Carrier Voice over IP Fault Management Logs Reference Volume 4

ATTENTION
The Carrier Voice over IP Fault Management Log Reference document uses six volumes to describe logs that Carrier VoIP Portfolio components can generate. Not all components apply to every solution.

A log report is a message about important conditions or events related to Carrier VoIP portfolio component(s) performance. Log reports include, but are not restricted to, the following information:

- state and activity reports
- changes in state
- hardware or software errors
- test results
- other events or conditions that affect performance

Note: Both system actions and manual overrides can generate log reports.

What's new for (I)SN09?

There is no new content.

Log formats

The log formats shown in this volume display in either NT or SCC2 standard formats. Not every format that generates from the core appears in a log report. Consult the latest software load that accompanies your product for a complete list of log formats.

In this volume

Volume 4 contains the Carrier VoIP Multi-service Gateway 4000 logs. The table in this volume identifies and briefly describes the logs they use. Double-click on the log identifier to see the log details.

Multi-service Gateway 4000

The following table lists the individual logs that the Multi-service Gateway 4000 (MG 4000) generates.

MG 4000 logs (Sheet 1 of 8)

Log ID	Description
ATM300	AN LCD is raised on an SPM with ATM RMs
ATM501	The system's ATM signaling status has changed
ATM600	The ATM framework has gained a registered ATM address
ATM605	Indicates an ATM overload event
ATM800	Indicates a possible degradation of service related to ATM Performance Monitoring thresholds
CARR300	Indicates a carrier failure event is cleared
CARR501	Generates when a carrier state changes to central-side busy (CBsy) from system busy (SysB) or manual busy (ManB)
CARR510	Generates when a carrier state changes to manual busy (ManB) from in-service (InSv), system busy (SysB), or C-side busy (CBsy)
CARR511	Generates when a carrier state changes to system busy (SysB) from in-service (InSv) or central-side busy (CBsy)
CARR512	Generates when an OC-3 carrier changes to a central-side busy (CBsy) state from in-service (InSv), manual busy (ManB), or system busy (SysB)
CARR800	Generates when a TCA for a metered performance parameter is cleared
CARR801	Indicates that maintenance limits have been re-set to zero

MG 4000 logs (Sheet 2 of 8)

Log ID	Description
CARR810	Generates when a TCA event for a metered performance parameter occurs
CARR811	Generates when a TCA event for a non-metered performance parameter occurs
CCMT301	Indicates a core PVC segment fault
CCMT501	Indicates a connection link state change occurred between the XA-Core and an MG 4000
CCMT502	Indicates a communication link state change occurred between two MG 4000 nodes
CCMT601	Indicates a communication problem between the XA-Core and an MG 4000 has cleared
DPTM500	Indicates the state of DPT Terminals has changed to an IDL state from any other state
DPTM501	Indicates the state of DPT Terminals has changed to a SYSB state from any other state
DPTM502	Indicates the state of DPT Terminals has changed to a MANB state from any other state
DPTM503	Indicates the state of DPT Terminals has changed to a PMB state from any other state
DPTM504	Indicates the state of DPT Terminals has changed to an INB state from any other state
DPTM550	Generates when a DPT range with BICC (i.e., ISUPPLUS) signalling changes state
DPTM700	Indicates bulk downloading or dynamic update of DPT data failed
DPTM701	Indicates the DDM audit process cleared a DPT data mismatch between the core and the node
DPTM702	Indicates a call is rejected because the DPT SOC limit is reached
EXT102	Generates when a major alarm scan point (scannm) changes state

MG 4000 logs (Sheet 3 of 8)

Log ID	Description
EXT108	Generates when raising and clearing of EXT alarm HIGH_MEM_BLOCKING
IOAU112	Indicates changes in the system routine exercise (SREX) controller operation or schedule
NODE326	Indicates a hardware fault
NODE500	Indicates a System node state change
NODE600	Generates to notify a system recovery action
PRSM400	Indicates an SPM loadfile is datafilled in the PMLOADS table
SPM300	Generates when a device fault occurs
SPM301	Generates when the clock oscillator tuning range reaches 70% and again when it reaches 90%
SPM310	Receives performance data from the SPM as a result of the SPM-based automatic monitoring process
SPM311	Generates when a SoftWare Exception Report (SWER) occurs on an SPM
SPM312	Generates when a trap occurs on an SPM
SPM330	Indicates the two CEMs have either come into datasync or have gone out of datasync
SPM331	Generates when a device has a protection switch failure
SPM332	Generates when stability or screening for REX testing on an SPM fails
SPM333	Generates when the REX test on the SPM fails
SPM334	Generates when an alternate synchronization source is not available
SPM335	Generates when a device has a protection switch failure

MG 4000 logs (Sheet 4 of 8)

Log ID	Description
SPM336	Indicates the clock oscillator tuning range has reached 90% of the maximum range
SPM337	Indicates the SPM has entered Holdover
SPM338	Indicates the SPM has been in Holdover over 24 hours
SPM339	Indicates the clock oscillator tuning range has reached 70% of the maximum range
SPM340	Generates during a CM warm switch of activity
SPM341	Generates when an SRM in an MG 4000 enters a holdover condition
SPM342	Generates when an SRM in an MG 4000 enters a holdover condition for 24 hours
SPM344	Generates when an SRM in an MG 4000 experiences a loss of BITS redundancy alarm
SPM350	Generates to warn of a potential for resource exhaustion of one specific resource type on a specific SPM node
SPM352	Generates when an MG 4000 equipped with dual SRMs enters a Stratum 3E Holdover alarm status
SPM353	Indicates that both of the Sync RMs are in holdover for 24 hours, so the SPM has entered Stratum 3E Holdover24
SPM354	Generates when both SRMs in an MG 4000 are out-of-service
SPM355	Generates when both SRMs in an MG 4000 are out-of-service due for 24 consecutive hours
SPM356	Generates when one SRM in an MG 4000 is out-of-service
SPM357	Generates when an MG 4000 experiences non-critical faults on more than two of the four BITS Links

MG 4000 logs (Sheet 5 of 8)

Log ID	Description
SPM358	Generates when a timing reference field change in the MNNODE table, between LINE and EXTERNAL, fails
SPM370	Indicates an SPM health monitor event
SPM399	Generates when an SPM-based node enters or leaves an overload condition
SPM500	Generates when a device changes state
SPM501	Generates when the clock mode changes
SPM502	Generates when the local CEM software sends a single alarm report
SPM503	Generates when the associated carrier on an SPM goes out-of-service
SPM504	Generates for the SPM when both of the associated ATM RM devices on an SPM go out-of-service
SPM510	Indicates a PM Timing Mode change indicating a line to external and vice versa
SPM600	Generates for the SPM when the message switch changes modes
SPM605	Generates when the SPMRESALIGN tool excludes RM protection group from the Resource Module ID-ProtWhom ID alignment process
SPM610	Generates whenever an SPM node and SSM value changes
SPM611	Indicates a reference node switch has occurred either manually or through the system
SPM619	Generates whenever an FSP alarm is raised or cleared on a remote MG 4000
SPM630	Generates when a successful sparing event occurs
SPM632	Generates when the REX test on the SPM starts

