.                       |

## RDT307 (end)

#### (Sheet 2 of 2)

| Field        | Value                        | Description   |
|--------------|------------------------------|---|
| IDT number   | Numeric                      | This field identifies the number of the affected integrated digital terminal (IDT). |
| object class | Numeric and character string | This field identifies the type of object in which the mismatch occurred.            |

## Action

Check the circuit pack and assigned options, and change the notice or replace the card. A more appropriate notice can be STuttered Dial Tone (STD). Use the ADD or CHF SERVORD commands to change the notice. The Omega line source card supports MWL. Refer to *S/DMS AccessNode Module Replacement Procedures* for procedures to replace the Epsilon card with the Omega card.

## **Associated OM registers**

There are no associated OM registers.

### **Additional information**

There is no additional information.

#### **RDT308**

#### **Explanation**

Log report RDT308 applies to remote digital terminals (RDTs) of type GENTMC or GENCSC. The system generates RDT308 when the system receives a threshold alert from an remote fiber terminal (RFT). The field Text of the log identifies the problem. Field Text is optional. The RDT does not always provide the field Text. The asterisks in the log header and the field Service condition of the log indicate the severity of the problem. Field Service condition is optional. The RDT does not always provide the field Service condition.

#### Format

The log report format for RDT308 is as follows:

<sv> RDT308 <date/time> <sq> TBL Threshold Alert Location: <site><ff><u> Status: <status> Trouble: Threshold alert Action: Refer to Trouble recovery documentation Text: <text> Procedure: Clear the alarm condition at the RDT <idt#> Network element: <NEID> <NEName> Associated IDT: RDT alarm record ID: <rID> Correlated record ID: <cID> Service condition: <service condition> Object class: <Object class# (Object class name)>

### Example

An example of log report RDT308 follows:

```
**RDT308 FEB25 14:35:10 3706 TBL Threshold Alert
Location: RDT1 03 0
Status: Alarm raised
Trouble: Threshold alert
Action Refer to Trouble recovery documentation
Text: None
Procedure: Clear the alarm condition at the RDT
Associated IDT: 3 Network element: 3 RALEIGH_AMEX_B1
RDT alarm record ID: 17
Correlated record ID: None
Service condition: Service affecting
Object class: 008D (ds1_line_termination)
```

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 3)

| Field                                   | Value   | Description   |  |
|---|---|---|--|
| <s v=""></s>                            | *   | Indicates the severity of the alarm,  |  |
|   |   | " " = No alarm  |  |
|   |   | "*" = Minor alarm   |  |
|   |   | "**" = Major alarm  |  |
|   |   | "***" = Critical alarm  |  |
| TBL Threshold Alert                     | Constant  | Indicates the system received a threshold alert from the RFT.   |  |
| Location <site> <ff><u></u></ff></site> | Any valid site<br>name as datafilled<br>in table SITE | Identifies the source RDT site. This field,<br>the Frame, and Unit numbers form the name<br>of the RD entered in table RDTINV.      |  |
| <ff></ff>                               | 0-99  | Identifies the source RDT frame. This field,<br>the area name, and Unit number form the<br>name of the RDT entered in table RDTINV. |  |
| <u></u>                                 | 0-9   | Identifies the source RDT unit. This field,<br>the area name, and Frame number form the<br>name of the RDT entered in table RDTINV. |  |
| Status <status></status>                | Alarm raised,   | Indicates the state of the RFT as follows:  |  |
|   | Alarm cleared, or<br>Trouble alert                    | <ul> <li>Alarm raised-log indicates the new<br/>alarm generates from the RFT.</li> </ul>  |  |
|   |   | <ul> <li>Alarm cleared-log indicates an alarm<br/>clears at the RFT.</li> </ul>   |  |
|   |   | <ul> <li>Trouble alert-log indicates an alarm of<br/>an severity that is not known.</li> </ul>                                      |  |
| Trouble                                 | Threshold alert                                       | Indicates the RDT alarm is a threshold alert.   |  |
| Action                                  | Refer to trouble recovery documentation               | Describes the action. This field does not appear in an Alarm cleared report.  |  |
| Text <text></text>                      | Any text as<br>received from the<br>RDT, or None      | Indicates a text string from the alarm and indicates the type of the problem. If the RDT does not provide text, None appears.       |  |

# RDT308 (continued)

### (Sheet 2 of 3)

| Field  | Value   | Description   |
|--|---|---|
| Procedure  | Clear the alarm<br>condition at the<br>RDT                    | Indicates operating company personnel<br>must connect to the indicated RDT (Network<br>element) to clear the alarm. This field does<br>not appear for an Alarm cleared report.  |
| Associated IDT <idt#></idt#>                                 | 0-255   | Indicates the IDT to post under the PM level of the MAPCI terminal to track this RDT alarm.   |
| Network element ID <neid></neid>                             | 0-32767   | Indicates the Network element ID of the RDT that started the alarm report.  |
| Network element name<br><nename></nename>                    | Any text as entered<br>in table RDTINV,<br>or Unnamed         | Indicates the Network element name of the RDT that started the alarm report. If the NENAME is not set to a text string, the Network element name prints unnamed.  |
| RDT alarm record ID <rid></rid>                              | 0-9999, ????, or<br>None                                      | Indicates the record ID of the alarm at the RDT. This integer can perform as a log against the alarm at the RDT. If the system cannot determine record ID, ???? appears. If the RDT does not provide the record ID, None appears in this field.   |
| Correlated record ID <cid></cid>                             | 0-9999, ????, or<br>None                                      | Indicates which alarm the system cleared at<br>the RDT, if the report is an alarm cleared<br>report. If the system cannot determine the<br>correlated record ID, ???? appears. If RDT<br>does not provide correlated record ID or the<br>report is an alarm raised report, None<br>appears in this field. |
| Service condition<br><service_condition></service_condition> | Service-affecting,<br>Non-service<br>affecting, or<br>Unknown | Indicates when this alarm condition affects<br>subscriber service. This field does not<br>appear if the log report documents an alarm<br>that the system clears. If the RDT does not<br>provide the service condition, Unknown<br>appears in this field.  |

### RDT308 (end)

| Field  | Value  | Description   |
|--|--|---|
| Object class <object class#=""></object>           | An object class<br>number of any<br>valid object class<br>for which the<br>system generates<br>the alarms at RDT   | Indicates the class number of the object for<br>which the system generated the event<br>report. |
| Object class <object class<br="">name&gt;</object> | An object class<br>name of any valid<br>object class for<br>which the the<br>system generates<br>the alarms at RDT | Indicates the class name of the object for which the system generated the event report.         |

#### (Sheet 3 of 3)

## Action

When the system generates RDT308, perform the following actions:

- 1. Post the associated Integrated Digital Terminal (IDT) at the Peripheral Module (PM) level of the Maintenance and Administration Position command interpreter (MAPCI) terminal to track the alarm.
- 2. To clear the alarm at the RDT, refer to the correct RDT vendor documentation.

### Associated OM registers

There are no associated OM registers.

## Additional information

Field Correlated record ID of an Alarm cleared report matches the field RDT alarm record ID of the associated Alarm raised report. Field Correlated record ID is optional. The RDT does not always provide the field Correlated record ID.

Module RDTLOG defines the RDT308 log. To generate this log, establish a maintenance connection to a real or simulated RDT and report an RDT threshold alert.

#### **RDT309**

#### **Explanation**

Log report RDT309 applies to remote digital terminals (RDTs) of type GENTMC or GENCSC. The system generates the RDT309 when the system receives an Indeterminate alarm from an RFT. The field Text of the log identifies the problem. Field Text is optional. The RDT does not always provide the field Text. The asterisks in the log header and the field Service condition of the log indicate the severity of the problem. Field Service condition is optional. The RDT does not always provide the field Service condition.

#### Format

The log report format for RDT309 is as follows:

| <sv> RDT309 <date< th=""><th>/time&gt; <sq> TBL Indeterminate alarm</sq></th></date<></sv> | /time> <sq> TBL Indeterminate alarm</sq>                       |
|--|--|
| Location: <site>&lt;</site>  | ff> <u></u>  |
| Status: <status></status>  | >  |
| Trouble: Indeterm  | ninate alarm   |
| Action: Refer to '   | Trouble recovery documentation                                 |
| Text: <text></text>  |  |
| Procedure: Clear the   | e alarm condition at the RDT                                   |
| Associated IDT:  | <idt#> Network element: <neid> <nename></nename></neid></idt#> |
| RDT alarm record II  | D: <rid></rid>   |
| Correlated record ID   | : <cid></cid>  |
| Service condition:   | <service_condition></service_condition>                        |
| Object class:  | <object (object="" class="" class#="" name)=""></object>       |

#### Example

An example of log report RDT309 follows:

```
*RDT309 FEB25 14:35:10 3706 TBL Indeterminate alarm
Location: RDT1 03 0
Status: Alarm raised
Trouble: Indeterminate alarm
Action Refer to Trouble recovery documentation
Text: None
Procedure: Clear the alarm condition at the RDT
Associated IDT: 3 Network element: 3 RALEIGH_AMEX_B1
RDT alarm record ID: 17
Correlated record ID: None
Service condition: Non-Service affecting
Object class: 0093 (network_element)
```

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 3)

| Field                                  | Value  | Description   |
|--|--|---|
| <sv></sv>                              | *  | Indicates the severity of the alarm:  |
|  |  | " "= No alarm   |
|  |  | "*" = Minor alarm   |
|  |  | "**" = Major alarm  |
|  |  | "***" = Critical alarm  |
| TBL Indeterminate Alarm                | Constant   | Indicates system received a transmission alarm from the RFT.  |
| Location <site><ff><u></u></ff></site> | Any valid site<br>name as entered in<br>table SITE | Identifies the source RDT site. This field,<br>the Frame, and Unit numbers form the name<br>of the RDT entered in table RDTINV.     |
| <ff></ff>                              | 0-99   | Identifies the source RDT frame. This field,<br>the site name, and Unit number form the<br>name of the RDT entered in table RDTINV. |
| <u></u>                                | 0-9  | Identifies the source RDT unit. This field,<br>the site name, and Frame number form the<br>name of the RDT entered in table RDTINV. |
| Status <status></status>               | Alarm raised,                                      | Indicates the state of the RFT as follows:  |
|  | Alarm cleared, or<br>Trouble alert                 | <ul> <li>Alarm raised-log indicates new alarm<br/>generates from the RFT.</li> </ul>  |
|  |  | <ul> <li>Alarm cleared-log indicates an alarm<br/>cleared at the RFT.</li> </ul>  |
|  |  | Trouble alert-log indicates an alarm of<br>an unknown severity  |
| Trouble                                | Indeterminate<br>alarm                             | Indicates the problem that caused the RDT alarm is not known.   |
| Action                                 | Refer to trouble recovery documentation            | Describes the action. This field does not appear in an Alarm cleared report.  |
| Text <text></text>                     | Any text as<br>received from the<br>RDT, or None   | Indicates a text string from the alarm and indicates the type of problem. If the RDT does not provide text, None appears.           |

# RDT309 (continued)

#### (Sheet 2 of 3)

| Field  | Value   | Description   |
|--|---|---|
| Procedure  | Clear the alarm<br>condition at the<br>RDT                    | Indicates operating company personnel<br>must connect to the indicated RDT (Network<br>element) to clear the alarm. This field does<br>not appear for an Alarm cleared report.  |
| Associated IDT <idt#></idt#>                                 | 0-255   | Indicates the IDT to post under the PM level of the MAPCI terminal to track this RDT alarm.   |
| Network element ID <neid></neid>                             | 0-32767   | Indicates the Network element ID of the RDT that started the alarm report.  |
| Network element name<br><nename></nename>                    | Any text as entered<br>in table RDTINV,<br>or Unnamed         | Indicates the Network element name of the RDT that started the alarm report. If the NENAME is not set to a text string, the Network element name prints unnamed.  |
| Service condition<br><service_condition></service_condition> | Service-affecting,<br>Non-service<br>affecting, or<br>Unknown | Indicates when this alarm condition affects<br>subscriber service. This field does not<br>appear if the log report documents an alarm<br>that clears. If the RDT does not provide the<br>service condition, Unknown appears in this<br>field.                                     |
| RDT alarm record ID <rid></rid>                              | 0-9999, ????, or<br>None                                      | Indicates the record ID of the alarm at the RDT. The system can use this integer as a log against the alarm at the RDT. If the record ID is not determined, ???? appears. If the RDT does not provide the record ID, No record ID appears in this field.                          |
| Correlated record ID <cid></cid>                             | 0-9999, ????, or<br>None                                      | Indicates which alarm at the RDT cleared, if<br>the report is an alarm cleared report. If the<br>correlated record ID is not determined, ????<br>appears. If RDT does not provide correlated<br>record ID or the report is an alarm raised<br>report, None appears in this field. |

### RDT309 (end)

| Field  | Value  | Description   |
|--|--|---|
| Object class <object class#=""></object>           | An object class<br>number of any<br>valid object class<br>for which the<br>system generates<br>the alarms at RDT | Indicates the class number of the object for<br>which the system generates the event<br>report. |
| Object class <object class<br="">name&gt;</object> | An object class<br>name of any valid<br>object class for<br>which the system<br>generates the<br>alarms at RDT   | Indicates the class name of the object for<br>which the system generates the event<br>report.   |

#### (Sheet 3 of 3)

### Action

When the system generates log RDT309, perform the following actions:

- 1. Post the associated Integrated Digital Terminal (IDT) at the Peripheral Module (PM) level of the Maintenance and Administration Position command interpreter (MAPCI) terminal to track the alarm.
- 2. To clear the alarm at the RDT, refer to the correct RDT vendor documentation.

### Associated OM registers

There are no associated OM registers.

## Additional information

Field Correlated record ID of an Alarm cleared report matches the field RDT alarm record ID of the equivalent Alarm raised report. Field Correlated record ID is optional. The RDT does not always provide the field Correlated record ID.

Module RDTLOG defines the RDT309 log. To generate this log, establish a maintenance connection to a real or simulated RDT and report an RDT Indeterminate alarm.

### **RDT310**

### Explanation

Log report RDT310 indicates that a required resource is not available at the remote digital terminal (RDT). Log report RDT310 includes two lines of text. The DMS application that generates the log provides this text.

#### Format

The log report format for RDT310 is as follows:

| RDT310 <d.ate></d.ate> | <pre>&gt; <time> <sequence-number> TBL Resource Unavailable</sequence-number></time></pre> |
|------------------------|--|
| Location:              | <site> <frame/> <unit></unit></site>   |
| Status:                | Trouble alert  |
| Trouble:               | Error response received from remote  |
| Action:                | Refer to Trouble recovery documentation  |
| Problem:               | <description_text></description_text>  |
| Resource:              | <description_text></description_text>  |
| Associated IDT:        | <idt#> Network element: <neid> <nename></nename></neid></idt#>                             |

### Example

An example of log report RDT310 follows:

RDT310 FEB25 14:35:10 3706 TBL Resource Unavailable Location: RDT 05 0 Status: Trouble alert Trouble: Error response received from remote Action Refer to Trouble recovery documentation Problem: Alarm count list object create failed Resource: Alarm count list object not supported by the RDT Associated IDT: 3 Network element: 3 RALEIGH\_AMEX\_B1

### **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                                     | Value   | Description  |
|---|---|--|
| TBL Resource unavailable                  | Constant  | Indicates an RDT resource is not available.  |
| Location<br><site><ff><u></u></ff></site> | Any valid site<br>name as datafilled<br>in table SITE | Identifies the source RDT area. The source<br>RDT area, the Frame, and Unit numbers<br>contain the name of the RDT e in table<br>RDTINV. |

## RDT310 (continued)

| Field                                     | Value   | Description   |
|---|---|---|
| <ff></ff>                                 | 0-99  | Identifies the source RDT frame. The<br>source RDT frame, the area name, and unit<br>number contain the name of the RDT in<br>table RDTINV.           |
| <u></u>                                   | 0-9   | Identifies the source RDT unit. The source<br>RDT unit, the area name, and Frame<br>number contain the name of the RDT<br>datafilled in table RDTINV. |
| Status <status></status>                  | Trouble alert   | Indicates the log reports a problem condition because a resource is not available at the RDT.   |
| Trouble                                   | Error response<br>received from<br>remote                       | Indicates an RDT resource is not available.   |
| Action                                    | Refer to trouble<br>recovery<br>documentation                   | Indicates that operating company personnel must consult the correct RDT vendor documentation to check this problem.                                   |
| Problem                                   | Any text as defined<br>by the application<br>generating the log | Indicates the type of the problem. This field is optional and can be blank.   |
| Resource                                  | Any text as defined<br>by the application<br>generating the log | Indicates the resource of the problem.  |
| Associated IDT <idt#></idt#>              | 0-255   | Indicates the IDT to post under the PM level of the MAPCI terminal to track this RDT alarm.   |
| Network element ID <neid></neid>          | 0-32767   | Indicates the Network element ID of the RDT when the resource is not available.   |
| Network element name<br><nename></nename> | Any text as<br>datafilled in table<br>RDTINV, or<br>Unnamed     | Indicates the Network element name of the RDT. If the NENAME is not set to a text string, the system prints Unnamed.                                  |

#### (Sheet 2 of 2)

## Action

When the system generates log RDT310, there is no immediate action required.

### RDT310 (continued)

### **Associated OM registers**

There are no associated OM registers.

### **Additional information**

The system can generate RDT310 at association installation of RDT. Field Problem is optional and indicates the alert type. Field Resource indicates the "Alarm count list object not supported by the RDT." Consult the RDT vendor documentation to determine the limit of the RDT software support for this resource.

Module RDTLOG defines the RDT310 log. The content of the RDT310 log depends on the application that generates the log. The system generates this log in the following methods:

- the system allows an RDT alarm audit to run on an RDT of different types of GENTMC or GENCSC. GENTMC and GENCSC do not support the Alarm Count List object class. Check this condition after installation of association. Check the condition after the associated IDT or EOC maintenance connection becomes INSV from an OFFL condition).
- if the Event Report Control (ERC) process cannot create an ERC object, the Problem field indicates that creation of the object failed. The Resource field indicates the cause of the failure.
  - If the Resource field is "Event report control object not supported by the RDT," the RDT does not support the ERC object. The ERC process tries to create the ERC object again. This ERC process occurs when another association installation occurs and the system receives a Threshold Alert Event Report.
  - If the Resource field is "Failed to create event report control object," the RDT supports the ERC object. An error occurs when the ERC process tried to create the object. The ERC process tries to create the

ERC object again on the next association installation or Trouble Alert notice.

- if the RDT sends a Rose Reject. The type of Rose Reject message controls the display of the Resource field. The Resource field displays one of the following values:
  - Rose P-Reject: General Problem
    - APDU not recognized
    - Mistyped APDU
    - Badly structured APDU
  - Rose U-Reject: Cause Problem
    - Duplicate invocation
    - operation not recognized
    - Mistyped arguments
    - Resource limit
    - Initiator releases
    - linked ID not recognized
    - Linked response unexpected not expected
    - child operation that is not expected
  - Rose U-Reject: Return Result Problem
    - cause not recognized
    - Result response not expected
    - Mistyped result
  - Rose U-Reject: Return Error Problem
    - cause not recognized
    - Error response not expected
    - error not recognized
    - error not expected
    - Mistyped parameter

The system does not generate a log for an IDT that has the discriminator state set to false.

### **RDT600**

### **Explanation**

The system generates remote digital terminal (RDT600) when the database audit process finds a mismatch. This mismatch occurs between object data in the RDT and the computing module (CM). The system corrects the fault automatically.

#### Format

The log report format for RDT600 is as follows:

RDT600 mmmdd hh:mm:ss ssdd INFO Audit Resolved Location: <site><ff><u> Resolved trouble: Data not synchronized Object class: <object class> Description: Object data mismatch between RDT and CM

## Example

An example of log report RDT600 follows:

\*RDT600 FEB25 14:35:10 0123 INFO Audit Resolved Location: RDT1 00 0 Resolved trouble: Data not synchronized Object class: 563 (mtau) Description: Object data mismatch between RDT and CM

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                                   | Value    | Description   |
|---|----------|---|
| INFO Audit Resolved                     | Constant | Indicates the database audit process found a mismatch between the RDT and the CM. |
| Location:                               | RDT      | Identifies the source RDT site.   |
| <ff></ff>                               | 0-99     | Identifies the source RDT frame.  |
| <u></u>                                 | 0-9      | Identifies the source RDT unit.   |
| Resolved trouble: Data not synchronized | Constant | Indicates that data is not in sync.   |

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## RDT600 (end)

#### (Sheet 2 of 2)

| Field        | Value         | Description   |
|--------------|---------------|---|
| Object class | Symbolic text | Provides the type of object in which the mismatch occurs. |
| Description  | Symbolic text | Indicates where the data mismatch occurred.               |

## Action

This log is for information only. There is no action required. A mismatch can indicate another problem. The operating company personnel must note this log and check for more errors conditions.

## **Associated OM registers**

There are no associated OM registers.

### **RDT601**

### Explanation

The system generates the RDT601 log when the lines that provision audit process find a mismatch. This mismatch occurs between line data in the remote digital terminal (RDT) and the computing module (CM). The system starts a procedure to correct the fault.

#### Format

The log report format for RDT601 is as follows:

RDT601 mmmdd hh:mm:ss ssdd INFO Audit Action Location: <site><ff><u> Acting on trouble: Data not synchronized Object class: <object class> Description: Object data mismatch between RDT and CM

## **Example**

An example of log report RDT601 follows:

\*RDT601 FEB25 14:35:10 0123 INFO Audit Action Location: RDT1 00 0 Acting on trouble: Data not synchronized Object class: 4e8 (loopGndBus\_line\_termination) Description: Object data mismatch between RDT and CM

### **Field descriptions**

The table following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                                    | Value    | Description  |
|--|----------|--|
| INFO Audit Action                        | Constant | Indicates the audit process found a mismatch between the RDT and the CM. |
| Location: <site></site>                  | RDT      | Identifies the source RDT area.  |
| <ff></ff>                                | 0-99     | Identifies the source RDT frame.   |
| <u></u>                                  | 0-9      | Identifies the source RDT unit.  |
| Acting on trouble: Data not synchronized | Constant | Indicates that data is not in sync.                                      |

## RDT601 (end)

#### (Sheet 2 of 2)

| Field  | Value         | Description   |
|--|---------------|---|
| Object class   | Symbolic text | Provides the type of object in which the mismatch occurs. |
| Description: Object data<br>mismatch between RDT<br>and CM | Constant      | Indicates a data mismatch.                                |

## Action

This log is for information only. There is no action required. A mismatch can indicate another problem. The operating company personnel must note this log and check for other error conditions.

## **Associated OM registers**

There are no associated OM registers.

### REPL100

#### Explanation

The Report Log (EPL) subsystem generates REPL100. The subsystem does this when the system updates an entry in Table REPLCODE during call processing with the journal file not active. The log warns that the journal file does not receive the tuple update.

At the present time, the system does not generate this log because updates to Table REPLCODE from a call process are for future use.

### Format

The log report design for REPL100 is as follows:

REPL100 mmmdd hh:mm:sss ssdd INFO NO JOURNAL FILE REPLCODE TABLE UPDATE, NO JFILE. Updated Contents Are: repltxt

## **Example**

An example of log report REPL100 follows:

REPL100 AUG17 19:08\_05 INFO NO JOURNAL FILE REPLCODE TABLE UPDATE, NO JFILE. Updated Contents Are: REPL1 123 7224111 NSC COSMAP1

### **Field descriptions**

The following table describes each field in the log report:

| Field                               | Value         | Description   |
|-------------------------------------|---------------|---|
| INFO NO JOURNAL<br>FILE             | Constant      | Indicates that the journal file is not active.  |
| REPLCODE TABLE<br>UPDATE, NO JFILE. | Constant      | Indicates that the system updated Table<br>REPLCODE while the journal file was not<br>active.   |
| Updated Contents Are                | Symbolic text | Contains the tuple update the user entered.<br>Refer to the data schema section of the<br><i>Translations Guide</i> for more information. |

## Action

Mount the journal file to save the updates or ignore the log. If the user ignores the log, the change does not appear in the journal file.

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

There is no additional information.

#### **RMAN100**

#### **Explanation**

The Automatic Call Distribution (ACD) remote load management (RMAN) subsystem, a part of the ACD management information system, generates this report when the down stream processor (DSP) issues a REASSIGN AGENT POSITION command.

The ACD remote load management provides a DSP the cagability of issuing ACD load management commands remotely.

#### Format

The format for log report RMAN100 follows:

RMAN100 mmmdd hh:mm:ss ssdd INFO REASSIGN\_AGENT\_POS<br/>SESSION ID:NEWSIPPOOLnnPOOLpoolnameSUBPOOL:subpoolnameNEW ACD GROUP:newgroupnameNEW SUPERVISOR IDidnmbrAGENT POSITION IDidnmbrJOURNAL FILE ACTIVE:answrtxt

### Example

An example of log report RMAN100 follows:

RMAN100 SEP05 18:14:33 4827 INFO REASSIGN\_AGENT\_POS SESSION ID: 2 POOL; POOL1 SUBPOOL; SUBPOOL1 NEW ACD GROUP: ACDGRP1 NEW SUPERVISOR ID 0023 AGENT POSITION ID 0010 JOURNAL FILE ACTIVE: YES

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field                      | Value                  | Description   |
|----------------------------|------------------------|---|
| INFO<br>REASSIGN_AGENT_POS | Constant               | Indicates the DSP issues a REASSIGN<br>AGENT POSITION command.  |
| SESSION ID: nn             | 0-14                   | Specifies the number of the session in use.   |
| POOL                       | Up to 16<br>characters | Identifies the pool of ACD groups<br>associated with the data stream. ACD<br>groups are associated with one data stream<br>at a given time. Only one pool of ACD<br>groups is associated with a data stream at a<br>given time. |
| SUBPOOL: subpoolname       | Up to 16<br>characters | Identifies the subpool within a pool of ACD<br>groups. Subpools are a method of ensuring<br>switch and ACD customer security.<br>Normally, all ACD groups belonging to an<br>ACD customer are grouped within one<br>subpool.    |
| NEW ACD GROUP              | Up to 16<br>characters | Identifies the ACD group to which the agent position is reassigned.   |
| NEW SUPERVISOR ID          | 0001-9999              | Identifies the position identification (ID) of the supervisor to which the agent is reassigned.   |
| AGENT POSITION ID          | 0001-9999              | Identifies the position ID of the reassigned agent.   |
| JOURNAL FILE ACTIVE        | YES, NO                | Indicates whether or not the journal file was active at the time of the remote load management command.   |

# Action

No action is required.

# **Associated OM registers**

None

#### **RMAN101**

#### **Explanation**

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem is part of the ACD Management Information System. The ACD RMAN generates RMAN101 when the down stream processor (DSP) issues a REASSIGN ACD DIRECTORY NUMBER command.

The ACD RMAN provides a DSP the ability to issue ACD Load Management commands from a distance.

#### Format

The log report format for RMAN101 is as follows:

RMAN101 mmmdd hh:mm:ss ssdd INFO REASSIGN\_ACD\_DN **SESSION ID:** nn POOL: poolname SUBPOOL: subpoolname OLD GROUP: oldgroupname **NEW GROUP:** newgroupname DN: nn **PRIMARY OR SUPPLEMENTARY:** answrtxt P1: n P2: n JOURNAL FILE ACTIVE: answrtxt

#### Example

An example of log report RMAN101 follows:

RMAN101 AUG23 09:45:15 1234 INFO REASSIGN\_ACD\_DN SESSION ID: 2 POOL: POOL1 SUBPOOL: SUBPOOLA OLD GROUP: ACDGRP1 NEW GROUP: ACDGRP2 DN: 6 PRIM OR SUPP: PRIM P1: 0 P2: 1 JOURNAL FILE ACTIVE: YES

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                      | Value                  | Description  |
|----------------------------|------------------------|--|
| INFO REASSIGN_ACD_DN       | Constant               | Indicates that the DSP issued a REASSIGN ACD DN command.   |
| SESSION ID                 | 0-14                   | Specifies the number of the session in use.  |
| POOL                       | Up to 16<br>characters | Identifies the pool of ACD groups that<br>associate with the data stream. ACD groups<br>can be associated with only one data stream at<br>a time. Only one pool of ACD groups can be<br>associated with each data stream at a given<br>time. |
| SUBPOOL: subpoolname       | Up to 16<br>characters | Identifies the subpool within a pool of ACD groups. Subpools make sure the switch and ACD customer are secure. ACD groups that belong to an ACD customer are in groups in each subpool.  |
| OLD GROUP: oldgroupname    | Up to 16<br>characters | Identifies the ACD group to which the ACD directory number (DN) is assigned.   |
| NEW GROUP:<br>newgroupname | Up to 16<br>characters | Identifies the ACD group to which the ACD DN is assigned.  |
| DN: nn                     | 0-16                   | Identifies the ACD DN that is assigned again.  |
| PRIM OR SUPP: answrtxt     | PRIM or SUPP           | Indicates if the ACD DN that is assigned again is a primary or auxiliary ACD DN in the new group.  |
| P1: n                      | 0-3                    | The field PRIM OR SUPP can be PRIM. When<br>this event occurs, P1: n indicates the trunk<br>priority that the primary ACD DN is assigned. If<br>the field is SUPP, P1:n indicates the general<br>priority of the auxiliary ACD DN.           |

## RMAN101 (end)

(Sheet 2 of 2)

| Field               | Value   | Description   |
|---------------------|---------|---|
| P2: n               | 0-3     | The field PRIM OR SUPP can be PRIM. When<br>this event occurs, P2: n indicates the line<br>priority that the primary ACD DN is assigned.<br>If the field is SUPP, this field appears. |
| JOURNAL FILE ACTIVE | YES, NO | Indicates if the journal file was active at the time of the remote load management command.   |

## Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

## **RMAN102**

### **Explanation**

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem is a part of the ACD Management Information System. The ACD RMAN generates RMAN102 when the down stream processor (DSP) issues a CHANGE MAXWAIT command.

The ACD RMAN provides a DSP the ability to issue ACD load management commands from a distance.