MG 4000 logs (Sheet 6 of 8)

Log ID	Description
SPM637	Indicates the clock mode has changed from Holdover to Sync
SPM638	Indicates the SPM recovers from the 24 hour Holdover state
SPM641	Generates when a SRM in an MG 4000 exits from a holdover alarm condition
SPM642	Indicates a SyncRM has exited 3E Holdover 24 state
SPM644	Generates when a SRM in an MG 4000 a loss of BITS redundancy alarm clears
SPM645	Generates the Link Protocol and Messaging Interface Controller Event Report
SPM650	Indicates a successful in-service loading procedure has occurred
SPM651	Indicates an in-service loading procedure has failed
SPM652	Indicates the SPM has exited Stratum 3E Holdover
SPM653	Indicates the SPM has exited Stratum 3E Holdover24
SPM654	Generates when a SRM in an MG 4000 returns to service
SPM655	Generates when at least one SRM in an MG 4000 returns to service
SPM656	Generates when one SRM in an MG 4000 returns to service
SPM657	Indicates the input timing signals degradation has cleared
SPM658	Indicates a PM timing mode change has occurred with explicit reason

MG 4000 logs (Sheet 7 of 8)

Log ID	Description
SPM660	Generates each time a continuous performance monitored trunk member is involved in an answered echo canceller enabled call
SPM661	Generates whenever a continuous monitoring ON/OFF command or an SPMECMON AUTO command completes successfully
SPM670	Generates an INFO log to report that the health monitor “CallCount PTS no setup fault” has been cleared
SPM680	Indicates low MBM Application Buffers
SPM681	Indicates low MBM Application Buffer Pools
SPM682	Generates when a manual reset is performed on a CEM or resource module RM in an SPM-based node
SPM683	Generates whenever a switch of activity occurs on a common equipment module in an SPM-based node
SPM684	Indicates Erase Flash
SPM685	Indicates a force action has been performed on a resource module
SPM700	Generates when a DDM audit fails for a particular subgroup on a specified SPM
SPM701	Generates when a DDM audit successfully updates a subgroup on a specified SPM
SPM702	Generates when a DDM dynamic update fails for a subgroup in a specified SPM
SPM703	Generates when a DDM audit updates a trunk member in a SPM
SPM704	Generates when a DDM dynamic update fails for a trunk member in a SPM
SPM705	Generates after a trunk is set either to a lockout or system busy state

MG 4000 logs (Sheet 8 of 8)

Log ID	Description
SPM706	Generates when a trunk automatically returns to service after being in a lockout state
SPM707	Generates when the dynamic update fails for the ISDNPARM table
SPM708	Generates when the DDM audit updates the ISDNPARM table
SPM709	Generates when the dynamic update fails for the ISDNPROT table
XPKT301	Generates when one of the peripheral nodes sends a UNI Release/Release Complete message
XPKT806	Generates when the number of XPKT301 logs for an SPM-based node meets or exceeds the RAISE_THRESHOLD
XPKT807	Generates when the number of XPKT301 logs for an SPM-based node meets or exceeds the CLEAR_THRESHOLD

Supplementary logs

The following documents reference logs and/or alarms that do not appear in this volume:

Note: The terms Passport, PVG and MDM have been re-branded in conjunction with the new Nortel Networks' brand simplified naming format. Passport is now referred to as the Nortel Networks Multiservice Switch, PVG is now the Nortel Networks Media Gateway 7480/15000, and MDM is now the Nortel Networks Multiservice Data Manager.

- For USP logs, refer to the *Log and Operational Measurement Descriptions for Universal Signaling Point (USP),* version 3.0.3. These logs also appear on the Graphical User Interface (GUI).
- For XA-CORE logs, refer to the *XA-Core Reference Manual*, 297-8991-810.
- For information about Multiservice Switch alarms associated with your component, refer to *Nortel Networks Multiservice Switch 7400/15000/20000 Alarms Reference*, NN10600-500 and *Nortel*

Networks Multiservice Switch 15000, Media Gateway 15000 and Preside MDM in Succession Networks Fault Management Overview PT-AAL1/UA-AAL1/UA-IP, NN10092-911.

For information about Passport 8600 logs and traps, refer to the following documents:

- *Preside Passport 8600 Device Integration Cartridge User Guide*, *241-6003-110*.
- *Configuring Network Management- Passport 8000 Series Software Release 3.5, 314723-B*.
- *System Messaging Platform Reference Guide- Passport 8000 Series Software Release 3.5, 315015-B*.

ATM300

Log report ATM300 generates when a Loss of Cell Delineation (LCD) major alarm condition is raised on an SPM with ATM RMs. Correlates with ATM301.

Format

The format for log report ATM300 is as follows:

```
MSH10_I06BE ** ATM300   APR23 08:50:02 5087 FLT  ATM LCD Alarm Raised
               Location: SPM 5 ATM RM in Slot: 1 (Act   )
               Description: ATM LCD alarm raised.
               Location: SPM 5  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

Check the underlying SONET carrier status. Also check the ATM switch status.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

ATM501

Log report ATM501 indicates that the system's ATM signaling status has changed.

Format

The format for log report ATM501 is as follows:

```
MSH10_I06BE    ATM501 APR23 08:30:48 4687 INFO ATM Signalling Status
               Location: SPM 5
               Status: Down
               Description: ATM Signalling status has changed.
               Location: SPM 5  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

If signalling is down, check the ATM framework and edge switch. If no problems are found, a manual spare of the ATM RMs restores signalling. If signalling is coming up during an ATM RM recovery, no action is required.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

ATM600

Log report ATM600 indicates that the ATM framework has gained a registered ATM address.

Format

The format for log report ATM600 is as follows:

```
MSH10_I06BE    ATM600 APR23 08:44:11 4850 INFO ATM Address Registration
               Location: SPM 5
               Description: SPM has a registered ATM address.
               Location: SPM 5 Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

ATM605

Log report ATM605 indicates an ATM overload event.

Format

The format for log report ATM605 is as follows:

```
MSH10_I06BE    ATM605 APR21 14:09:52 7606 INFO ATM Overload Event
               Location: SPM 7 ATM RM
               Description: ATM RM Near Overload
               Location: SPM 7  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

ATM800

Log report ATM800 indicates a possible degradation of service related to ATM Performance Monitoring thresholds. This log is generated whenever one of the ATM performance monitoring (PM) statistics crosses a pre-determined threshold value.

Format

The format for log report ATM800 is as follows:

```
MSH10_I06BE   *  ATM800 APR21 14:14:32 7634  Threshold Crossing Alert (TCA)
               Location: SPM 7
               Type: SMG4
               Description: AAL1 Header Errors (discarded cells)
               Threshold:              5
               Current Value:          9
               Location: SPM 7  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

CARR300

Log report CARR300 generates when a carrier failure event is cleared. Failure clear events are reported with a severity of No Alarm.

Format

The format for log report CARR300 is as follows:

```
MSH10_I06BE    CARR300 APR21 12:51:48 4554 RTS  CARRIER SPM  6
     CKT: 3  CarrName: SPM6_STS3L_1
     Carrier: RM     0 OC3S   0 STS3L  0
     Failure: SIMPLEX  Clear
     Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

CARR300 generates when a carrier failure event is cleared. An analysis of the log report provides information regarding how long and how frequently this failure condition has been present on the specified carrier.