### Format

The log report format for RMAN102 is as follows:

RMAN102 mmmdd hh:mm:ss ssdd INFO CHANGE\_MAXWAIT<br/>SESSION ID: nn<br/>POOL: poolname<br/>SUBPOOL: subpoolname<br/>ACD GROUP groupname<br/>NEW MAXWAIT: nnnn SECS<br/>JOURNAL FILE ACTIVE: answrtxt

## Example

An example of log report RMAN102 follows:

RMAN102 AUG23 09:45:15 1234 INFO CHANGE\_MAXWAIT SESSION ID: 3 POOL: POOL1 SUBPOOL: SUBPOOLC ACD GROUP: ACDGRP2 NEW MAXWAIT 30 SECS JOURNAL FILE ACTIVE: YES

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                   | Value    | Description   |
|-------------------------|----------|---|
| INFO CHANGE_<br>MAXWAIT | Constant | Indicates that the DSP issued a CHANGE MAXWAIT command. |
| SESSION ID              | 0-14     | Specifies the number of the current session.            |

# RMAN102 (end)

(Sheet 2 of 2)

| Field               | Value                  | Description  |
|---------------------|------------------------|--|
| POOL                | Up to 16<br>characters | Identifies the pool of ACD groups associated with<br>the data stream. The ACD groups are associated<br>with only one data stream at a time. Only one<br>pool of ACD groups can be associated with each<br>data stream at a given time. |
| SUBPOOL             | Up to 16<br>characters | Identifies the subpool within a pool of ACD groups. Subpools make sure the switch and ACD customer are secure. The ACD groups that belong to an ACD customer are in groups in each subpool.  |
| ACD GROUP           | Up to 16<br>characters | Identifies the ACD group for which the MAXWAIT value is changed.   |
| NEW MAXWAIT SECS    | 0-1800                 | Indicates the maximum wait time in seconds.<br>This wait time is the time that a call must wait in<br>the incoming call queue. The system must<br>present the call to an agent position in the<br>maximum wait time.                   |
| JOURNAL FILE ACTIVE | YES, NO                | Indicates if the journal file was active at the time of the remote load management command.  |

## Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

## RMAN103

### **Explanation**

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem is a part of the ACD Management Information System. This subsystem generates this report when the down stream processor (DSP) issues a CHANGE MAXCQSIZE command.

The RMAN allows a DSP to issue ACD load management reports remotely.

### Format

The log report format for RMAN103 is as follows:

RMAN103 mmmdd hh:mm:ss ssdd INFO CHANGE\_MAXCQSIZE SESSION ID: nn POOL: poolname SUBPOOL: subpoolname ACD GROUP: groupname NEW MAXQSIZE: nnn JOURNAL FILE ACTIVE: answrtxt

## Example

An example of log report RMAN103 follows:

RMAN103 AUG23 09:45:15 1234 INFO CHANGE\_MAXCQSIZESESSION ID:10POOL:POOL1SUBPOOL:SUBPOOL2ACD GROUP:ACDGRP2NEW MAXQSIZE:20JOURNAL FILE ACTIVE:YES

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                | Value    | Description  |
|----------------------|----------|--|
| CHANGE_<br>MAXCQSIZE | Constant | Indicates that the DSP issued a CHANGE<br>MAXCQSIZE command. |
| SESSION ID           | 0-14     | Indicates the number of the session in use.                  |

# RMAN103 (end)

(Sheet 2 of 2)

| Field                  | Value                  | Description   |
|------------------------|------------------------|---|
| POOL                   | Up to 16<br>characters | Identifies the pool of ACD groups associated with<br>the data stream. The ACD groups can associate<br>with one data stream at a given time. One pool of<br>ACD groups can associate with each data stream at<br>a given time. |
| SUBPOOL                | Up to 16<br>characters | Identifies the subpool in a pool of ACD groups.<br>Subpools are a method of security for switches and<br>ACD customers. Normally, all ACD groups that<br>belong to an ACD customer are together in each<br>subpool.           |
| ACD GROUP              | Up to 16<br>characters | Identifies the ACD group for which the MAXCQSIZE value is changed.  |
| NEW MAXCQSIZE          | 0-255                  | Indicates the new maximum call queue size.<br>Indicates the number of calls that the system can<br>queue in the incoming call queue at any one point in<br>time.  |
| JOURNAL FILE<br>ACTIVE | YES, NO                | Indicates if the journal file was active at the time of the remote load management command.   |

## Action

There is no action required.

## **Associated OM registers**

There are no associated OM registers.

## RMAN104

### Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem, is a part of the ACD Management Information System. The subsystem generates this report every time the down stream processor (DSP) issues a CHANGE THROUTE command.

The ACD RMAN allows a DSP to issue ACD load management commands remotely.

### Format

The log report format for RMAN104 is as follows:

RMAN104 mmmdd hh:mm:ss ssdd INFO CHANGE\_THROUTE

| SESSION ID:     | nn             |
|-----------------|----------------|
| POOL:           | poolname       |
| SUBPOOL:        | subpoolname    |
| ACD GROUP:      | groupname      |
| NEW THROUTE IN  | DEX: nnnn      |
| NEW THROUTE TA  | BLE: tablename |
| JOURNAL FILE AC | TIVE: answrtxt |

## Example

An example of log report RMAN104 follows:

RMAN104 AUG23 09:45:15 1234 INFO CHANGE\_THROUTESESSION ID:14POOL:POOL1SUBPOOL:SUBPOOLAACD GROUP:ACDGRP1NEW THROUTE INDEX:1001NEW THROUTE TABLE:OFRTJOURNAL FILE ACTIVE:YES

## RMAN104 (end)

## **Field descriptions**

The following table describes each field in the log report:

| Field                   | Value                  | Description   |
|-------------------------|------------------------|---|
| INFO CHANGE_<br>THROUTE | Constant               | Indicates that the DSP issued a CHANGE THROUTE command.   |
| SESSION ID              | 0-14                   | Indicates the number of the session in use.   |
| POOL                    | Up to 16<br>characters | Identifies the pool of ACD groups associated with<br>the data stream. The ACD groups can associate<br>with one data stream at a given time. One pool of<br>ACD groups can associate with each data stream<br>at a given time. |
| SUBPOOL                 | Up to 16<br>characters | Identifies the subpool in a pool of ACD groups.<br>Subpools are a method of security for switches<br>and ACD customers. Normally, ACD groups that<br>belong to an ACD customer are together in each<br>subpool.               |
| ACD GROUP               | Up to 16<br>characters | Identifies the ACD group for which the threshold route must change.   |
| NEW THROUTE INDEX       | 0-1023                 | Indicates the route list in the routing table for use with the new threshold route index.   |
| NEW THROUTE TABLE       | OFRT, IBNRTE           | Specifies the new routing table for use with the new threshold route.   |
| JOURNAL FILE ACTIVE     | YES, NO                | Indicates if the journal file was active at the time of the remote load management command.   |

## Action

There is no action required.

## **Associated OM registers**

### **Explanation**

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem is a part of the ACD Management Information System. The subsystem generates this report every time the down stream processor (DSP) issues a CHANGE NSROUTE command.

The ACD RMAN allows a DSP to issue ACD load management commands remotely.

### Format

The log report format for RMAN105 is as follows:

RMAN105 mmmdd hh:mm:ss ssdd INFO CHANGE\_NSROUTE

| SESSION ID:     | nn             |
|-----------------|----------------|
| POOL:           | poolname       |
| SUBPOOL:        | subpoolname    |
| ACD GROUP:      | groupname      |
| NEW NSROUTE IN  | DEX: nnnn      |
| NEW NSROUTE TA  | BLE: tablename |
| JOURNAL FILE AC | TIVE: answrtxt |

## Example

An example of log report RMAN105 follows:

RMAN105 AUG23 09:45:15 1234 INFO CHANGE\_NSROUTE<br/>SESSION ID:2POOL:POOL1SUBPOOL:SUBPOOLAACD GROUP:ACDGRP1NEW THROUTE INDEX:55NEW THROUTE TABLE:IBNRTEJOURNAL FILE ACTIVE:YES

## RMAN105 (end)

## **Field descriptions**

The following table describes each field in the log report:

| Field               | Value               | Description   |
|---------------------|---------------------|---|
| CHANGE_NSROUTE      | Constant            | Indicates that the DSP issued a CHANGE NSROUTE command.   |
| SESSION ID          | 0-14                | Indicates the number of the session in use.   |
| POOL                | Up to 16 characters | Identifies the pool of ACD groups associated with<br>the data stream. The ACD groups can associate<br>with one data stream at a given time. One pool of<br>ACD groups can associate with each data stream<br>at a given time. |
| SUBPOOL             | Up to 16 characters | Identifies the subpool within a pool of ACD groups. Subpools are a method of security for switches and ACD customers. Normally, all ACD groups that belong to an ACD customer are grouped in each subpool.                    |
| ACD GROUP           | Up to 16 characters | Identifies the ACD group for which the night service route must be changed.   |
| NEW NSROUTE INDEX   | 0-1023              | Specifies the route list in the routing table for use with the new night service route.   |
| NEW THROUTE TABLE   | OFRT, IBNRTE        | Specifies the new routing table for use with the night service route.   |
| JOURNAL FILE ACTIVE | YES, NO             | Indicates if the journal file was or was not active at the time of the remote load management command.  |

## Action

There is no action required.

## **Associated OM registers**

## Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem is a part of the ACD Management Information System. The subsystem generates this report every time the down stream processor (DSP) issues a CHANGE EHOVFL command.

The ACD RMAN allows a DSP to issue ACD load management commands remotely.

### Format

The log report format for RMAN106 is as follows:

RMAN106 mmmdd hh:mm:ss ssdd INFO CHANGE\_EHOVFL

| SESSION ID:       | nn           |
|-------------------|--------------|
| POOL:             | poolname     |
| SUBPOOL:          | subpoolname  |
| ACD GROUP:        | groupname    |
| EHOVFL GRP1:      | groupname    |
| EHOVFL GRP2:      | groupname    |
| EHOVFL GRP3:      | groupname    |
| EHOVFL GRP4:      | groupname    |
| EHOVFL NUMBER:    | n            |
| JOURNAL FILE ACTI | VE: answrtxt |

## Example

An example of log report RMAN106 follows:

| RMAN106 AUG23 09:45:15 | 1234 INFO CHANGE_EHOVFL |
|------------------------|-------------------------|
| SESSION ID:            | 3                       |
| POOL:                  | POOL1                   |
| SUBPOOL:               | SUBPOOL1                |
| ACD GROUP:             | ACDGRP1                 |
| EHOVFL GRP1:           | ACDGRP11                |
| EHOVFL GRP2:           | ACDGRP22                |
| EHOVFL GRP3:           | ACDGRP33                |
| EHOVFL GRP4:           | ACDGRP44                |
| EHOVFL NUMBER:         | 4                       |
| JOURNAL FILE ACTIVE    | YES                     |

## RMAN106 (end)

## **Field descriptions**

The following table describes each field in the log report:

| Field                  | Value                  | Description  |
|------------------------|------------------------|--|
| INFO CHANGE_<br>EHOVFL | Constant               | Indicates that the DSP issued a CHANGE EHOVFL command to change the enhanced overflow list.  |
| SESSION ID             | 0-14                   | Indicates the number of the session in use.  |
| POOL                   | Up to 16<br>characters | Identifies the ACD groups associated with the data<br>stream. ACD groups can associate with one data<br>stream at a given time. One pool of ACD groups can<br>associate with each data stream at a given time.       |
| SUBPOOL                | Up to 16<br>characters | Identifies the subpool within a pool of ACD groups.<br>Subpools are a method of security for switches and ACD<br>customers. Normally, all ACD groups that belong to an<br>ACD customer are together in each subpool. |
| ACD GROUP              | Up to 16<br>characters | Identifies the ACD group for which the enhanced overflow list must be changed.   |
| EHOVFL GROUP1          | Up to 16<br>characters | Identifies the first ACD group in the enhanced overflow list.  |
| EHOVFL GROUP2          | Up to 16<br>characters | Identifies the second ACD group in the enhanced overflow list.   |
| EHOVFL GROUP3          | Up to 16<br>characters | Identifies the third ACD group in the enhanced overflow list.  |
| EHOVFL GROUP4          | Up to 16<br>characters | Identifies the fourth ACD group in the enhanced overflow list.   |
| EHOVFL NUMBER          | 0-4                    | Indicates the number of ACD groups in the enhanced overflow list.  |
| JOURNAL FILE<br>ACTIVE | YES, NO                | Indicates if the journal file was or was not active at the time of the remote load management command.   |

## Action

There is no action required.

## **Associated OM registers**

## Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem is a part of the ACD Management Information System. The subsystem generates this report every time the down stream processor (DSP) issues a CHANGE ACD DN PRIORITY command.

The ACD RMAN allows a DSP to issue ACD load management commands remotely.

### Format

The log report format for RMAN107 is as follows:

RMAN107 mmmdd hh:mm:ss ssdd INFO CHANGE\_ACD\_DN\_ PRIORITY

| nn                            |  |  |
|-------------------------------|--|--|
| poolname                      |  |  |
| subpoolname                   |  |  |
| groupname                     |  |  |
|                               |  |  |
| answrtxt                      |  |  |
| n                             |  |  |
|                               |  |  |
| JOURNAL FILE ACTIVE: answrtxt |  |  |
|                               |  |  |

## Example

An example of log report RMAN107 follows:

| RMAN107 AUG23 09:45:15 123 | 4 INFO CHANGE_ACD_DN_PRIORITY |
|----------------------------|-------------------------------|
| SESSION ID:                | 2                             |
| POOL:                      | POOL1                         |
| SUBPOOL:                   | SUBPOOL1                      |
| ACD GROUP:                 | ACDGRP1                       |
| DN:                        | б                             |
| PRIM OR SUPP:              | PRIM                          |
| P1: 1 P2: 0                |                               |
| P2:                        | 0                             |
| JOURNAL FILE ACTIVE:       | YES                           |

## RMAN107 (continued)

# **Field descriptions**

The following table describes each field in the log report:

| Field                           | Value                  | Description   |
|---------------------------------|------------------------|---|
| INFO CHANGE_ACD_<br>DN_PRIORITY | Constant               | Indicates that the DSP issued a CHANGE ACD DN PRIORITY command.   |
| SESSION ID                      | 0-14                   | Indicates the number of the session in use.   |
| POOL                            | Up to 16<br>characters | Identifies the pool of ACD groups associated with<br>the data stream. The ACD groups can associate<br>with one data stream at a given time. One pool of<br>ACD groups can associate with each data stream<br>at a given time. |
| SUBPOOL                         | Up to 16<br>characters | Identifies the subpool within a pool of ACD groups. Subpools are a method of security for switches and ACD customers. Normally, all ACD groups that belong to an ACD customer are grouped within each subpool.                |
| ACD GROUP                       | Up to 16<br>characters | Identifies the ACD group for which the priorities of the ACD DN must change.  |
| DN                              | 0-16                   | Identifies the directory number (DN) ID that is the sequence in which the system assigned the ACD DN to the ACD group.  |
| PRIM OR SUPP                    | PRIM, SUPP             | Indicates if the ACD DN that has a changing priority is a primary or supplementary ACD DN.  |
| P1                              | 0-3                    | If the field PRIM OR SUPP is PRIM, this field<br>indicates the trunk priority that the system<br>assigns the primary ACD DN to. If SUPP, this<br>field indicates the general priority of the<br>supplementary ACD DN.         |
| P2                              | 0-3                    | If the field PRIM OR SUPP is PRIM, this field<br>indicates the line priority that the system assigns<br>the primary ACD DN to. If SUPP, this field<br>appears blank.  |
| JOURNAL FILE ACTIVE             | YES, NO                | Indicates if the journal file was or was not active at the time of the RMAN command.  |

## RMAN107 (end)

## Action

There is no action required.

# **Associated OM registers**

# Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem is a part of the ACD Management Information System. The subsystem generates this report every time the down stream processor (DSP) issues a CHANGE AUDIO GROUP command.

The ACD RMAN allows a DSP to issue ACD Load Management commands remotely.

#### Format

The log report format for RMAN108 is as follows:

RMAN108 mmmdd hh:mm:ss ssdd INFO CHANGE\_AUDIO\_GROUP

| SESSION ID:                | nn           |  |
|----------------------------|--------------|--|
| POOL:                      | poolname     |  |
| SUBPOOL:                   | subpoolname  |  |
| ACD GROUP:                 | groupname    |  |
| NEW AUDIO GROUP: groupname |              |  |
| JOURNAL FILE ACTI          | VE: answrtxt |  |
|                            |              |  |

### Example

An example of log report RMAN108 follows:

| RMAN108 AUG23 09:45:15 | 1234 INFO CHANGE_AUDIO_GROUP |
|------------------------|------------------------------|
| SESSION ID:            | 2                            |
| POOL:                  | POOL1                        |
| SUBPOOL:               | SUBPOOL1                     |
| ACD GROUP:             | ACDGRP1                      |
| NEW AUDIO GROUP:       | AUDIO1                       |
| JOURNAL FILE ACTIVE    | : YES                        |

### **Field descriptions**

The following table describes each field in the log report:

| Field                       | Value    | Description  |
|-----------------------------|----------|--|
| INFO CHANGE_<br>AUDIO_GROUP | Constant | Indicates that the DSP issued a CHANGE AUDIO GROUP command |
| SESSION ID                  | 0-14     | Specifies the number of the session in use.                |

## RMAN108 (end)

| Field                  | Value                  | Description   |
|------------------------|------------------------|---|
| POOL                   | Up to 16<br>characters | Identifies the pool of ACD groups associated with<br>the data stream. The ACD groups can associate<br>with one data stream at a given time. One pool of<br>ACD groups can associate with each data stream at<br>a given time. |
| SUBPOOL                | Up to 16<br>characters | Identifies the subpool in a pool of ACD groups.<br>Subpools are a method of security for switches and<br>ACD customers. Normally, all ACD groups that<br>belong to an ACD customer are together in each<br>subpool.           |
| ACD GROUP              | Up to 16<br>characters | Identifies the ACD group for which the AUDIO group must be changed.   |
| NEW AUDIO GROUP        | AUDIO1-<br>AUDIO15     | Indicates the new AUDIO group to use to give announcements and/or music to callers queued in the incoming call queue.   |
| JOURNAL FILE<br>ACTIVE | YES, NO                | Indicates if the journal file was or was not active at the time of the RMAN command.  |

#### (Sheet 2 of 2)

## Action

There is no action required.

## **Associated OM registers**

### **Explanation**

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem is a part of the ACD Management Information System. The subsystem generates this report every time the down stream processor (DSP) issues a CHANGE RANTH command.

The ACD RMAN allows a DSP to issue ACD Load Management commands remotely.

#### Format

The log report format for RMAN109 is as follows:

RMAN109 mmmdd hh:mm:ss ssdd INFO CHANGE\_RANTH<br/>SESSION ID: nn<br/>POOL: poolname<br/>SUBPOOL: subpoolname<br/>ACD GROUP: groupname<br/>NEW AUDIO RANTH:nn SECS<br/>JOURNAL FILE ACTIVE: answrtxt

### Example

An example of log report RMAN109 follows:

| RMAN109 AUG23 09:45:15 | 1234 INFO CHANGE_RANTH |
|------------------------|------------------------|
| SESSION ID:            | 2                      |
| POOL:                  | POOL1                  |
| SUBPOOL:               | SUBPOOL1               |
| ACD GROUP:             | ACDGRP1                |
| NEW AUDIO RANTH:       | 45 SECS                |
| JOURNAL FILE ACTIVE    | : YES                  |

### **Field descriptions**

The following table describes each field in the log report:

| Field                 | Value    | Description   |
|-----------------------|----------|---|
| INFO CHANGE_<br>RANTH | Constant | Indicates that the DSP issued a CHANGE RANTH command to change the recorded announcement threshold. |
| SESSION ID            | 0-14     | Indicates the number of the session in use.   |

# RMAN109 (end)

| Field                  | Value                  | Description   |
|------------------------|------------------------|---|
| POOL                   | Up to 16<br>characters | Identifies the pool of ACD groups associated with<br>the data stream. The ACD groups can associate<br>with one data stream at a given time. One pool of<br>ACD groups can associate with each data stream at<br>a given time. |
| SUBPOOL                | Up to 16<br>characters | Identifies the subpool within a pool of ACD groups.<br>Subpools are a method of security for switches and<br>ACD customers. Normally, all ACD groups that<br>belong to an ACD customer are together in one<br>subpool.        |
| ACD GROUP              | Up to 16<br>characters | Identifies the ACD group for which the system changes the recorded announcement threshold.  |
| NEW RANTH              | 0, 6-60                | Indicates the new recorded announcement threshold time in seconds.  |
| JOURNAL FILE<br>ACTIVE | YES, NO                | Indicates if the journal file was or was not active at the time of the remote load management command.  |

#### (Sheet 2 of 2)

## Action

There is no action required.

## **Associated OM registers**

### Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem is a part of the ACD Management Information System. The subsystem generates this report every time the down stream processor (DSP) issues a CHANGE QTHRESHOLD command.

The ACD RMAN allows a DSP to issue ACD Load Management commands remotely.

#### Format

The log report format for RMAN110 is as follows:

RMAN110 mmmdd hh:mm:ss ssdd INFO CHANGE\_QTHRESHOLD

| nn            |
|---------------|
| poolname      |
| subpoolname   |
| groupname     |
| queueid       |
| IVE: answrtxt |
|               |

### Example

An example of log report RMAN110 follows:

|            | RMAN110 AUG23 09:45:15 | 1234 INFO CHANGE_QTHRESHOLD |
|------------|------------------------|-----------------------------|
|            | SESSION ID:            | 3                           |
|            | POOL:                  | POOL1                       |
| SUBPOOL:   |                        | SUBPOOLC                    |
| ACD GROUP: |                        | ACDGRP1                     |
|            | QTHRESHOLDS:           | Т2                          |
|            | JOURNAL FILE ACTIVE    | : YES                       |

### **Field descriptions**

The following table describes each field in the log report:

| Field                      | Value    | Description   |
|----------------------------|----------|---|
| INFO CHANGE_<br>QTHRESHOLD | Constant | Indicates that the DSP issued a CHANGE<br>QTHRESHOLD command. |
| SESSION ID                 | 0-14     | Indicates the number of the session in use.                   |

## RMAN110 (end)

| Field                  | Value                  | Description  |
|------------------------|------------------------|--|
| POOL                   | Up to 16<br>characters | Identifies the pool of ACD groups associated with<br>the data stream. The ACD groups can only<br>associate with one data stream at a given time. One<br>pool of ACD groups can associate with each data<br>stream at a given time. |
| SUBPOOL                | Up to 16<br>characters | Identifies the subpool with a pool of ACD groups.<br>Subpools are a method of security for switches and<br>ACD customers. Normally, all ACD groups that<br>belong to an ACD customer are together in one<br>subpool.               |
| ACD GROUP              | Up to 16<br>characters | Identifies the ACD groups that needs the QTHRESHOLD value changed.   |
| QTHRESHOLDS            | T1, T2, T3             | Indicates the new MSQS thresholds for the specified ACD group, where T1, T2, and T3 are in the range 10 to 2400.   |
| JOURNAL FILE<br>ACTIVE | YES, NO                | Indicates if the journal file was or was not active at the time of the RMAN command.   |

#### (Sheet 2 of 2)

## Action

There is no action required.

## **Associated OM registers**

### Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem is a part of the ACD Management Information System. The subsystem generates this report every time the down stream processor (DSP) issues a CHANGE ACDDNNAME command.

The ACD RMAN allows a DSP to issue ACD load management commands remotely.

#### Format

The log report format for RMAN111 is as follows:

RMAN111 mmmdd hh:mm:ss ssdd INFO CHANGE\_ACDDNNAME

| SESSION ID:    | nn              |
|----------------|-----------------|
| POOL:          | poolname        |
| SUBPOOL:       | subpoolname     |
| ACD GROUP:     | groupname       |
| ACDDNID:       | idnmbr          |
| ACDDNNAME:     | newgroupname    |
| JOURNAL FILE A | CTIVE: answrtxt |

## Example

An example of log report RMAN111 follows:

RMAN111 AUG23 09:45:15 1234 INFO CHANGE\_ACDDNNAME SESSION ID: 2 POOL: POOL1 SUBPOOL: SUBPOOL1 ACD GROUP: ACDGRP1 ACDDNID: 1 ACDDNNAME: ACDGRP2 JOURNAL FILE ACTIVE: YES

## **Field descriptions**

The following table describes each field in the log report:

| Field                     | Value                  | Description  |
|---------------------------|------------------------|--|
| INFO CHANGE_<br>ACDDNNAME | Constant               | Indicates that the DSP has been issued a CHANGE ACDDNNAME command.   |
| SESSION ID                | 0-14                   | Specifies the number of the session in use.  |
| POOL                      | Up to 16<br>characters | Identifies the pool of ACD groups associated with<br>the data stream. The ACD groups can associate<br>with one data stream at a given time. Only one pool<br>of ACD groups can associate with each data stream<br>at a given time. |
| SUBPOOL                   | Up to 16<br>characters | Identifies the subpool within a pool of ACD groups.<br>Subpools are a method of security for switches and<br>ACD customers. Normally, all ACD groups that<br>belong to an ACD customer are together in one<br>subpool.             |
| ACD GROUP                 | Up to 16<br>characters | Identifies the ACD group to which the system assigns the agent position.   |
| ACDDNID                   | 1-16                   | Indicates which ACD directory number (DN) to which the system assigns the name.  |
| ACDDNNAME                 | Up to 16<br>characters | Indicates the new ACDDN name that must change.<br>If the name is 15 blanks, the system requests a<br>delete.   |
| JOURNAL FILE<br>ACTIVE    | YES or NO              | Indicates if the journal file was or was not active at the time of the RMAN command.   |

# Action

There is no action required.

## Associated OM registers

### **Explanation**

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem generates log report RMAN112. The RMAN is a part of the ACD Management Information System. This report appears when the down stream processor (DSP) issues a CHANGE DISPDIGS command.

The ACD RMAN subsystem allows a DSP to issue ACD load management commands from a remote site.

#### Format

The log report format for RMAN112 is as follows:

RMAN112 mmmdd hh:mm:ss ssdd INFO CHANGE\_DISPDIGS SESSION ID: nn POOL: poolname SUBPOOL: subpoolname ACD GROUP: groupname NEW VALUE: nn JOURNAL FILE ACTIVE: answrtxt

### Example

An example of log report RMAN112 follows:

| RMAN112 AUG23 09:45:15 | 1234 INFO CHANGE_DISPDIGS |
|------------------------|---------------------------|
| SESSION ID:            | 3                         |
| POOL:                  | POOL1                     |
| SUBPOOL:               | SUBPOOLC                  |
| ACD GROUP:             | ACDGRP1                   |
| NEW VALUE:             | 4                         |
| JOURNAL FILE ACTIVE    | : YES                     |

### **Field descriptions**

The following table describes each field in the log report:

| Field                    | Value    | Description   |
|--------------------------|----------|---|
| INFO CHANGE_<br>DISPDIGS | Constant | Indicates that the DSP issues a CHANGE<br>DISDIGS command |
| SESSION ID               | 0-14     | Specifies the number of the session in use                |

# RMAN112 (end)

| Field               | Value                  | Description  |
|---------------------|------------------------|--|
| POOL                | Up to 16<br>characters | Identifies the pool of ACD that associates with data<br>stream. The ACD groups only associate with one<br>data stream at a given time. Only one pool of ACD<br>groups associates with each data stream at a<br>given time. |
| SUBPOOL             | Up to 16<br>characters | Identifies the subpool in a pool of ACD groups.<br>Subpools protect switch and ACD customer<br>security. One group normally contains all ACD<br>groups that belong to an ACD customer.                                     |
| ACD GROUP           | Up to 16<br>characters | Identifies the ACD group in which the DISPDIGS value changed.  |
| NEW VALUE           | 0-7                    | Indicates the new value of the display digits.   |
| JOURNAL FILE ACTIVE | YES, NO                | Indicates if the journal file is active during the RMAN command.   |

#### (Sheet 2 of 2)

## Action

There is no action required.

# Associated OM registers

### Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem generates log report RMAN113. The RMAN is part of the ACD Management Information System. This report appears when the down stream processor (DSP) issues a CHANGE SUBPOOL command.

The ACD RMAN subsystem allows a DSP the ability to issue ACD load management commands from a remote site.

### Format

The log report format for RMAN113 is as follows:

RMAN113 mmmdd hh:mm:ss ssdd INFO CHANGE\_SUBPOOL

| SESSION ID:     | nn             |
|-----------------|----------------|
| POOL:           | poolname       |
| SUBPOOL:        | subpoolname    |
| ACD GROUP:      | groupname      |
| NEW SUBPOOL:    | subpoolname    |
| JOURNAL FILE AC | TIVE: answrtxt |
|                 |                |

### Example

An example of log report RMAN113 follows:

| RMAN113 AUG23 09:45:15 | 1234 INFO CHANGE_SUBPOOL |
|------------------------|--------------------------|
| SESSION ID:            | 3                        |
| POOL:                  | POOL1                    |
| SUBPOOL:               | SUBPOOL1                 |
| ACD GROUP:             | ACDGRP1                  |
| NEW SUBPOOL:           | SUBPOOL2                 |
| JOURNAL FILE ACTIVE    | : YES                    |

### **Field descriptions**

The following table describes each field in the log report:

| Field                   | Value    | Description   |
|-------------------------|----------|---|
| INFO CHANGE_<br>SUBPOOL | Constant | Indicates that the DSP issues a CHANGE<br>SUBPOOL command |
| SESSION ID              | 0-14     | Specifies the number of the session in use                |

## RMAN113 (end)

| Field               | Value                  | Description  |
|---------------------|------------------------|--|
| POOL                | Up to 16<br>characters | Identifies the pool of ACD groups that associates<br>with the data stream. The ACD groups only<br>associate with one data stream at a given time.<br>Only one pool of ACD groups associates with a<br>data stream at a given time. |
| SUBPOOL             | Up to 16<br>characters | Identifies the subpool in a pool of ACD groups.<br>Subpools protect switch and ACD customer<br>security. One subpool normally contains all ACD<br>groups that belong to an ACD customer.   |
| ACD GROUP           | Up to 16<br>characters | Identifies the ACD group in which the DISPDIGS value changes.  |
| NEW SUBPOOL         | Up to 16<br>characters | Indicates the new subpool to which the system assigns the ACD group  |
| JOURNAL FILE ACTIVE | YES or NO              | Indicates if the journal file is active at the time of the RMAN command  |

#### (Sheet 2 of 2)

## Action

There is no action required.

## **Associated OM registers**

### Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem generates log report RMAN114. The RMAN is a part of the ACD Management Information System. This report appears when the down stream processor (DSP) issues a CHANGE PRIOPRO (Priority Promotion) command.

The ACD Remote Load Management allows a DSP to issue ACD load management commands from a remote site.

#### Format

The log report format for RMAN114 is as follows:

 RMAN114 mmmdd hh:mm:ss ssdd INFO CHANGE\_PRIOPRO

 SESSION ID:
 nn

 POOL:
 poolname

 SUBPOOL:
 subpoolname

 ACD GROUP:
 groupname

 NEW PRIOPRO:
 nnn

 IOURDNAL EU E ACTIVIE:
 ansaurtation

#### JOURNAL FILE ACTIVE: answrtxt

#### Example

An example of log report RMAN114 follows:

RMAN114 AUG23 09:45:15 1234 INFO CHANGE\_PRIOPRO SESSION ID: 3 POOL: POOL1 SUBPOOL: SUBPOOL1 ACD GROUP: ACDGRP1 NEW PRIOPRO: 20 JOURNAL FILE ACTIVE: YES

#### **Field description**

The following table describes each field in the log report:

| Field                   | Value    | Description   |
|-------------------------|----------|---|
| INFO CHANGE_<br>PRIOPRO | Constant | Indicates that the DSP issues a CHANGE<br>ACDDNNAME command |
| SESSION ID              | 0-14     | Specifies the number of the session in use                  |

## RMAN114 (end)

| Field               | Value                  | Description   |
|---------------------|------------------------|---|
| POOL                | Up to 16<br>characters | Identifies the pool of ACD groups that associates<br>with the data stream. The ACD groups associate<br>with one data stream at a given time. Only one<br>pool of ACD groups associates with one data<br>stream at a given time. |
| SUBPOOL             | Up to 16<br>characters | Identifies the subpool in a pool of ACD groups.<br>Subpools protect switch and ACD customer<br>security. One subpool normally contains all ACD<br>groups that belong to an ACD customer.  |
| ACD GROUP           | Up to 16<br>characters | Identifies the ACD group in which the DISPDIGS value changed.   |
| NEW PRIOPRO         | 0-255                  | Indicates the new priority promotion time   |
| JOURNAL FILE ACTIVE | YES or NO              | Indicates if the journal file is active at the time of the RMAN command   |

#### (Sheet 2 of 2)

## Action

There is no action required.