Related log reports: CARR310 reports carrier failure events.

CARR501

Log report CARR501 generates when a carrier state changes to central-side busy (CBsy) from system busy (SysB) or manual busy (ManB). The new state is identified in the log report header line, while the previous state is identified in the body of the log report.

CARR501 has an alarm severity of No Alarm.

CARR501 applies to carriers other than OC-3.

For OC-3 carrier state changes resulting in a CBsy state, refer to log report CARR512.

Format

The format for log report CARR501 is as follows:

```
MSH10_I06BE    CARR501 APR21 13:01:18 4873 CBSY CARRIER SPM  6
       CKT: 98  CarrName: SPM6_STS1P_1_VT15P_1_DS1P_4
       Carrier: STS1P  1 VT15P 22 DS1P   1
       Previous State: SYSB
       Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

Take action to return the parent carrier to service.

Associated OM registers

This log report has no associated OM registers.

Additional information

CARR501 generates when a non-OC-3 carrier has been returned to service from the ManB or SysB states, but the parent carrier is still not in-service. An analysis of the log report provides information regarding how long and how frequently this carrier has been out-of-service.

CARR510

Log report CARR510 generates when a carrier state changes to manual busy (ManB) from in-service (InSv), system busy (SysB), or C-side busy (CBsy). This event is identified in the log report header line, while the previous state is identified in the body of the log report.

CARR510 has an alarm severity of No Alarm.

Format

The format for log report CARR510 is as follows:

```
MSH10_I06BE    CARR510 APR21 12:49:56 4491 MANB CARRIER SPM  6
        CKT: 4  CarrName: SPM6_STS3L_2
        Carrier: RM     1 OC3S   0 STS3L  0
        Previous State: INSV
        Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

The CARR510 log reports that someone has taken control of this carrier, taking it from the previous state of InSv, CBsy, or SysB. An analysis of the CARR510 log report provides information about how often manual intervention is required in carrier maintenance.

CARR511

Log report CARR511 generates when a carrier state changes to system busy (SysB) from in-service (InSv) or central-side busy (CBsy). This event is identified in the log report header line, while the previous state is identified in the body of the log report.

This report has an alarm severity of Minor.

Format

The format for log report CARR511 is as follows:

```
MSH10_I06BE * CARR511 APR21 13:11:31 5470 SYSB CARRIER SPM  6
        CKT: 7  CarrName: SPM6_STS1P_3
        Carrier: STS1P  3
        Previous State: CBSY
        Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

The system has taken control of a carrier for maintenance.Watch this carrier to ensure the system returns it to service. If the carrier is not returned to service within a reasonable time period, manual action may be warranted.

Associated OM registers

This log report has no associated OM registers.

Additional information

An analysis of CARR511 log report provides information regarding how often the system must take maintenance action on a carrier.

CARR512

Log report CARR512 generates when an OC-3 carrier changes to a central-side busy (CBsy) state from in-service (InSv), manual busy (ManB), or system busy (SysB). These state changes are not reported for other carriers. The new state is identified in the log report header line, while the previous state is identified in the body of the log report.

The report has an alarm severity of Minor.

CARR512 applies only to OC-3 carriers and indicates the OC-3 host is out-of-service, not due to a carrier problem, but due to the corresponding OC-3 resource module (RM) being out-of-service.

For carrier state changes in other carriers resulting in a CBsy event, refer to CARR501.

Format

The format for log report CARR512 is as follows:

```
MSH10_I06BE  * CARR512 APR21 13:01:14 4825 CBSY CARRIER SPM  6
       CKT: 1  CarrName: SPM6_OC3S_1
       Carrier: RM     0 OC3S   0
       Previous State: INSV
       Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

An OC-3 RM has changed state from ManB, SysB, or InSv to CBsy. Coming from the InSv state indicates that this is the beginning of an out-of-service period. Action should be taken to return the corresponding OC-3 RM back to service.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

CARR800

Log report CARR800 generates when a threshold crossing alert (TCA) for a metered performance parameter is cleared. Metered performance parameters include laser bias current (LBC), optical power transmitted (OPT), or optical power received (OPR). Metered performance parameters represent a snapshot of a meter value rather than an accumulated value. They are interpreted as percentages. These values express the ratio of the current value of the parameter to the calibrated value of the OC-3 resource module when it was placed in service.

TCA clear events are reported with a severity of No Alarm. TCA clear reports are not generated for non-metered performance parameters.

Format

The format for log report CARR800 is as follows:

```
MSH10_I06BE    CARR800 APR21 13:36:37 6551 RTS  CARRIER SPM  6
        CKT: 182  CarrName: MSHATM_OC3S_SPM_6_CKT_182
        Carrier: RM     3 OC3S   0
        LBC-N  Clear Threshold Crossing Alert:        100
        Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log reports the return of a metered performance parameter back into an acceptable range. An analysis of CARR800 and CARR810 log reports provides information regarding the frequency that an OC-3 drifts outside its acceptable range. This information may indicate a need for maintenance action.

A related log report is CARR810, which generates when a TCA has been set for a metered performance parameter.

CARR801

Log report CARR801 indicates that maintenance limits (ML) have been re-set to zero. The ML increments every time a TCA occurs.

Format

The format for log report CARR801 is as follows:

```
MSH10_I06BE     CARR801 APR23 01:00:00 2864 INFO CARRIER SPM  7
        CKT: 95  CarrName: SPM7_STS1P_1_VT15P_1_DS1P_1
        Carrier: STS1P  1 VT15P  1 DS1P   1
        TCA    Maintenance Limit Reset:          0
        Location: SPM 7  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

CARR810

Log report CARR810 generates when a threshold crossing alert (TCA) event for a metered performance parameter occurs. Metered performance parameters include laser bias current (LBC), optical power transmitted (OPT), or optical power received (OPR). Metered performance parameters represent a snapshot of a meter value rather than an accumulated value. They are interpreted as percentages. These values express the ratio of the current value of the parameter to the calibrated value of the OC-3 resource module when it was placed in service.

In the cases of OPT and OPR, an alert is reported when the meter value falls below the established threshold. For LBC, an alert is reported when the meter value rises above the established threshold. The thresholds are provisioned for the TCA and carrier in MNHSCARR.

The alarm severity of CARR810 depends on the alarm severity provisioned for the TCA and carrier in MNHSCARR.