## **Associated OM registers**

### Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem generates log report RMAN115. The ACD RMAN subsystem is a part of the ACD Management Information System. This report appears when the down stream processor (DSP) issues a time delay overflow (CHANGE TMDELOFL) command.

The ACD RMAN subsystem allows a DSP to issue ACD load management commands from a remote site.

### Format

The log report format for RMAN115 is as follows:

RMAN115 mmmdd hh:mm:ss ssdd INFO CHANGE\_TMDELOFL SESSION ID: nn POOL: poolname SUBPOOL: subpoolname ACD GROUP: groupname NEW TMDELOFL: nnnn JOURNAL FILE ACTIVE: answrtxt

## **Example**

An example of log report RMAN115 follows:

RMAN115 AUG23 09:45:15 1234 INFO CHANGE\_TMDELOFL SESSION ID: 3 POOL: POOL1 SUBPOOL: SUBPOOL1 ACD GROUP: ACDGRP1 NEW TMDELOFL: 30 JOURNAL FILE ACTIVE: YES

## **Field descriptions**

The following table describes each field in the log report:

| Field                    | Value    | Description  |
|--------------------------|----------|--|
| INFO CHANGE_<br>TMDELOFL | Constant | Indicates that the DSP issued a CHANGE<br>TMDELOFL command |
| SESSION ID               | 0-14     | Specifies the number of the session in use                 |

## RMAN115 (end)

| Field               | Value                  | Description  |
|---------------------|------------------------|--|
| POOL                | Up to 16<br>characters | Identifies the pool of ACD groups that<br>associates with the data stream. The ACD<br>groups only associate with one data stream at a<br>given time. Only one pool of ACD groups<br>associates with each data stream at a given<br>time. |
| SUBPOOL             | Up to 16<br>characters | Identifies the subpool in a pool of ACD groups.<br>Subpools protect switch and ACD customer<br>security. One subpool normally contains all<br>ACD groups that belong to an ACD customer.   |
| ACD GROUP           | Up to 16<br>characters | Identifies the ACD group in which the<br>DISPDIGS value changes  |
| NEW TMDELOFL        | 0-1800                 | Indicates the new time delay overflow time   |
| JOURNAL FILE ACTIVE | YES or NO              | Indicates if the journal file is active at the time of the RMAN command  |

(Sheet 2 of 2)

## Action

There is no action required.

## **Associated OM registers**

### Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem generates log report RMNA116. The ACD RMAN subsystem is a part of the ACD Management Information System. This report appears when the Down Stream Processor (DSP) issues an overflow type (CHANGE OFLTYPE) command.

The ACD RMAN subsystem allows a DSP to issue ACD load management commands from a remote site.

### Format

The log report format for RMAN116 is as follows:

RMAN116 mmmdd hh:mm:ss ssdd INFO CHANGE\_OFLTYPE

| SESSION ID:     | nn             |
|-----------------|----------------|
| POOL:           | poolname       |
| SUBPOOL:        | subpoolname    |
| ACD GROUP:      | groupname      |
| NEW OFLTYPE:    | answrtxt       |
| NEW START:      | answrtxt       |
| JOURNAL FILE AC | TIVE: answrtxt |

### Example

An example of log report RMAN116 follows:

RMAN116 AUG23 09:45:15 1234 INFO CHANGE\_OFLTYPESESSION ID:3POOL:POOL1SUBPOOL:SUBPOOLCACD GROUP:ACDGRP1NEW OFLTYPE:ALLPRIONEW START:IMMEDIATJOURNAL FILE ACTIVE:YES

## **Field descriptions**

The following table describes each field in the log report:

| Field                   | Value                | Description   |
|-------------------------|----------------------|---|
| INFO CHANGE_<br>OFLTYPE | Constant             | Indicates the DSP issued a CHANGE<br>OFLTYPE command  |
| SESSION ID              | 0-14                 | Specifies the number of the session in use  |
| POOL                    | Up to 16 characters  | Identifies the pool of ACD groups that<br>associates with the data stream. The ACD<br>groups only associate with one data stream at<br>a given time. Only one pool of ACD groups<br>associate with each data stream at a given<br>time. |
| SUBPOOL                 | Up to 16 characters  | Identifies the subpool in a pool of ACD groups.<br>Subpools protect switch and ACD customer<br>security. One subpool normally contains all<br>ACD groups that belong to an ACD customer.  |
| ACD GROUP               | Up to 16 characters  | Identifies the ACD group in which the DISPDIGS value changes.   |
| NEW OFLTYPE             | ALLPRIO,<br>PRI0ONLY | Indicates the new type of time delay overflow desired.  |
| NEW START               | IMMEDIAT, POONLY     | Indicates the new start time for the time delay overflow timer.   |
| JOURNAL FILE ACTIVE     | YES or NO            | Indicates if the journal file is active during the RMAN command.  |

## Action

There is no action required.

## **Associated OM registers**

### **Explanation**

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem generates log report RMAN117. The RMAN subsystem is a part of the ACD Management Information System. This report appears when the down stream processor (DSP) issues a CHANGE SERVICE command.

The ACD RMAN subsystem allows a DSP to issue ACD load management commands from a remote site.

#### Format

The log report format for RMAN117 is as follows:

RMAN117 mmmdd hh:mm:ss ssdd INFO CHANGE\_SERVICESESSION ID:nnPOOL:poolnameSUBPOOL:subpoolnameACD GROUP:groupnameNEW SERVICE:answrtxtJOURNAL FILE ACTIVE:answrtxt

### Example

An example of log report RMAN117 follows:

RMAN117 AUG23 09:45:15 1234 INFO CHANGE\_SERVICE SESSION ID: 3 POOL: POOL1 SUBPOOL: SUBPOOL1 ACD GROUP: ACDGRP1 NEW SERVICE: OLDEST JOURNAL FILE ACTIVE: YES

# **Field descriptions**

The following table describes each field in the log report:

| Field               | Value    | Description  |
|---------------------|----------|--|
| NFO CHANGE_ SERVICE | Constant | Indicates the DSP issued a CHANGE<br>SERVICE command |
| SESSION ID          | 0-14     | Specifies the number of the session in use           |

# RMAN117 (end)

| (Sheet | 2 | of | 2) |  |
|--------|---|----|----|--|
|--------|---|----|----|--|

| Field               | Value                      | Description   |
|---------------------|----------------------------|---|
| POOL                | Up to 16 characters        | Identifies the pool of ACD groups that<br>associate with the data stream. The ACD<br>groups only associate with one data<br>stream at a given time. Only one pool of<br>ACD groups associates with each data<br>stream at a given time. |
| SUBPOOL             | Up to 16 characters        | Identifies the subpool in a pool of ACD groups. Subpools protect switch and ACD customer security. One subpool normally contains all ACD groups that belong to an ACD customer.   |
| ACD GROUP           | Up to 16 characters        | Identifies the ACD group in which the<br>DISPDIGS value changes   |
| NEW SERVICE         | OVFLIN, P0FIRST,<br>OLDEST | Indicates the method to service ACD calls   |
| JOURNAL FILE ACTIVE | YES or NO                  | Indicates if the journal file is active during the RMAN command   |

## Action

There is no action required.

## Associated OM registers

### Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem generates log report RMAN118. The ACD RMAN subsystem is a part of the ACD Management Information System. This report appears when the down stream processor (DSP) issues a maximum virtual queue size (CHANGE MAXVQSIZE) command.

The ACD RMAN subsystem allows a DSP to issue ACD load management commands from a remote site.

#### Format

The log report format for RMAN118 is as follows:

 RMAN118 mmmdd hh:mm:ss ssdd INFO CHANGE\_MAXVQSIZE

 SESSION ID:
 nn

| POOL:             | poolname     |
|-------------------|--------------|
| SUBPOOL:          | subpoolname  |
| ACD GROUP:        | groupname    |
| NEW MAXVQSIZE:    | nnn          |
| JOURNAL FILE ACTI | VE: answrtxt |

## **Example**

An example of log report RMAN118 follows:

RMAN118 AUG23 09:45:15 1234 INFO CHANGE\_MAXVQSIZE SESSION ID: 3 POOL: POOL1 SUBPOOL: SUBPOOL1 ACD GROUP: ACDGRP1 NEW MAXVQSIZE: 255 JOURNAL FILE ACTIVE: YES

### **Field descriptions**

The following table describes each field in the log report:

| Field                     | Value    | Description   |
|---------------------------|----------|---|
| INFO CHANGE_<br>MAXVQSIZE | Constant | Indicates that the DSP issued a CHANGE<br>MAXVQSIZE command |
| SESSION ID                | 0-14     | Specifies the number of the session in use                  |

## RMAN118 (end)

| Field               | Value                  | Description  |
|---------------------|------------------------|--|
| POOL                | Up to 16<br>characters | Identifies the pool of ACD groups that<br>associates with the data stream. The ACD<br>groups only associate with one data stream at<br>a given time. Only one pool of ACD groups<br>associates with each data stream at a given<br>time. |
| SUBPOOL             | Up to 16<br>characters | Identifies the subpool in a pool of ACD groups.<br>Subpools protect switch and ACD customer<br>security. One subpool normally contains all<br>ACD groups that belong to an ACD customer.   |
| ACD GROUP           | Up to 16<br>characters | Identifies the ACD group in which the<br>DISPDIGS value changes  |
| NEW MAXVQSIZE       | 0-511                  | Indicates the new maximum virtual queue size   |
| JOURNAL FILE ACTIVE | YES or NO              | Indicates if the journal file is active during the RMAN command  |

(Sheet 2 of 2)

## Action

There is no action required.

## **Associated OM registers**

### Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem generates log report RMAN119. The ACD RMAN subsystem is a part of the ACD Management Information System. This report appears when the down stream processor (DSP) issues a control interflow route (CHANGE CIFROUTE) command.

The ACD RMAN subsystem allows a DSP to issue ACD load management commands from a remote site.

### Format

The log report format for RMAN119 is as follows:

RMAN119 mmmdd hh:mm:ss ssdd INFO CHANGE\_CIFROUTE

| SESSION ID:     | nn              |
|-----------------|-----------------|
| POOL:           | poolname        |
| SUBPOOL:        | subpoolname     |
| ACD GROUP:      | groupname       |
| NEW CIFROUTE I  | NDEX: nnnn      |
| NEW CIFROUTE T  | ABLE: answrtxt  |
| JOURNAL FILE AC | CTIVE: answrtxt |

## **Example**

An example of log report RMAN119 follows:

RMAN119 AUG23 09:45:15 1234 INFO CHANGE\_CIFROUTE
SESSION ID: 3
POOL: POOL1
SUBPOOL: SUBPOOL1
ACD GROUP: ACDGRP1
NEW CIFROUTE INDEX: 55
NEW CIFROUTE TABLE: IBNRTE
JOURNAL FILE ACTIVE: YES

## **Field descriptions**

The following table describes each field in the log report:

| Field                    | Value                  | Description   |
|--------------------------|------------------------|---|
| INFO CHANGE_<br>CIFROUTE | Constant               | Indicates the DSP issued a CHANGE<br>CIFROUTE command   |
| SESSION ID               | 0-14                   | Specifies the number of the session in use  |
| POOL                     | Up to 16<br>characters | Identifies the pool of ACD groups that associates<br>with the data stream. The ACD groups only<br>associate with one data stream at a given time.<br>Only one pool of ACD groups associates with<br>each data stream at a given time. |
| SUBPOOL                  | Up to 16<br>characters | Identifies the subpool in a pool of ACD groups.<br>Subpools protect switch and ACD customer<br>security. One subpool normally contains all ACD<br>groups that belong to an ACD customer.  |
| ACD GROUP                | Up to 16<br>characters | Identifies the ACD group in which the DISPDIGS value changes  |
| NEW CIFROUTE INDEX       | 0-1023                 | Specifies the location of the route list in the routing table for the use of the control interflow route  |
| NEW CIFROUTE TABLE       | OFRT, IBNRTE           | Indicates the new routing table for use of the control interflow route  |
| JOURNAL FILE ACTIVE      | YES or NO              | Indicates if the journal file is active during the RMAN command   |

## Action

There is no action required.

## **Associated OM registers**

### Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem generates log report RMAN120. The ACD RMAN subsystem is a part of the ACD Management Information System. This report appears when the Down Stream Processor (DSP) issues a CHANGE QUEUETHRESHOLD command.

The ACD RMAN subsystem allows a DSP to issue ACD load management commands from a remote site.

#### Format

The log report format for RMAN120 is as follows:

RMAN120 mmmdd hh:mm:ss ssdd INFO CHANGE\_QUEUETHRESHOLD SESSION ID: nn POOL: poolname SUBPOOL: subpoolname ACD GROUP: groupname NEW QUEUE THRESHOLD: nnn JOURNAL FILE ACTIVE: answrtxt

## **Example**

An example of log report RMAN120 follows:

RMAN120 AUG23 09:45:15 1234 INFO CHANGE\_QUEUETHRESHOLDSESSION ID:3POOL:POOL1SUBPOOL:SUBPOOL1ACD GROUP:ACDGRP1NEW QUEUE THRESHOLD:250JOURNAL FILE ACTIVE:YES

## **Field descriptions**

The following table describes each field in the log report:

| Field                          | Value                  | Description   |
|--------------------------------|------------------------|---|
| INFO CHANGE_<br>QUEUETHRESHOLD | Constant               | Indicates the DSP issued a CHANGE<br>QUEUETHRESHOLD command   |
| SESSION ID                     | 0-14                   | Specifies the number of the session in use  |
| POOL                           | Up to 16<br>characters | Identifies the pool of ACD groups that associates<br>with the data stream. The ACD groups only<br>associate with one data stream at a given time.<br>Only one pool of ACD groups associates with<br>each data stream at a given time. |
| SUBPOOL                        | Up to 16<br>characters | Identifies the subpool in a pool of ACD groups.<br>Subpools protect switch and ACD customer<br>security. One subpool normallly contains all ACD<br>groups that belong to an ACD customer.   |
| ACD GROUP                      | Up to 16<br>characters | Identifies the ACD group in which the DISPDIGS value changes.   |
| NEW QUEUE<br>THRESHOLD         | 0-511                  | Indicates the maximum number of calls an NACD group treats as nodal calls. When calls reach the threshold, all new incoming calls receive network service.  |
| JOURNAL FILE ACTIVE            | YES or NO              | Indicates if the journal file is active during the RMAN command   |

## Action

There is no action required.

## **Associated OM registers**

### Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem generates log report RMAN121. The ACD RMAN subsystem is a part of the ACD Management Information System. This report appears when the down stream processor (DSP) issues a CHANGE WAITTHRESHOLD command.

The ACD RMAN subsystem allows a DSP to issue ACD load management commands from a remote site.