Format

The format for log report CARR810 is as follows:

```
MSH10_I06BE  * CARR810 APR23 08:57:14 5365 TBL  CARRIER SPM  5
        CKT: 182  CarrName: MSHATM_OC3S_SPM_5_CKT_182
        Carrier: RM     3 OC3S   0
        LBC-N  Set   Threshold Crossing Alert:        200
        Location: SPM 5  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

An OC-3 metered performance parameter has gone beyond the acceptable range of its provisioned level of severity, which is minor, major, or critical. If provisioned as a minor alarm, note and track each minor alarm to be certain that the indicated device is performing as expected. If provisioned as a major or critical alarm and an alarm occurs at the expected duration of service for the device, consider changing the card in anticipation of a complete device failure.

Refer to the appropriate NTP that describes alarms for Spectrum for more information.

Associated OM registers

This log report has no associated OM registers.

Additional information

The performance level of an optical monitor changes approximately 5 to 10% during the life of the device. When the device approaches end of life, these parameters start to deviate rapidly. When a major alarm is reported, a device failure in the near term is likely.

An analysis of CARR800 and CARR810 log reports provides information regarding the frequency that an OC-3 drifts outside its acceptable range. This information may indicate a need for maintenance action.

A related log report is CARR800, which generates to report a TCA has been cleared for a metered performance parameter.

CARR811

Log report CARR811 generates when a threshold crossing alert (TCA) event for a non-metered performance parameter (PP) occurs. Non-metered performance parameters accumulate as pegged counts over predefined intervals. CARR811 generates when a performance parameter crosses its threshold for the accumulation interval. The thresholds are provisioned for the TCA and carrier in MNHSCARR.

Examples of non-metered performance parameters include coding violation (CV), errored seconds (ES), unavailable seconds (UAS), and others.

CARR811 formatting specifies whether the performance parameter represents the near end (NE) or far end (FE) of the carrier.

Alarm severity for CARR811 depends on the alarm severity provisioned for the TCA and carrier in MNHSCARR.

An invalid data flag (IDF), denoted by an asterisk (*) following the Accumulation Interval, indicates that interval is not accurate. Conditions causing this flag to be set may include the following:

- The beginning of the period over which the count was accumulated was later than it should have been due to a restart of the resource module (RM), the common equipment module (CEM), or the DMS-Spectrum Peripheral Module (SPM).
- SPM's time of day changed by more than 10 seconds during the accumulation period.
- The register was manually reset after accumulation began.
- Data is missing for the period because of defects or missing far-end reports.

Format

The format for log report CARR811 is as follows:

```
MSH10_I06BE * CARR811 <mmmdd> <hh:mm:ss> <ssdd> <event>
CARRIER <pmid>
CKT: <ckt> CarrName: <carrier name>
Carrier: <payload>
<PP> Threshold Crossing Alert: <value>
Accumulation Interval: <hh>:<mm>:<ss><idf> Period: <period>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
pmid	type loctxt	Identifies the peripheral module by name and node number
ckt	0-181	Indicates the circuit number
carrier name		Name for the carrier associated in datafill for table MNHSCARR, 38 characters
payload		Payload description of the carrier, 26 characters
pp		Abbreviated name of the non-metered performance parameter, 6 characters, as follows: • N is the suffix for Near End parameters. • F is the suffix for Far End parameters. • SEFS-N = severely errored framing seconds • CV-N = coding violations • ES-N = errored seconds • SES-N = severely errored seconds • PSC-N = protection switch count • UAS-N = unavailable seconds • AISS-N = alarm indication signal seconds • CSS-N = controlled slip seconds • CV-F = coding violations • ES-F = errored seconds • SES-F = severely errored seconds • UAS-F = unavailable seconds

Field	Value	Description
value	0-1073741823	
idf	*	Invalid data flag, 1 character
period	24 hours	Collection period
	15 minutes	Note: The accumulation interval is the length of time it takes to collect the performance parameter count specified by the value field.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log generates when PP counts exceed a provisioned threshold in a given time period. Analyzing TCA can help to identify carriers that may be susceptible to failures in the future. Take appropriate maintenance action to avoid the possibility of future failures.

CCMT301

Log report CCMT301 indicates a core PVC segment fault. Correlates with CCMT601.

Format

The format for log report CCMT301 is as follows:

```
MSH10_I06BE     CCMT301 APR21 13:02:02 5049 FLT  Core PVC Segment Fau
      Core: LINK 2  CONN 0  VPI   0  VCI   107  TAG    21
      Node: SMG4    7
      Timeout waiting for end-to-end connectivity notification.
      0000 0000 0000 0000 0000 0000 0000 0000
      0000 0000 0000 0000 0000 0000 0000 0000
      Location: SPM 7  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

CCMT501

Log report CCMT501 indicates that a connection link state change occurred between the XA-Core and an MG 4000.

Format

The format for log report CCMT501 is as follows:

```
MSH10_I06BE  ** CCMT501 APR21 12:52:00 4567 INFO Core Connection State
Change
             Core: LINK 1  CONN 1  VPI   0  VCI   106  TAG     0
             Node: SMG4    6       VPI   0  VCI    51
             State Change: SysB to InSv.
             Initiated by system RTS.
             0000 0000 0000 0000 0000 0000 0000 0000
             0000 0000 0000 0000 0000 0000 0000 0000
             Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

CCMT502

Log report CCMT502 indicates that a communication link state change occurred between two MG 4000 nodes.

Format

The format for log report CCMT502 is as follows:

```
MSH10_I06BE   CCMT502 APR21 12:49:41 4481 INFO Peer Connection State Change
             Src Node: SMG4    5  CONN   0  TAG     0    Dest Node: SMG4    6
              Connection is down.
              051B 0000 0000 0000 0000 0000 0000 0000
              0000 0000 0000 0000 0000 0000 0000 0000
              Location: SPM 5  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

CCMT601

Log report CCMT601 indicates that a communication problem between the XA-Core and an MG 4000 has cleared.

Format

The format for log report CCMT601 is as follows:

```
MSH10_I06BE     CCMT601 APR21 13:11:04 5322 INFO Core PVC Segment Fault
Cleared

                Core: LINK 0  CONN 0  VPI   0  VCI   106  TAG    19
                Node: SMG4    6
                Received end-to-end connectivity notification.
                0000 0000 0000 0000 0000 0000 0000 0000
                0000 0000 0000 0000 0000 0000 0000 0000
                Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

DPTM500

Log report DPTM500 indicates that the state of DPT Terminals has changed to an IDL state from any other state.

Format

The format for log report DPTM500 is as follows:

```
MSH10_I06BE     DPTM500 APR21 12:52:00 4568 RTS  DPT Terminals INSV
       DPT Terminals returned to inservice.
       SPM  Number:     6
       Previous State of Terminals: SYSB
       Reason: Packet Network Available
       Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

DPTM501

Log report DPTM501 indicates that the state of DPT Terminals has changed to a SYSB state from any other state.

Format

The format for log report DPTM501 is as follows:

```
MSH10_I06BE     DPTM501 APR21 13:01:48 4935 SYSB DPT Terminals OOS
                DPT Terminals state changed to SYSB.
                SPM  Number:     7
                Previous State of Terminals: INSV
                Reason: Packet Network Unavailable
                Location: SPM 7  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

DPTM502

Log report DPTM502 indicates that the state of DPT Terminals has changed to a MANB state from any other state.

Format

The format for log report DPTM502 is as follows:

```
MSH10_I06BE   DPTM502 APR22 09:54:50 4991 MANB DPT Terminals OOS
              DPT Terminals state changed to MANB.
              SPM  Number:     6
              Previous State of Terminals: INSV
              Reason: Manual Request
              Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

DPTM503

Log report DPTM503 indicates that the state of DPT Terminals has changed to a PMB state from any other state.

Format

The format for log report DPTM503 is as follows:

```
MSH10_I06BE   DPTM503 APR21 13:01:24 4900 PBSY DPT Terminals OOS
              DPT Terminals state changed to PMB.
              SPM  Number:     6
              Previous State of Terminals: SYSB
              Reason: System Request
              Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

DPTM504

Log report DPTM504 indicates that the state of DPT Terminals has changed to an INB state from any other state.

Format

The format for log report DPTM504 is as follows:

```
MSH10_I06BE   DPTM504 APR22 09:56:55 5008 OFFL DPT Terminals OOS
              DPT Terminals state changed to INB.
              SPM  Number:     6
              Previous State of Terminals: MANB
              Reason: Manual Request
              Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

DPTM550

Log report DPTM550 generates when a DPT range with BICC (i.e., ISUPPLUS) signalling changes state.

Format

The format for log report DPTM550 is as follows:

```
MSH10_I06BR   DPTM550 JAN01 02:06:25 5433 INFO DPTRKS STATE CHANGE
              CLLI: DPTINATM
              Start CIC: 8000       End CIC: 8999
              Previous State: SYS
              New State     : INI
              Reason: System Request
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

DPTM700

Log report DPTM700 indicates bulk downloading or dynamic update of DPT data failed. There is a data mismatch in the CM and MG4K. Correlates with DPTM701.

Format

The format for log report DPTM700 is as follows:

```
MSH10_I06BR   * DPTM700 JUN09 13:51:46 9089 INFO DPT Data Mismatch
              SPM  Number:     5
              Affected Table: MNNODE
              Reason: DPT Data Downloading Failed.
              Action: Data Mismatch will be cleared by DDM Audit.
              Location: SPM 5  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

DPTM701

Log report DPTM701 indicates that the DDM audit process cleared a DPT data mismatch between the core and the node.

Format

The format for log report DPTM701 is as follows:

```
MSH10_I06BR   DPTM701 JUN09 13:51:53 9096 INFO DPT Data Mismatch Cleared
              SPM  Number:     5
              Affected Table: MNNODE
              Action Taken: DPT Data Mismatch Cleared by DDM Audit.
              Location: SPM 5  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

DPTM702

Log report DPTM702 indicates that a call is rejected because the DPT SOC limit is reached.

Format

The format for log report DPTM702 is as follows:

```
MSH10_I06BR   DPTM702 JUN02 17:14:05 8831 INFO DPT SOC Call Rejection
              DPT usage limit has been reached
              More DPT ports may be needed
              Check DPT_MAX_PORTS in table OFCVAR
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

EXT102

The external alarms (EXT) subsystem generates the EXT102 log report when a major alarm scan point (scannm) changes state. EXT102 log generation requires the REPORT field of the ALMSC table set to 'Y'. Scan points can be assigned by an office.

Format

The format for the EXT102 log report is as follows:

```
MG4K106BT  **  EXT102 MAY28 14:04:26 1371 INFO FSP_REMOTE_SMG4  (

MG4K106BT  **  EXT102 MAY28 14:04:54 1374 INFO FSP_REMOTE_SMG4  (
```

Selected field descriptions

This log report has no selected fields.

Action

The scan point determines the action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

EXT108

Log report EXT108 is generated when raising and clearing of EXT alarm HIGH_MEM_BLOCKING.

Format

The format for log report EXT108 is as follows:

```
MSH10_I06BE ***  EXT108 APR22 15:29:11 9303 INFO HIGH_MEM_BLOCKIN ON
         High Memory Blocking
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

IOAU112

The Input/Output Audit (IOAU) subsystem generates the IOAU112 log report to inform operating company personnel of changes in the system routine exercise (SREX) controller operation or schedule.

Format

The IOAU112 log report format is as follows:

```
** IOAU112 mmmdd hh:mm:ss ssdd  INFO REX SCHEDULER NOTICE
<reason_text>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
INFO REX SCHEDULER NOTICE	Constant	Indicates that information about the routine exercise (REx) scheduler (SREX controller) follows.
reason_text	Variable text string of up to 60 characters	Provides the reason for the IOAU112 log report. The explanations for the reasons follow. In the reason descriptions that follow, <REX_test_name> represents the name of the REx test as it appears in table REXSCHED. <pm_id> represents the identifier for the node the REx test is performed on. <nn> represents a number from 1 to 99.
	REX Scheduler control parameters have changed.	The values specified by office parameter NODEREXCONTROL in table OFCVAR have changed.
	<REX_test_name> on <pm_id> has not run for <nn> days.	The indicated REx test has not been performed on the indicated node for at least 7 days.

Field	Value	Description
	<REX_test_name> on <pm_id> not run after <nn> attempts.	The SREX controller is unable to start the indicated REx test on the indicated node. Check other logs indicated by pm_id for more information.
	<REX_test_name> on <pm_id> took more than <nn> minutes.	The SREX controller has timed out while waiting for a response from the indicated node during a REx test on the node. The SREX controller starts the REx test on next node scheduled for REx testing.
	System REX controller aborted.	The system stopped the SREX controller during the time period (window) for REx testing scheduled by operating company personnel. All application REx tests are stopped by the SREX controller.
	System REX controller started.	The SREX controller has been started. This message is generated at the start of the scheduled REx test window. Because conditions like high CPU activity can prevent REx testing, this message does not mean that REx testing started.
	System REX controller stopped.	The SREX controller has been stopped. This message is generated at the end of the scheduled REx test window. This message does not mean that REx testing has stopped. The system attempts to complete scheduled critical REx tests after the window.
	System REX controller timeout	The SREX controller timed out during the time period (window) for REx testing scheduled by operating company personnel. All application REx tests are stopped by the SREX controller.

Field	Value	Description
	System REX test delayed, System Recovery in Progress.	System recovery, monitored by the system recovery controller (SRC), is in progress. The SREX controller does not start REx tests when system recovery is in progress.
	System REX test delayed until CPU occupancy decreases.	The computing module (CM) CPU occupancy is too high for a REx test to be performed safely. The SREX controller constantly monitors the CPU time allocated to call processing and maintenance. If the combined allocation exceeds the 40% threshold, REx tests are stopped. REx tests are normally stopped for 5 min. If the occupancy remains above the threshold after a 5 min suspension, an IOAU112 log report is generated. Log report IOAU112 generated for the indicated reason does *not* mean that the CM is overloaded.
	The System REX Scheduler is currently turned OFF.	The SREX controller is turned off. Log report IOAU112 is generated for this reason at the SREX controller start time (specified by office parameter NODEREXCONTROL in the OFCVAR table).
	The CRITICAL <REX_test_name> has been DISABLED INDEFINITELY.	The indicated REx test has been disabled using datafill in table REXSCHED. This message applies only to CM, message switch (MS), and enhanced network (ENET) REx testing
	The CRITICAL <REX_test_name> has been ENABLED.	The indicated REx test has been enabled using datafill in table REXSCHED. This message applies only to CM, MS, and ENET REx testing.

Action

If the IOAU112 log report is generated repetitively for a particular node class, there may be too many restrictions for that node class. That is, the SREX controller cannot test all the nodes within the dedicated time period. To correct this situation, the craftsperson should check the tuple entries for the affected REx test in table REXSCHED and adjust the scheduling parameters, if necessary. The IOAU112 log report is not generated if the node has been removed from the REx testing schedule.

If the indicated REx test is disabled, the operating company personnel should determine if the REx test is intentionally disabled. The REx test can be enabled by changing the associated datafill in table RExSCHED.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

NODE326

Log report NODE326 indicates a hardware fault.

Format

The format for log report NODE326 is as follows:

```
MSH10_I06BE    NODE326 APR21 14:09:52 7606 TBL Hardware Fault
               Location: SPM 7 Unit 0
               Status: Alarm raised
               Trouble: Card fault
               Action: Restore communication with the Resource Processor
               Activity: I
                Integrated Detail Node Maintenance Information
               Trouble Reason: Loadname mismatch
               Trouble Detail: Link isolation condition
               Location: SPM 7  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

For a raised alarm, follow the recommended action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

NODE500

Log report NODE500 indicates a System node state change. Correlates to a SYSB alarm.