### Format

The log report format for RMAN121 is as follows:

RMAN121 mmmdd hh:mm:ss ssdd INFO<br/>CHANGE\_WAITTHRESHOLD<br/>SESSION ID:NEVnnPOOL:poolname<br/>groupnameACD GROUP:groupname<br/>groupnameNEW WAIT THRESHOLD:nnn<br/>JOURNAL FILE ACTIVE:answrtxt

## **Example**

An example of log report RMAN121 follows:

RMAN121 AUG23 09:45:15 1234 INFO CHANGE\_WAITTHRESHOLDSESSION ID:3POOL:POOL1SUBPOOL:SUBPOOL1ACD GROUP:ACDGRP1NEW WAIT THRESHOLD:360JOURNAL FILE ACTIVE:YES

## **Field descriptions**

The following table describes each field in the log report:

| Field                         | Value               | Description   |
|-------------------------------|---------------------|---|
| INFO CHANGE_<br>WAITTHRESHOLD | Constant            | Indicates the DSP issued a CHANGE<br>WAITTHRESHOLD command  |
| SESSION ID                    | 0-14                | Specifies the number of the session in use  |
| POOL                          | Up to 16 characters | Identifies the pool of ACD groups that associates<br>with the data stream. The ACD groups only<br>associate with one data stream at a given time.<br>Only one pool of ACD groups associates with<br>each data stream at a given time. |
| SUBPOOL                       | Up to 16 characters | Identifies the subpool in a pool of ACD groups.<br>Subpools protect switch and ACD customer<br>security. One subpool normally contains all ACD<br>groups that belong to an ACD customer.  |
| ACD GROUP                     | Up to 16 characters | Identifies the ACD group in which the DISPDIGS value changes  |
| NEW WAITTHRESHOLD             | 0-1800              | Indicates the new wait threshold time. When calls reach the threshold, all new incoming calls receive network service.  |
| JOURNAL FILE ACTIVE           | YES or NO           | Indicates if the journal file is active during the RMAN command   |

## Action

There is no action required.

# **Associated OM registers**

### **RMAN122**

#### Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem generates log report RMAN122. The ACD RMAN subsystem is a part of the ACD Management Information System. This report appears when the down stream processor (DSP) issues a preference waiting factor (CHANGE PWF) command.

The ACD RMAN subsystem allows a DSP to issue ACD load management commands from a remote site.

#### Format

The log report format for RMAN122 is as follows:

RMAN122 mmmdd hh:mm:ss ssdd INFO CHANGE\_PWFSESSION ID:nnPOOL:poolnameSUBPOOL:subpoolnameACD GROUP:groupnameDEST ACD GROUP:groupnameNEW PWF:nnJOURNAL FILE ACTIVE:answrtxt

### Example

An example of log report RMAN122 follows:

RMAN122 AUG23 09:45:15 1234INFO CHANGE\_PWFSESSION ID:3POOL:POOL1SUBPOOL:SUBPOOL1ACD GROUP:ACDGRP1DEST ACD GROUP:ACDGRP2NEW PWF:25JOURNAL FILE ACTIVE:YES

The following table describes each field in the log report:

| Field                  | Value                  | Description  |
|------------------------|------------------------|--|
| INFO CHANGE_PWF        | Constant               | Indicates that the DSP issued a CHANGE PWF command   |
| SESSION ID             | 0-14                   | Specifies the number of the sessions in use  |
| POOL                   | Up to 16<br>characters | Identifies the pool of ACD groups that associates<br>with the data stream. The ACD groups can only<br>associate with one data stream at a given time. Only<br>one pool of ACD groups can associate with each<br>data stream at a given time. |
| SUBPOOL                | Up to 16<br>characters | Identifies the subpool in a pool of ACD groups.<br>Subpools protect switch and ACD customer<br>security. One subpool normally cotains all ACD<br>groups that belong to an ACD customer.  |
| ACD GROUP              | Up to 16<br>characters | Identifies the ACD group in which the DISPDIGS value changes   |
| DEST ACD GROUP         | Up to 16<br>characters | Identifies the ACD group that associates with the new PWF  |
| NEW PWF                | 0-31                   | Indicates the new PWF  |
| JOURNAL FILE<br>ACTIVE | YES or NO              | Indicates if the journal file is active at the time of the RMAN command  |

## Action

There is no action required.

# **Associated OM registers**

There are no associated OM registers.

### **RMAN123**

#### Explanation

The Automatic Call Distribution (ACD) Remote Load Management (RMAN) subsystem generates log report RMAN123. The ACD RMAN subsystem is a part of the ACD Management Information System. This report appears when the down stream processor (DSP) issues a resource index (CHANGE RI) command.

The ACD RMAN subsystem allows a DSP to issue ACD load management commands from a remote site.

#### Format

The log report format for RMAN123 is as follows:

RMAN123 mmmdd hh:mm:ss ssdd INFO CHANGE\_RISESSION ID:nnPOOL:poolnameSUBPOOL:subpoolnameACD GROUP:groupnameDEST ACD GROUP:groupnameNEW RI:nnnJOURNAL FILE ACTIVE:answrtxt

### Example

An example of log report RMAN123 follows:

RMAN123 AUG23 09:45:15 1234 INFO CHANGE\_RISESSION ID:3POOL:POOL1SUBPOOL:SUBPOOL1ACD GROUP:ACDGRP1DEST ACD GROUP:ACDGRP2NEW RI:20JOURNAL FILE ACTIVE:YES

The following table describes each field in the log report:

| Field               | Value                  | Description   |  |
|---------------------|------------------------|---|--|
| CHANGE_RI           | Constant               | Indicates that the DSP issued a CHANGE RI command   |  |
| SESSION ID          | 0-14                   | Specifies the number of the session in use  |  |
| POOL                | Up to 16<br>characters | Identifies the pool of ACD groups that<br>associates with the data stream. The ACD<br>groups can only associate with one data<br>stream at a given time. Only one pool of<br>ACD groups can associate with each data<br>stream at a given time. |  |
| SUBPOOL             | Up to 16<br>characters | Identifies the subpool in a pool of ACD groups. Subpools protect switch and ACD customer security. One subpool normally contains all ACD groups that belong to an ACD customer.   |  |
| ACD GROUP           | Up to 16<br>characters | Identifies the ACD group in which the<br>DISPDIGS value changes   |  |
| DEST ACD GROUP      | Up to 16<br>characters | Indicates the non-DMS ACD group resource index.   |  |
| NEW RI              | 0-255                  | Indicates the new route index value   |  |
| JOURNAL FILE ACTIVE | YES, NO                | Indicates if the journal file is active at the time of the remote load management command.  |  |

# Action

There is no action required.

# Associated OM registers

There are no associated OM registers.

### **RMAN139**

#### Explanation

The Automatic Call Distribution (ACD) Management Information System (MIS) enables Remote Load Management (RLM) commands to control data queued again for ACD groups. The system generates this log when the down stream processor (DSP) issues the Remote Load Management command, CHANGE RENQTOUT.

### Format

The format for log report RMAN139 follows:

RMAN139 mmmdd hh:mm:ss ssdd INFO CHANGE RENQTOUT SESSION ID: <range 0–14> POOL: <16 character vector> SUBPOOL: <16 character vector> ACD GROUP: <16 character vector> NEW RENQ TIME: <range 0–1800> JOURNAL FILE ACTIVE: <either YES or NO>

### Example

An example of log report RMAN139 follows:

RMAN139 JUL25 22:45:15 1234 INFO CHANGE\_RENQTOUT
 SESSION ID: 2
 POOL: POOL1
 SUBPOOL: SUBPOOL1
 ACD GROUP: ABCGRP1
 NOW RENQ TIME: 20
 JOURNAL FILE ACTIVE: YES

The following table explains each of the fields in the log report:

| Field               | Value             | Description  |
|---------------------|-------------------|--|
| SESSION ID          | 0-14 digits       | Represents the correct number of the session in use  |
| POOL                | 1-16 alphanumeric | ACD group partitioning between data<br>streams for the ACD MIS. ACD groups can<br>belong to only one pool at a time. You can<br>associate a pool with only one data stream<br>at a time. You can associate only one pool<br>of groups with each data stream at a time.<br>The DSP must specify the pool of ACD<br>groups that you plan to associate with the<br>data stream. |
| SUBPOOL             | 1-16 alphanumeric | Method of insuring switch and ACD<br>customer security. You define subpools of<br>ACD groups within a pool of ACD groups.<br>Normally, you group all ACD groups<br>belonging to an ACD customer within one<br>subpool.   |
| ACD GROUP           | 1-16 alphanumeric | The ACD group for the changed RENQTOUT timer   |
| NEW RENQ TIME       | 0-1800 s          | Specifies the index in table specified by field NEW RENQROUTE TABLE  |
| JOURNAL FILE ACTIVE | YES or NO         | Indicates the activation status of the journal file at the time of the Remote Load Management command  |

## Action

None

# Associated OM registers

None

## **Additional information**

### RMAN140

#### Explanation

The Automatic Call Distribution (ACD) Management Information System (MIS) enables Remote Load Management (RLM) commands to control re-enqueue data for ACD groups. The system generates this log when the down stream processor (DSP) issues the RLM command, CHANGE RENQRTE.

#### Format

The format for log report RMAN140 follows:

RMAN140 mmmdd hh:mm:ss ssdd INFO CHANGE RENQRTE SESSION ID: <range 0–14> POOL: <16 character vector> SUBPOOL: <16 character vector> ACD GROUP: <16 character vector> NEW RENQROUTE INDEX: <range 0–1023> NEW RENQROUTE TABLE: <6 character vector> JOURNAL FILE ACTIVE: <either YES or NO>

### Example

An example of log report RMAN140 follows:

RMAN140 JUL25 22:45:15 1234 INFO CHANGE\_RENQRTE SESSION ID: 2 POOL: POOL1 SUBPOOL: SUBPOOL1 ACD GROUP: ABCGRP1 NEW RENQROUTE INDEX: 99 NEW RENQROUTE TABLE: IBNRTE JOURNAL FILE ACTIVE: YES

The following table explains each of the fields in the log report:

| Field               | Value   | Description   |  |
|---------------------|---|---|--|
| SESSION ID          | 0-14 digits   | Correct number of the session in use  |  |
| POOL                | 1-16 alphanumeric   | ACD group partitioning between data streams<br>for the ACD MIS. ACD groups can belong to<br>only one pool at a time. You can associate a<br>pool with only one data stream at a time. You<br>can associate only one pool of groups with<br>each data stream at a time. The DSP must<br>specify the pool of ACD groups associated<br>with the data stream. |  |
| SUBPOOL             | 1-16 alphanumeric Method of insuring switch and ACD cus<br>security. Subpools of ACD groups resid<br>within a pool of ACD groups. Normally,<br>ACD groups belonging to an ACD custo<br>belong to one subpool. |   |  |
| ACD GROUP           | 1-16 alphanumeric   | ACD group of the changed RENQTOUT timer   |  |
| NEW RENQROUTE INDEX | 0-1023 numeric  | Specifies the index in table specified by the NEW RENQROUTE TABLE field   |  |
| NEW RENQROUTE TABLE | IBNRTE, OFRT  | Specifies the table for selecting the re-enqueue route  |  |
| JOURNAL FILE ACTIVE | YES or NO   | Indicates the activation status of the journal file at the time of the Remote Load Management command   |  |

# Action

None

## **Associated OM registers**

None

## **Additional information**

#### RMAN141

#### Explanation

The Automatic Call Distribution (ACD) Management Information System (MIS) enables Remote Load Management (RLM) commands to control re-enqueue data for ACD groups. The system generates this log when the down stream processor (DSP) issues the Remote Load Management command, CHANGE RENQAUD.

### Format

The format for log report RMAN141 follows:

RMAN141 mmmdd hh:mm:ss ssdd INFO CHANGE\_RENQAUD SESSION ID: <range 0–14> POOL: <16 character vector> SUBPOOL: <16 character vector> ACD GROUP: <16 character vector> NEW RENQ AUDIO GROUP: <range 0–511> JOURNAL FILE ACTIVE: <either YES or NO>

### Example

An example of log report RMAN141 follows:

RMAN141 JUL25 22:45:15 1234 INFO CHANGE\_RENQAUD SESSION ID: 2 POOL: POOL1 SUBPOOL: SUBPOOL1 ACD GROUP: ABCGRP1 NOW RENQ AUDIO GROUP: AUDIO1 JOURNAL FILE ACTIVE: YES

The following table explains each of the fields in the log report:

| Field                | Value             | Description   |
|----------------------|-------------------|---|
| SESSION ID           | 0-14 digits       | Represents the actual number of the session in use  |
| POOL                 | 1-16 alphanumeric | ACD group partitioning between data<br>streams for the ACD MIS. ACD groups can<br>belong to only one pool at a time. You can<br>associate a pool with only one data stream<br>at a time. You can associate only one pool<br>of groups with each data stream at a time.<br>The DSP must specify the pool of ACD<br>groups associated with the data stream. |
| SUBPOOL              | 1-16 alphanumeric | Method of insuring switch and ACD security.<br>Subpools of ACD groups are defined within<br>a pool of ACD groups. Normally, all ACD<br>groups belonging to an ACD customer are<br>grouped within one subpool.   |
| ACD GROUP            | 1-16 alphanumeric | The ACD group for which the RENQTOUT timer is changing  |
| NEW RENQ AUDIO GROUP | 0-511 numeric     | Specifies the new audio group for the ACD group   |
| JOURNAL FILE ACTIVE  | YES or NO         | Indicates the activation status of the journal file at the time of the Remote Load Management command   |

## Action

None

## **Associated OM registers**

None

## **Additional information**

#### RMSG600

#### Explanation

The system generates an RMSG600 log report each time rapid messaging (RM) places a basic rate interface (BRI) logical terminal identifier (LTID) in a RM temporary out-of-service state. RM places the BRI LTID in a RM temporary out-of-service state under either of the following conditions:

- The rate of incoming Q.931 messages from the BRI terminal or terminals associated with the BRI LTID exceeds the administrable threshold twice in one RM measurement interval.
- The rate of incoming Q.931 messages from the BRI terminal or terminals associated with the BRI LTID exceeds the administrable threshold once in each of two consecutive RM measurement intervals.

The administrable threshold is specified by the overload messaging limit (OML) parameter on an office-wide basis or for each LTID.

When RM places the BRI LTID out-of-service, the system does not permit new calls to or from the BRI terminal or terminals associated with the LTID. However, the out-of-service condition does not affect the following calls:

- calls already in the active state (talking state)
- calls already in the process of origination or termination

When RM places a BRI LTID in a RM temporary out-of-service state, the BRI LTID automatically returns to RM in-service at the end of the next full RM measurement interval.

#### Format

The format for log report RMSG600 follows:

RTP2 RMSG600 JAN19 14:31:07 1805 INFO BRI LTID Temp Out-of-Service

LTID: <ltid> LEN: <len>

#### Example

An example of log report RMSG600 follows:

RTP2 RMSG600 JAN19 14:31:07 1805 INFO BRI LTID Temp Outof-Service LTID: ISDN 25 LEN: Host 01 1 07 03

The following table explains each of the fields in the log report:

| Field | Value                           | Description   |
|-------|---------------------------------|---|
| LTID  | 3-13 alphanumeric<br>characters | This mandatory value is a two-part logical<br>terminal identifier (LTID) expressed as a<br>combination of logical terminal group<br>(LTGRP) and logical terminal number<br>(LTNUM) within the group. The first part of<br>the value is a 1- to 8-alphanumeric character<br>LTGRP name. The second part is an<br>LTNUM (1-1023). |
| LEN   | 15 alphanumeric<br>characters   | This mandatory value is the line equipment<br>number (LEN) to which the LTID is attached.<br>The value of the LEN is in standard<br>DMS-100 LEN format.   |

## Action

The RMSG600 log report informs operating company personnel that new call processing for the BRI LTID is temporarily inhibited until the BRI LTID automatically returns to RM in-service. The BRI LTID automatically returns to RM in-service at the end of the next full RM measurement interval. However, operating company personnel can return the BRI LTID to RM in-service earlier by executing a return-to-service (RTS) command at the MAP (maintenance and administration position) terminal.

# **Associated OM registers**

Register RMBRIOOS of OM group RMSGOMGP is an office-wide operational measurement that counts the number of times RM places a BRI LTID out-of-service.

## **Additional information**

### RMSG601

#### Explanation

The system generates an RMSG601 log report each time rapid messaging (RM) places a basic rate interface (BRI) logical terminal identifier (LTID) in a RM permanent out-of-service state. RM places a BRI LTID in a permanent out-of-service state when the following condition occurs:

• The rate of incoming Q.931 messages from the BRI terminal or terminals associated with the LTID satisfies the conditions for RM temporary out-of-service for the 10th time in a 1/2-hr period.

When RM places the BRI LTID out-of-service, the system does not permit new calls to or from the BRI terminal or terminals associated with the LTID. However, the following calls are unaffected:

- calls already in the active state (talking state)
- calls already in the process of origination or termination

When RM places a BRI LTID in a RM permanent out-of-service state, the BRI LTID does not automatically return to RM in-service. Operating company personnel must return the BRI LTID to RM in-service by executing a return-to-service (RTS) command at the MAP (maintenance and administration position) terminal.

#### Format

The format for log report RMSG601 follows:

RTP2 RMSG601 JAN19 14:31:07 1805 INFO BRI LTID Perm Out-of-Service

LTID: <ltid> LEN: <len>

#### Example

An example of log report RMSG601 follows:

```
RTP2 RMSG601 JAN19 14:31:07 1805 INFO BRI LTID Perm Out-
of-Service
LTID: ISDN 25
LEN: HOST 01 1 07 03
```

The following table explains each of the fields in the log report:

| Field | Value                         | Description  |
|-------|-------------------------------|--|
| LTID  | 3-13 alphanumeric characters  | This mandatory value is a two-part logical<br>terminal identifier (LTID) expressed as a<br>combination of logical terminal group<br>(LTGRP) and logical terminal number<br>(LTNUM) within the group. |
|       |                               | The first part of the value is a 1- to<br>8-alphanumeric character LTGRP name.<br>The second part is an LTNUM (1-1023)<br>within the group.  |
| LEN   | 15 alphanumeric<br>characters | This mandatory value is the line equipment<br>number (LEN) to which the LTID is attached.<br>The value of the LEN is in the standard<br>DMS-100 LEN format.  |

### Action

The RMSG601 log report informs the operating company personnel that new call processing for the BRI LTID is permanently inhibited. To make new call processing available to the BRI terminal or terminals associated with the LTID, operating company personnel must execute a return-to-service (RTS) command at the MAP terminal.

The operating company determines if the LTID can return to service, depending on both the LTID and the policies and procedures of the operating company.

## **Associated OM registers**

Register RMBRIOOS of OM group RMSGOMGP is an office-wide operational measurement that counts the number of times RM places a BRI LTID out-of-service.

## Additional information

### RMSG602

### Explanation

The system generates an RMSG602 log report when rapid messaging (RM) returns a basic rate interface (BRI) logical terminal identifier (LTID) to RM in-service from either a RM temporary or RM permanent out-of-service state. The From field in the body of the log report indicates the existing RM out-of-service state (temporary or permanent) before the BRI LTID is returned to RM in-service.

When RM places a BRI LTID in a temporary out-of-service state, RM automatically returns the BRI LTID to RM in-service at the end of the next full RM measurement interval without any action from the operating company personnel.

When RM places a BRI LTID in a permanent out-of-service state, the BRI LTID remains RM out-of-service until the operating company personnel returns the BRI LTID to RM in-service by executing a return-to-service (RTS) command at the MAP (maintenance and administration position) terminal.

When RM returns a BRI LTID to RM in-service from an RM out-of-service state, the DMS-100 switch updates the feature indicators of the BRI terminal or terminals associated with the LTID, and then permits new calls to or from the terminal or terminals.

### Format

The format for log report RMSG602 follows:

RTP2 RMSG602 JAN19 14:31:07 1805 INFO BRI LTID In-Service LTID: <ltid> LEN: <len> From: <previous\_RM\_state>

### Example

Examples of log report RMSG602 follow:

```
RTP2 RMSG602 JAN19 14:31:07 1802 INFO BRI LTID In-Service
LTID: ISDN 25
LEN: HOST 01 1 07 03
From: Temp Out-of-Service
RTP2 RMSG602 JAN19 14:31:07 1802 INFO BRI LTID In-Service
LTID: ISDN 25
LEN: HOST 01 1 07 03
From: Perm Out-of-Service
```

The following table explains each of the fields in the log report:

| Field | Value                         | Description  |
|-------|-------------------------------|--|
| LTID  | 3-13 alphanumeric characters  | This mandatory value is a two-part logical<br>terminal identifier (LTID) expressed as a<br>combination of logical terminal group<br>(LTGRP) and logical terminal number<br>(LTNUM) within the group.                 |
|       |                               | The first part of the value is a 1- to<br>8-alphanumeric character LTGRP group<br>name. The second part is an LTNUM<br>(1-1023).   |
| LEN   | 15 alphanumeric characters    | This mandatory value is the line equipment<br>number (LEN) to which the LTID is attached.<br>This value is in the standard DMS-100 LEN<br>format.  |
| From  | 19 alphanumeric<br>characters | This mandatory value indicates the existing<br>temporary or permanent out-of-service state<br>before the BRI LTID is returned to<br>in-service. The values are either Temp<br>Out-of-Service or Perm Out-of-Service. |

## Action

No action is required. This log report is for informational purposes only.

### **Associated OM registers**

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## RMSG602 (end)

## Additional information

### RMSG603

### Explanation

The system generates an RMSG603 log report for logical terminal identifiers (LTID) with an overload condition treatment (OCT) parameter value of REPONLY (report only). For these LTIDs, the system generates this log report when rapid messaging (RM) detects either of the following conditions:

- The rate of incoming Q.931 messages from the basic rate interface (BRI) terminal or terminals associated with the LTID exceeds the administrable threshold twice in one RM measurement interval.
- The rate of incoming Q.931 messages from the BRI terminal or terminals associated with the LTID exceeds the administrable threshold once in each of two consecutive RM measurement intervals.

### Format

The format for log report RMSG603 follows:

RTP2 RMSG603 JAN19 14:31:07 1805 INFO BRI LTID Overload LTID: <ltid> LEN: <len>

### Example

An example of log report RMSG603 follows:

RTP2 RMSG603 JAN19 14:31:07 1805 INFO BRI LTID Overload LTID: IDSN 25 LEN: HOST 01 1 07 03

### RMSG603 (end)

## **Field descriptions**

The following table explains each of the fields in the log report:

| Field | Value                         | Description  |
|-------|-------------------------------|--|
| LTID  | 3-13 alphanumeric characters  | This mandatory value is a two-part logical<br>terminal identifier (LTID) expressed as a<br>combination of logical terminal group<br>(LTGRP) and logical terminal number<br>(LTNUM) within the group. |
|       |                               | The first part of the value is a 1- to<br>8-alphanumeric character LTGRP name.<br>The second part is an LTNUM (1-1023).  |
| LEN   | 15 alphanumeric<br>characters | This mandatory value is the line equipment<br>number (LEN) to which the LTID is attached.<br>This value is in the standard DMS-100 LEN<br>format.  |

### Action

Each RMSG603 log report indicates a BRI terminal can be overloading the call processing resources of the DMS-100 switch. Operating company personnel can monitor RMSG603 log reports to recognize potentially overloading BRI terminals. The policies and procedures of the operating company determine whether further response is required.

### **Associated OM registers**

None

### **Additional information**

## Explanation

The Remote Operation (RO) subsystem generates log report RO101 when a remote logon attempt occurs.

The associated operational mesurement (OM) group is ROAPPL. The associated OM registers are successful logons (ROAPLOGA) and failed logons (ROAPFLOG).

### Format

The log report format for RO101 is as follows:

RO101 mmmdd hh:mm:ss ssdd INFO SESSION LOGON SESSION nn desctxt appltxt

### Example

An example of log report RO101 follows:

```
RO101 MAR17 17:10:40 1089 INFO SESSION LOGON
Session 1
Logon Successful
0: Nil Parameter
FT
```

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                 | Value    | Description  |
|-----------------------|----------|--|
| INFO SESSION<br>LOGON | Constant | Indicates a remote logon attempt occurred  |
| SESSION               | 0-15     | Indicates the session that received the logon request. (Value set by office parameter NOS_QUANTITY_OF_SVCS). |

## RO101 (continued)

#### (Sheet 2 of 2)

| Field   | Value            | Description  |
|---------|------------------|--|
| desctxt | Logon Successful | If the logon failed, provides the reason for the failure. The system displays a return code if necessary. Refer to Table LOGON FAILURE REASONS at the end of this log report |
| appltxt | Symbolic text    | The name of the application that requests the logon, if logon is not successful. Refer to Table LOGON FAILURE REASONS at the end of this log report.                         |

# Action

There is no action required.

### Logon failure reasons (Sheet 1 of 2)

| Reasons                          | Application | RC                         | Explanation  |
|----------------------------------|-------------|----------------------------|--|
| FLAG CREATION<br>FAILED          | none        | flag system return code    | The system generates this log when RO Service fails to create flags.   |
| OUTPUT FILE<br>CREATION FAILED   | none        | file system return code    | The system generates this log when RO Service fails to create an output file for the DOWN task.  |
| CANNOT DE CODE<br>LOGON RO       | none        | none                       | The system generates this log when RO Service fails to decode the incoming remote LOGON request.   |
| LOGON DURING<br>INVALID STATE    | none        | session state              | The system generates this log when<br>RO Service receives a remote logon<br>and is in an unknown state. This<br>condition does not occur normally.                       |
| DUPLICATE LOGON                  | none        | session state              | The system generates this log when<br>RO service receives a remote LOGON<br>request when already logged on.  |
| APPLICATION ID<br>NOT RECOGNIZED | none        | received<br>application id | The system generates this log when<br>RO Service receives a remote<br>LOGON request. This request<br>contains an application identifier that<br>RO Service does not use. |

# RO101 (end)

#### Logon failure reasons (Sheet 2 of 2)

| Reasons                       | Application | RC                                   | Explanation  |
|-------------------------------|-------------|--------------------------------------|--|
| NO SESSIONS<br>AVAILABLE      | present     | number of session<br>already running | The system generates this log when<br>RO Service receives a remote<br>LOGON request for an application.<br>This application already runs the<br>maximum number of sessions<br>allowed. |
| APPLICATION INIT.<br>FAILED   | present     | none                                 | The system generates this log when a remote LOGON requests an application that does not initialize.  |
| STORE<br>ALLOCATION<br>FAILED | present     | store return code                    | The system generates this log when<br>RO Service fails an attempt to allocate<br>store. The RO Sevices allocates store<br>for RO Service input and output data<br>buffers.             |
| UP/DOWN TASK<br>SYNCH FAILED  | present     | none                                 | The system generates this log when RO Service UP task fails to notify the down task that corresponds.  |
| LOGON<br>SUCCESSFUL           | present     | none                                 | The system generates this log after<br>RO Service performs a session logon<br>and sends a RETURN RESULT to the<br>remote system.   |

## **Associated OM registers**

There are no associated OM registers.

## **Additional information**

There is no additional information.

## RO102

## Explanation

The Remote Operation (RO) subsystem generates log report RO102 when a remote logoff attempt occurs.

### Format

The log report format for RO102 follows:

.RO102 mmmdd hh:mm:ss ssdd INFO SESSION LOGOFF SESSION nn desctxt appltxt

### Example

An example of log report RO102 follows:

RO102 MAR 17 16:48:50 4526 INFO SESSION LOGOFF
SESSION 6
Logoff Successful
0 : Nil Parameter
Ptae Appl

# **Field descriptions**

The following table describes each field in the log report:

| Field                  | Value             | Description   |
|------------------------|-------------------|---|
| INFO SESSION<br>LOGOFF | Constant          | Indicates the system attempted a remote logoff  |
| SESSION                | 0-15              | Indicates the session that received the logoff request. (Value set by office parameter "NOS_QUANTITY_OF_SVCS").   |
| desctxt                | Logoff Successful | If the logoff failed, provides the reason for the failure. The system displays a return code if necessary. Refer to Table LOGOFF FAILURE REASONS at the end of this log report. |
| appltxt                | Symbolic text     | The name of the application that requested the logoff if logoff failed. Refer to Table LOGOFF FAILURE REASONS at the end of this log report.                                    |

## Action

There is no action required.

#### Logoff failure reasons

| Reason                         | Application | RC            | Explanation   |
|--------------------------------|-------------|---------------|---|
| LOGOFF DURING<br>INVALID STATE | none        | session state | The system generates this log when RO service is not in a LOGON state and receives a remote LOGOFF request. |
| APPL.<br>TERMINATION<br>FAILED | present     | none          | The system generates this log when the application fails to terminate during the logoff process.            |
| LOGOFF<br>SUCCESSFUL           | present     | none          | The system generates this log when RO service logs off and sends a LOGOFF RE to the remote system.          |

# Associated OM registers

There are no associated OM registers.

## **Additional information**

There is no additional information.

### RO103

#### Explanation

The Remote Operation (RO) subsystem log generates log report RO103. This report appears when the DMS cannot encode or decode (translate) a remote operation.

The OM group that associates with this log is ROAPPL. The registers that increase are ROAPIC (encoding error) and ROAPOG (decoding error).

### Format

The log report format for RO103 is as follows:

RO103 mmmdd hh:mm:ss ssdd INFO TRANS ERROR SESSION nn desctxt rctxt appltxt

### Example

An example of log report RO103 follows:

RO103 MAR17 17:10:02 0786 INFO TRANS ERROR SESSION 9 OG OP ID NOT FOUND 69: OPERATION ID FT

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field       | Value         | Description   |
|-------------|---------------|---|
| TRANS ERROR | Constant      | Indicates that the DMS cannot translate (encode or decode) a remote operation                   |
| SESSION nn  | 0-15          | Indicates the session that had the error. Value set by office parameter NOS_QUANTITY_OF_SVCS.   |
| desctxt     | Symbolic text | Text description that states the type of error.<br>Refer to Table 1, Translation error reasons. |

# RO103 (continued)

#### (Sheet 2 of 2)

| Field   | Value         | Description  |
|---------|---------------|--|
| rctxt   | Symbolic text | The operation identifier. Refer to Table 1, Translation error reasons.                                   |
| appltxt | Symbolic text | The name of the application that owns the remote operation. Refer to Table 1, Translation error reasons. |

# Action

There is no action required.