Format

The format for log report NODE500 is as follows:

```
MSH10_I06BE   * NODE500 APR21 13:00:52 4789 INFO Node State Cha
        Location: SPM 6
        From:     InSv ( Connected )
          To:     ISTb ( Connected )

MSH10_I06BE  ** NODE500 APR21 13:01:04 4795 INFO Node State Cha
        Location: SPM 6 Unit 0
        From:     ISTb ( Connected, Inactive )
          To:     ManB ( Connected, Inactive )
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

NODE600

Log report NODE600 is an INFO log used to notify a system recovery action.

Format

The NODE600 log report format is as follows:

```
MSH10_I06BR     NODE600 JAN01 01:50:49 2496 INFO System Recovery Action
        Location: SPM 2 Unit 1
        Activity : I
        System recovery is in progress
        Integrated Node Maintenance Detailed Information
                  INM SNEGO trigger received
                  Information for analysis, no immediate action required
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

PRSM400

The PRSM400 command summary log generates for an SPM destination when an SPM loadfile (containing SPM PRSU fixes) is datafilled in the PMLOADS table. The PRSM400 summary log is generated for any DBAUDITs performed on any SPM destinations.

Format

The PRSM400 log report format is as follows:

```
** PRSM400 mmmd hh:mm:ss ssdd INFO COMMAND SUMMARY
   User-Class: <user>        User Identity: <userid>
   REASON: <change reason>
                  Destination   Command    Pass/    Time
   PRSU id        (DEST)        Method     Fail     Complete
   -------        -------------- -------- ------- --------
   <prsuid>       <destid>      <command> <status> <time>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
User Class	User Class	Field heading, 11 characters.
user_class	ci_user padn_use autoapply_user file_audit_user status_audit_use r xpm_reload_user onp_user, reporting_user misc_user communication_ pipe comm_pipe_pal dmscom_user autoinstall_user autoproc_user	Class of user, 16 characters
User Identity	User Class	Field heading, 14 character
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>	PRSU name	Field value for PRSU name, 32 characters

Field	Value	Description
<destname>	destination name UNKNOWN NONE	Field value for destination name, 32 characters
<com_name>	APPLY REMOVE VALIDATE DBAUDIT FREEMEM ASSIGN	Command name for the given action, 16 characters
<pass_fail>	Pass Fail	Success value of the action, 4 characters
<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

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM300

The SPM300 log report generates when a common equipment module (CEM) or resource module (RM) device on an SPM-based node experiences a specified fault.

There are three problem description severity levels:

- Info - information only log.
- Non-Critical - A Non-Critical fault reported by the active CEM causes the affected RM to change to an ISTB state.
- Critical - A Critical fault reported by the active CEM causes the RM to change to a SYSB state and spare, if it is active.

Faults reported by the inactive CEM affect the RM state when that CEM becomes active, if they are not cleared prior to the inactive CEM becoming active.

In the SN07 release the SPM300 log includes ATM RM threshold utilization fault information which was previously reported in the ATM605 log. Depending on the severity level, a minor alarm raises on the ATM RM and the state changes to ISTb. When this occurs, an SPM500 log generates to indicate the state change and an overload condition displays after executing a "querypm flt reason" command.

ATM RM resource exhaustion severity is based on the following predefined utilization levels:

- None
- Level 1
- Level 2

Any utilization beyond Level 2 represents an overload condition. The ATM RM transfers these levels to the CEM, therefore both circuit packs share the same resource utilization levels.

The following table defines the resource utilization levels.

Resource Utilization Level Definitions

Level	Definition
None	Active ATM RM's CPU resource utilization has dropped below 60%.
Level 1	Active ATM RM's CPU resource utilization initially exceeds 75% and subsequently exceeds 60%. The ATM RM enters an ISTB state at this level.
Level 2	Active ATM RM's CPU resource utilization initially exceeds 75% and subsequently exceeds 88%

Format

The format for log report SPM300 is as follows:

```
<labclli>  <*>   SPM300 <MMMdd hh:mm:ss SSSS> TBL Device Fault Report
                 Location     : SPM <xx> <cpk> : <y> Activity : <atm_act>
                 Status       : <reason>
                 Problem Description: <problem>
                 <Slot Number> <cem_act>: <text>
                 Action       : <action>
                 Cardlist     :
                   No Cardlist Available
                 Location: SPM <xx>  Type: <node_type>      Fabric: ATM
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
labclli	alpha numeric	This field displays the common language location identifier (CLLI) for the office where the log generated.
*	* or <empty space>	One asterisk (*) appears for a log of severity 'Minor' and empty space appears for a log of severity 'No Alarm'.

Field	Value	Description
xx	0 through 85	This field contains the node identification number that houses the circuit pack.
cpk	CEM, ATM, OC3, DSP, DLC, VSP, IEM	The device associated with the log.
y	0 or 1	The circuit pack number associated with the log.
dev_act	A or I	The device activity status, either Active or Inactive.
reason	1. Info Only 2. Fault Raised 3. Fault Cleared	The log purpose, to either only provide information or to report a fault status.
problem	1. No Problem 2. Non Critical 3. Critical 4. Error	The log severity.
slot_no	7 or 8	The slot number of the associated CEM.
cem_act	A or I	The associated CEM activity status, either Active or Inactive.
text	alpha numeric	Problem description detail. For ATM RM resource utilization overload, the following text appears, depending on the resource utilization level (None, Level 1, and Level 2): 1. Resources OK 2. Monitor OMs - Check SPMOLVD OMs 3. Ovld Pending
action	alpha numeric	Suggested actions in response to the specific device failure.

Action

If the inactive CEM becomes active while a problem has been communicated to the indicated RM from the inactive CEM, then the RM becomes SYSB and the log produces the following problem description:

```
Check messaging Inactive CEM to RM loopback test
timeout
```

1. Collect sysbuf and /aer/display all from the inactive CEM dshell
2. Try to remlogin to the RM from the inactive CEM. If this fails, remlogin to the RM from the active CEM. Collect the footprint logs from the RM
3. BSY/RTS the RM
4. If the log reoccurs, BSY/RESETMOD/RTS the inactive CEM

For ATM RM resource utilization overload, the following actions appear on the log:

1. Refer to NTPs for Alarm Clearing Procedures
2. No Action Required

Refer to the associated logs referenced in Additional information.