#### Translation error reasons (Sheet 1 of 2)

| Reason                          | Application                  | RC         | Explanation   |
|---------------------------------|------------------------------|------------|---|
| DECODE HEADER<br>FAILED         | present<br>session<br>logged | if none    | The system generates this log when RO service receives a remote operation, but cannot decode the header data.   |
| IC OPDU TYPE NOT<br>RECOGNIZED  | present<br>session<br>logged | if opdu id | The system generates this log when RO<br>service receives a remote operation. The<br>opdu id of this remote operation is not equal to<br>INVOKE, RETURN RESULT, RETURN<br>ERROR, or REJECT.     |
| IC OP ID NOT<br>RECOGNIZED      | present                      | op id      | The system generates this log when RO<br>service receives an INVOKE remote<br>operation. The RO sevices does not<br>recognize the op id of this INVOKE remote<br>operation.                     |
| IC RO NOT IN<br>CORR. TABLE     | present                      | invoke id  | The system generates this log when RO<br>service receives a RETURN RESULT,<br>RETURN ERROR or REJECT RO. These RO<br>services cannot correlate with any INVOKE<br>that the system sent earlier. |
| DECODE RE<br>FAILED             | present                      | op id      | The system generates this log when RO service fails to decode an incoming RETURN ERROR remote operation.  |
| NO DECODE<br>PROCEDURE<br>FOUND | present                      | op id      | The system generates this log when RO service receives a remote operation and does not have a decode procedure to process.  |

# RO103 (end)

### Translation error reasons (Sheet 2 of 2)

| Reason                      | Application | RC        | Explanation   |
|-----------------------------|-------------|-----------|---|
| DECODE FAILED               | present     | op id     | The system generates this log when RO service fails to decode the received remote operation with the decode procedure that the application provides.  |
| OG OPDU ID NOT<br>FOUND     | op id       | none      | The system generates this log when the application sends data to remote operation service for encoding. The RO service encodes the data with opdu id that RO service does not recognize.  |
| OG OP ID NOT<br>FOUND       | present     | op id     | The system generates this log when the application sends data to RO service for encoding. The RO service encodes the data with operation id that RO service does not recognize.   |
| OG RO NOT IN<br>CORR. TABLE | present     | invoke id | The system generates this log when the<br>application sends RETURN RESULT,<br>RETURN ERROR or REJECT data to RO<br>service for encoding. The RO services<br>encodes the data with an invoke id that does<br>not correlate with earlier INVOKE remote<br>operations. |
| ENCODE PROC<br>NOT FOUND    | present     | op id     | The system generates this log when the application sends data to RO service for encoding. The RO service cannot locate the encoding procedure required to process the data that the applications provides.  |
| ENCODE FAILED               | present     | op id     | The system generates this log when RO service fails an attempt to encode data with the procedure that the application provides.   |
| ENCODE HEADER<br>FAILED     | present     | op id     | The system generates this log when remote operation service fails an attempt to encode the header data.   |

# **Associated OM registers**

There are no associated OM registers.

# **Additional information**

There is no additional information.

### Explanation

The Remote Operation (RO) subsystem generates log report RO104.

This report appears when the following services use a method that is not normal to terminate a session:

- the remote system
- an application
- remote operation service

The operational measurement (OM) group that associates with this log is ROMISC. The associated OM register is ROMTERM.

## Format

The log report format for RO104 is as follows:

RO104 mmmdd hh:mm:ss ssdd INFO ABNORMAL TERMINATION SESSION nn desctxt appltxt

## Example

An example of log report RO104 follows:

RO104 MAR17 17:10:03 0988 INFO ABNORMAL TERMINATION SESSION 9 Application Terminated FT

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                        | Value    | Description  |
|------------------------------|----------|--|
| INFO ABNORMAL<br>TERMINATION | Constant | Indicates that the remote system used a method that is not normal to terminate a session   |
| SESSION nn                   | 0-15     | Indicates the terminated session. (Value set by office parameter NOS_QUANTITY_<br>OF_SVCS. |

### RO104 (end)

(Sheet 2 of 2)

| Field   | Value         | Description  |
|---------|---------------|--|
| desctxt | Symbolic text | Description shown in text that states the<br>service initiated the termination, and the<br>reason for the termination, if known. Refer to<br>Table 1, Termination reasons. |
| appltxt | Symbolic text | The application that uses this session, if known. Refer to Table 1, Termination reasons.   |

# Action

There is no action required.

#### **Termination reasons**

| Reason                        | Application          | Explanation   |
|-------------------------------|----------------------|---|
| LINK DROPPED                  | present if logged on | The system generates this log when the remote operation service detects a link failure or termination                   |
| APPLICATION<br>TERMINATED     | present              | The system generates this log when the application initiates a session termination                                      |
| ROS CORRELATION<br>TABLE FULL | present              | The system generates this log when RO service finds the correlation table full as a result of many outstanding invokes. |

# **Associated OM registers**

There are no associated OM registers.

### **Additional information**

There is no additional information.

### **Explanation**

The Remote Operation (RO) subsystem generates log report RO105. This report appears when the remote operation service audit detects an invalid state. A state is invalid if the state of the data does not match the state of the session. This condition is a severe software error and must not occur often. The audit task terminates and cleans up the session.

### Format

The log report format for RO105 is as follows:

RO105 mmmdd hh:mm:ss ssdd INFO INVALID STATE SESSION nn desctxt

### Example

An example of log report format for RO105 follows:

RO105 MAR17 18:40:25 7649 INFO INVALID STATE SESSION 12 TOO LONG IN PENDING STATE

## **Field descriptions**

The following table describes each field in the log report:

| Field              | Value         | Description  |
|--------------------|---------------|--|
| INFO INVALID STATE | Constant      | Indicates that the remote operation service audit detected a state that is not valid   |
| SESSION            | 0-15          | Indicates the data of the session that does not match the data of the state. Value set by office parameter NOS_QUANTITY_OF_SVCS. |
| desctxt            | Symbolic text | Indicates description of the state difference shown in text. Refer to Invalid states table.                                      |

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RO105 (end)

### Action

Contact the next level of maintenance.

| State                        | Explanation  |
|------------------------------|--|
| INVALID IDLE STATE           | An idle session has data that is not compatible with the state of the data           |
| INVALID LOGOFF<br>STATE      | A logged-off session has data that is not compatible with the state of the data      |
| TOO LONG IN<br>PENDING STATE | The system detects a session in a LOGON PENDING or LOGOFF PENDING state for too long |

### **Associated OM registers**

There are no associated OM registers.

## **Additional information**

There is no additional information.

### **RONI100**

### **Explanation**

The Remote Operator Number Identification (RONI) subsystem generates log report RONI100. The subsystem generates this report when the subsystem encounters a problem during a remote central automatic message accounting (RCAMA) call attempt. This problem forces the RCAMA trunk to system busy (SysB).

### Format

The log report format for RONI100 is as follows:

RONI100 mmmdd hh:mm:ss ssdd SYSB RONI TROUBLE LOG CKT trkid CALL\_ID = callid VOICE TRUNK = CKT trkid DATA TRUNK = CKT trkid TROUBLE CODE = trbtxt

### Example

An example of log report RONI100 follows:

RONI100 APR01 12:00:00 2112 SYSB RONI TROUBLE LOG CKT OGVLON2301TV 106 CALL\_ID = 131604 VOICE TRUNK = CKT OGVLON2301TV 106 DATA TRUNK = CKT OGVLON2301TV 156 TROUBLE CODE = NO\_ZIP\_TONES\_DETECTED

## **Field descriptions**

The following table describes each field in the log report:

#### (Sheet 1 of 2)

| Field                    | Value         | Description   |
|--------------------------|---------------|---|
| SYSB RONI TROUBLE<br>LOG | Constant      | Indicates that the system encounters trouble during RCAMA call attempt. |
| СКТ                      | Symbolic text | Provides equipment identification for suspect trunk equipment.          |
| CALL_ID                  | Symbolic text | Identifies RCAMA call that generates log report.                        |

### RONI100 (end)

(Sheet 2 of 2)

| Field        | Value                        | Description  |
|--------------|------------------------------|--|
| VOICE TRUNK  | Symbolic text                | Provides equipment identification for voice trunk equipment in RONI circuit        |
| DATA TRUNK   | Symbolic text                | Provides equipment identification for data trunk equipment in RONI circuit         |
| TROUBLE CODE | CAMA_RELEASE_<br>_TIMEOUT    | Indicates originating toll office fails to send good digits signal.                |
|              | FORCE_RELEASE_<br>_TIMEOUT   | Indicates originating toll office does not acknowledge RONI force release.         |
|              | NO_ZIP_TONES_<br>_DETECTED   | Indicates failure to detect 480 Hz ZIP tones from originating toll office.         |
|              | REORDER_TIMEOUT              | Indicates originating toll office does not send bad digits signal or reset signal. |
|              | SENDER_ATTACHED_<br>_TIMEOUT | Indicates originating toll office does not send attached signal.                   |

## Action

Perform diagnostics on suspect trunk. Refer to *Alarm Clearing and Performance Monitoring Procedures* for step-by-step maintenance procedures.

If diagnostics on the suspect trunk do not resolve the problem, perform diagnostics on voice trunk, data trunk, or the tone detector. Check the integrity of the voice and signaling paths. Check the originating toll office for failure.

If these actions are not effective, contact the next level of maintenance.

### **Associated OM registers**

There are no associated OM registers.

### **Additional information**

There is no additional information.

#### Explanation

This report is generated under the following conditions:

- by the SERVORD system when a LEN that is no longer RSDT compatible is deleted from table RSDTLINE
- each time an inconsistent tuple is found in table RSDTLINE on activation or deactivation
- when an RSDT line could not be returned to service
- when an RSDT command fails to complete
- when a line could not be deleted from table RSDTLINE
- an improper line state is encountered during deactivation

### Format

The format for log report RSDT100 follows:

```
*RSDT100 mmmdd hh:mm:ss ssdd INFO RSDTLINE UPDATE REPORT
LEN:len OLD STATE = preaudit state
ERROR:probtxt
ACTION:actxt
```

### Example

An example of log report RSDT100 follows:

FP503 SEP05 18:14:33 4827 INFO RSDTLINE UPDATE REPORT LEN: HOST 00 1 00 08 OLD STATE = IN\_EFFECT ERROR: INCOMPATIBLE LCC FOR RSDTLINE ACTION: RSDT LINE HAS BEEN DELETED BY SERVORD

### **Field descriptions**

The following table explains each of the fields in the log report:

#### (Sheet 1 of 2)

| Field                          | Value         | Description   |
|--------------------------------|---------------|---|
| INFO RSDTLINE UPDATE<br>REPORT | Constant      | Indicates that an error has been detected in the RSDTLINE table.          |
| LEN                            | Symbolic text | Indicates the line equipment number of the line with the error condition. |

## RSDT100 (continued)

(Sheet 2 of 2)

| Field     | Value            | Description  |
|-----------|------------------|--|
| OLD STATE | Character string | Indicates the LEN state in table RSDTLINE before the audit process (IN_EFFECT, ELIGIBLE, or UNDEFINED).  |
| ERROR     | Descriptive text | Indicates the error that has occurred. See the Problem/Action table at the end of this report.   |
| ACTION    | Descriptive text | Identifies what has been attempted by the<br>system to correct the error. If the system<br>cannot correct the error, it may be<br>necessary for the user to take action. See<br>the Problem/Action section at the end of this<br>report. |

# Action

Message text describes the process invoked to correct the error and whether or not it was successful. If the problem was not corrected, the next audit cycle may correct the inconsistency.

## **Associated OM registers**

Group RSDT registers DELACT and DELSO

### **Additional information**

The following table explains problems and actions in the log report:

#### (Sheet 1 of 3)

| Problem  | Action   |
|--|--|
| ERROR : LINE IS IN_EFFECT BUT NOT IN SERVICE<br>ACTION: RSDT LINE SHOULD BE RTS  | Action required. Check the state of the line and attempt to RTS if possible.   |
| ERROR : LEN MUST BE PRESENT IN TABLE<br>LNINVACTION: RSDT LINE HAS BEEN DELETED  | <i>No further action required.</i> LEN has been removed from RSDTLINE due to missing datafill in table LNINV.            |
| ERROR : LEN MUST BE PRESENT IN TABLE<br>LNINVACTION: RSDT LINE CANNOT BE DELETED | <i>Possible action required.</i> LEN has no LNINV tuple. Investigate datafill and report problem to Nortel if necessary. |

# RSDT100 (continued)

#### (Sheet 2 of 3)

| Problem  | Action  |
|--|---|
| ERROR : CARDCODE NOT SUPPORTEDACTION:<br>RSDT LINE HAS BEEN DELETED                          | <i>No further action required.</i> LEN has been removed from RSDTLINE due to an unsupported CARDCODE in table LNINV.                          |
| ERROR : INCOMPATIBLE LINE STATUS FOR RSDT<br>LINEACTION: RSDT LINE HAS BEEN DELETED          | <i>No further action required.</i> LEN has been removed from RSDTLINE due to an incompatible line status in LNINV.                            |
| ERROR : INCOMPATIBLE LINE STATUS FOR RSDT<br>LINEACTION: RSDT LINE CANNOT BE DELETED         | <i>Possible action required.</i> LEN has an unsupported line STATUS in LNINV. Investigate datafill and report problem to Nortel if necessary. |
| ERROR : INCOMPATIBLE LCC FOR RSDT LINEACTION:<br>RSDT LINE HAS BEEN DELETED                  | <i>No further action required.</i> LEN has been removed from RSDTLINE due to an unsupported LCC.  |
| ERROR : INCOMPATIBLE LCC FOR RSDT LINEACTION:<br>RSDT LINE CANNOT BE DELETED                 | <i>Possible action required.</i> LEN has an unsupported LCC. Investigate datafill and report problem to Nortel if necessary.                  |
| ERROR : INCOMPATIBLE OPTION FOR RSDT<br>LINEACTION: RSDT LINE HAS BEEN DELETED               | <i>No further action required.</i> LEN has been removed from RSDTLINE due to an incompatible option.  |
| ERROR : INCOMPATIBLE OPTION FOR RSDT<br>LINEACTION: RSDT LINE CANNOT BE DELETED              | <i>Possible action required</i> . LEN has an unsupported option. Investigate datafill and report problem to Nortel if necessary.              |
| ERROR : INCOMPATIBLE LCC FOR RSDT LINEACTION:<br>RSDT LINE HAS BEEN DELETED BY SERVORD       | <i>No further action required.</i> A<br>SERVORD NEW, CHG, or SWAP<br>command has deleted the LEN from<br>RSDTLINE.                            |
| ERROR : INCOMPATIBLE OPTION FOR RSDT<br>LINEACTION: RSDT LINE HAS BEEN DELETED BY<br>SERVORD | No further action required. A SERVORD command has deleted the LEN from RSDTLINE.  |

## RSDT100 (end)

## (Sheet 3 of 3)

| Problem  | Action   |
|--|--|
| ERROR : RSDT CI COMMAND DID NOT<br>COMPLETEACTION: CI CLEANUP WAS INVOKED                      | Possible action required. RSDT CI<br>clean-up was invoked because the<br>RSDT CI command failed to complete.<br>As a result, an RSDT audit is scheduled<br>to run in the next cycle. It is<br>recommended that an audit be initiated<br>immediately to correct any corruption<br>by entering the CI command RSDT<br>AUDIT. |
| ERROR : RSDT CHGDN COMMAND DELETED RSDT<br>DNACTION: RSDT DN MUST BE ADDED TO TABLE<br>DNROUTE | Action required. The RSDT DN must<br>be added to table DNROUTE. If RSDT<br>was active before the RSDT CHGDN<br>command was executed, then RSDT<br>must be reactivated by entering the CI<br>command RSDT ACT after the RSDT<br>DN has been entered.  |
| ERROR : IMPROPER LINE STATEACTION: RSDT<br>STATE CANNOT BE SET TO UNDEFINED                    | Action required. The RSDT<br>IN_EFFECT line cannot be set to<br>UNDEFINED because it is in an<br>improper line state. It is recommended<br>that the CI command RSDT AUDIT be<br>entered when the line becomes IDLE.  |
| ERROR : CARDCODE NOT SUPPORTEDACTION:<br>RSDT LINE CANNOT BE DELETED                           | <i>Possible action required.</i> LEN has an unsupported CARDCODE in LNINV. Investigate datafill and report problem to Nortel if necessary.   |

#### DMS-100 Family North American DMS-100

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