Associated OM registers

This log report has no associated OM registers.

Additional information

For ATM RM resource utilization overload, the SPM300 log is associated with the following logs:

- NODE 500 - Node State Change
- NODE 602 - CEM State Change Reason Report
- SPM 399 - SPM Overload Report
- SPM 500 - Device State Change

SPM301

Log report SPM301 generates when patching fails on a SPM device.

Format

The format for log report SPM301 is as follows:

```
 SPM301 <mmmdd hh:mm:ss: ssdd> TBL  Device Patching Report
ation : SPM : <spm_no> <cpk_type>
 Status  : <status>
 Location: SPM <spm_no> Type: <spm_type> Fabric: <fabric_type>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
status	alpha string	1. patching operation failure set 2. patching operation cleared
activity	A or I	The device activity status (active or inactive) where the patching failed or cleared.

Action

If patching failed, run the ISTBAUDIT command in PRSM for the device(s) at fault.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM310

Log report SPM310 pertains to echo canceller performance. Specifically, the performance monitoring process on the computing module (CM) generates an SPM310 log when it receives performance data from the SPM as a result of the SPM-based automatic monitoring process. Field SOS in table SPMECAN, which indicates echo canceller failures, must be set to enable the SPM to send the performance data.

In addition, the SPMECAN AUTO command allows customers to enable/disable automatic echo canceller performance monitoring using the CI commands. The CI commands override the datafill in table SPMECAN. It is a system-wide (by office) command option. The customer also has the option to revert back to the datafill in table SPMECAN, with the AUTO TABLE command.

Format

The format for log report SPM310 is as follows:

```
SPM310 <date> <time> <seq num> INFO ECHO CANCELLER REPORT
<monitor mode>                  <orientation>
MON TRK: <clli> <mem> SPM <spm num> <cct_no> <cct_ts>
         RM: <rm num> RN: <rn num>
ASSOC TRK: <clli> <mem> <pm type> <pm num> <cct_no> <cct_ts>

ECAN DATA
     ERL: xx dB ERLE+ANLP: xx dB MERL: x dB ACOM: xx dB
     Delay of Loudest Echo Reflection: <rfl_dla>

                          Near-End   Far-End
        Talk-time         <ne_act>   <fe_act>
     Signal level         <ne_lvl>   <fe_lvl>
    Bckgrnd Noise         <ne_ns>    <fe_ns>


<Reason text>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Subfield	Value	Description
monitor mode		Automatic performance monitor	The automatic echo canceller performance monitoring process generates this report.
orientation	value	Near-End, Far-End	Echo canceller orientation

Field	Subfield	Value	Description
MON TRK	clli	String	Reporting trunk CLLI group name
	mem	0000-9999	Reporting trunk CLLI group member number
	spm num	00-63	Reporting trunk member is assigned to this SPM number
	cct_no	00-181	OC-3 DS1 as datafilled in table TRKMEM
	cct_ts	1-24	OC-3 DS0 as datafilled in table
	rm num	1-28 (except 7-10, which are reserved for CEMs and OC3s)	Reporting trunk member is assigned to this Spectrum resource module.
	rn num	000-387	Reporting trunk member is assigned to this Spectrum resource number.
ASSOC TRK	clli	String	CLLI group name of trunk connected to reporting trunk
	mem	0000-9999	CLLI group member number of trunk connected to reporting trunk
	pm type	SPM, DTC, DTCI, others	Type of peripheral associated with the trunk connected to the monitored trunk
	pm num	PM number	Trunk connected to the reporting trunk member is assigned to this PM number.
	cct_no	00-181	Trunk connected to the reporting trunk member is assigned to this carrier number as datafilled in table TRKMEM.
	cct_ts	1-24	Trunk connected to the reporting trunk member is assigned to this time slot as datafilled in table TRKMEM.

Field	Subfield	Value	Description
ERL	value	00-70	Echo return loss reading specified in decibels. Note: ERL measurements are not possible when the echo canceller cannot converge. The value reported in the SOS message is set to MERL-3dB. If this results in a negative value, zero is reported.
ERLE	value	00-70	Echo return loss enhancement reading specified in decibels.
MERL	value	0, 3, 6	Minimum ERL; datafilled in table SPMECAN
ERL+ERLE	value	00-140	Total loss of echo as a result of echo cancellation
rfl_dla	value	00-255	Delay of the main reflection in the echo-path specified in milliseconds. This value is set to 255 if the echo canceller is not currently converged.
ne_act	value	00-255	Number of seconds of near-end speech activity since the beginning of the call. Activity greater than 255 is reported as 255.
fe_act	value	00-255	Number of seconds of the far-end speech activity since the beginning of the call. Activity greater than 255 is reported as 255.
fe_lvl	value	-80-80	Average far-end signal (voice) level specified in dBm; valid only if fe_act is greater than 30 seconds.
ne_ns	value	-80-80	Measured near-end absolute average background noise level, specified in dBm

Field	Subfield	Value	Description
ne_lvl	value	-80-80	Average near-end signal (voice) level specified in dBm. Valid only if ne_act is greater than 30 seconds.
fe_ns	value	-80-80	Measured far-end absolute average background noise level, specified in dBm
reason text		Text string	Text explaining why log is generated. It is an evaluation of echo canceller's performance. See “Performance text explanation."

Action

This information log provides data to aid in the resolution of customer-reported echo cancellation problems.

Potential echo canceller problem; data as a result of an SOS message.

When a degradation in performance of an echo canceller resource is detected, an SOS message is sent from the echo canceller resource to the CM. Examples of such conditions include values falling below or exceeding specified ranges (for example, convergence time, ERLE).

Troubleshoot the possible sources of echo cancellation problem and correct.

Associated OM registers

The ECANRMANOM register ECANFAIL pegs when the SPM310 log report generates for a call. Although this log report generates for a call every 10 seconds, the ECANFAIL registers only pegs on the first occurrence of the log report of a particular call and not for subsequent SPM310 log reports for the same call.

Additional information

Data contained in this log can be compiled to detect potential echo cancellation or network problems.

SPM311

Log report SPM311 generates when a SoftWare Exception Report (SWER) occurs on an SPM.

Format

The format for log report SPM311 is as follows:

```
MSH10_I06BE  SPM311 OCT17 16:21:19 7300 TBL SW Exception Report
SPM <node> <circuitpack> <circuitpackno> : <activity> Time: <timestamp>
Filename: <filename> LineNumber: <linenumber>
TaskID: <taskid> Index: <indexnumber> Reason: <reason>
TaskName: <taskname>
ErrStr: <errorstring>
ErrData: <errordata>
Traceback: <traceback>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
node	0 to 85	This field displays the SPM number.
circuitpack	CEM, OC3, DSP, and VSP	This field displays the circuit pack type.
circuitpackno	0 to 27	This field displays the circuit pack unit number.
activity	A, I	This field displays the activity of the circuit pack, active (A) or inactive (I).
timestamp		This field displays the local time when the SWER occurred.
filename		This field displays the filename where the SWER occurred.
linenumber		This field displays the line number where the SWER occurred.
task id		This field displays the task id in hex.
taskname	alpha	This field displays the task name that describes the task id.

Field	Value	Description
index number		This field displays the index number of the SWER in hex.
reason		This field displays the reason number of the SWER in hex.
error string		This field displays the optional error string.
error data		This field displays the optional error data.
traceback		This field displays the traceback in hex.

Action

Contact the next level of support.

Associated OM registers

This log has no associated OM registers.

Additional information

Consult the Supplementary Information section of table MNCKTPAK in the Data Schema Reference Manual for your product for information on deleting and re-adding RMs.

SPM312

Log report SPM312 generates when a trap occurs on an SPM.

Format

The format for log report SPM312 is as follows:

```
MSH10_I06BR ** SPM312 NOV16 02:45:00 5019 TBL TRAP
SPM <node> <circuitpack> <circuitpackno> : <activity> Time: <timestamp>
TaskID: <taskid> TrapNo: <trapno>
TaskName: <taskname>
Instr: <instr> Flt: <flt> Vector: <vector>
Traceback: <traceback>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
node	0 to 63	This field displays the SPM number.
circuitpack	CEM, OC3, DSP, and VSP	This field displays the circuit pack type.
circuitpackno	0 to 27	This field displays the circuit pack unit number.
activity	A, I	This field displays the activity of the circuit pack, active (A) or inactive (I).
timestamp		This field displays the local time when the SWER occurred.
taskid		This field displays the task id in hex.
taskname	alpha	This field displays the task name that describes the task id.
trapno		This field displays the number of times the trap has occurred.
instr		This field displays address where the trap occurred.
flt		This field displays address of data access in the case of a data access error.

Field	Value	Description
vector		This field displays the processor-specific exception vector (used to identify the reason for the TRAP).
traceback		This field displays the traceback in hex.

Action

Contact the next level of support.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM330

Log report SPM330 indicates that the two CEMs have either come into datasync or have gone out of datasync. Correlates to an ISTB alarm.

Format

The format for log report SPM330 is as follows:

```
MSH10_I06BE   SPM330 APR21 13:00:52 4787 TBL  SPM Datasync Report
              Location    : SPM : 6   CEM : 1
              Status      : No Alarm
              Event       : No data sync.
              Description: Mate unavailable.
              Application:
              Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM331

Log report SPM331 generates when a device has a protection switch failure.

Format

The format for log report SPM331 is as follows:

```
MSH10_I06BR **SPM331 Feb07 10:22:11 4700 TBL Failed Device Protection
Switch
            Location: <pm type><node number><circuitpack> <circuitpackno>
            Status: Alarm Raised
            Description: <text>
             Reason  : <Failure Reason string>
            Location : <SPM node_no> Type: <spm_type> Fabric: <fabric_type>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
pm type	SPM	PM type
pm number	0-2047	PM number
Circuit Pack Type	CEM	Circuit pack types
	OC-3	
	DSP	
	DLC	
	VSP	Note: The voice signal processor (VSP) may not apply to all markets.
Circuit Pack Number	0-27	Circuit pack number
Fault Description		Describes protection switch failure; table 64 characters; size is 64 bytes
Reason	alpha	The reason for the device protection switch failure.

Action

Refer to the “PM 1SPM PROTFAIL SPM critical" alarm in the appropriate *Alarm Clearing and Performance Monitoring Procedures*.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM332

Log report SPM332 is generated when stability or screening for REX testing on an SPM fails.

Format

The format for log report SPM332 is as follows:

```
MSH10_I06BE   SPM332 APR30 02:24:08 5081 TBL  SPM REX Aborted
              SPM: 6    Type : SMG4
              Reason: Stability check on CEM 0 failed
                        ISTb state
              Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

Refer to the *Alarm Clearing and Performance Monitoring Procedures*.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM333

Log report SPM333 is generated when the REX test on the SPM fails.

Format

The format for log report SPM333 is as follows:

```
MSH10_I06BE   SPM333 <mmmdd hh:mm:ss><ssdd>  TBL SPM REX Failed
              SPM: <spm_number>      Type : <spm_variant>
              Reason: <reason>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
SPM REX Failed	Constant	Indicates that the REX test on an SPM node failed.
Node type	Constant	Indicates that the node type for this log is SPM.
Node number	0-85	SPM number
Type	alphanumeric string up to 6 characters in length	Indicates the variant of the SPM.
Reason	3 lines of variable text, each line consisting of 44 characters maximum	One of the following reasons why the REX test failed: • RESET step failed • OOS test step failed • RTS step failed • CEM drops to SYSB or does not come to Insv state during post-RTS wait period • SWACT step failed (either rejected for failed from local agent) • Active CEM drops SysB/IstB duringREX duration on that SPM

Action

Use commands "querypm flt" and "querypm flt reason" to check what active alarms are on the SPM. Also refer to the *Alarm Clearing and Performance Monitoring Procedures*.

Associated OM registers

This log report has no associated OM registers.

Additional information

If the reason in SPM333 log is RESET, OOS Test, or RTS step, then collect NODE500 and NODE600 logs.A SYSB alarm is raised on the MAP display, and a PM Alarm Banner is updated.

SPM334

Log report SPM334 generates whenever an alternate synchronization source is not available and the timing configuration no longer conforms to SONET specifications. Outside of SONET specifications, call quality degrades. Alarm severity is provisioned.

Format

The format for log report SPM334 is as follows:

```
MSH10_I06BE  **  SPM334 APR21 14:28:24 7756 INFO SPM Clock Perfor-
mance Out Of Spec
         Location: SPM: 2   CEM: 0
         Reason: No suitable network carriers available for sync.
         Alarm: CLKOOS
         Action: Raise
         Location: SPM 2  Type: IW        Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

Take action to restore the timing configuration within SONET specifications.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM335

Log report SPM335 generates when a device has a protection switch failure.

Format

The format for log report SPM335 is as follows:

```
MSH10_I06BE  **  SPM335 APR22 13:06:08 7310 TBL  Device Spare
             Location: SPM : 6   ATM : 1
             Status  : Alarm Raised
             Description: No spare devices in this protection group.
             Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM336

Log report SPM336 indicates that the clock oscillator tuning range has reached 90% of the maximum range. Correlates to a VCXO90 alarm.

Format

The format for log report SPM336 is as follows:

```
MSH10_I06BE  **  SPM336 APR21 14:24:47 7732 INFO Clock Range
              Location: SPM: 7   CEM: 1
              Reason: Clock oscillator tuning range has reached 90%.
              Alarm: VCXO90
              Action: Raise
              Location: SPM 7  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

If the clock range is between 70% and 90%, no immediate action is required, but consider replacing the common equipment module (CEM). If the clock range exceeds 90%, replace the CEM.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM337

Log report SPM337 indicates that the SPM has entered Holdover. Correlates with SPM637.

Format

The format for log report SPM337 is as follows:

```
MSH10_I06BE  **  SPM337 APR21 14:32:34 7795 INFO SPM Has Entered Holdover
              Location: SPM: 7   CEM: 1
              Reason: No available sync references.
              Alarm: HOLDOVR
              Action: Raise
              Location: SPM 7  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM338

Log report SPM338 indicates that the SPM has been in Holdover over 24 hours. This log correlates with SPM638.

Format

The format for log report SPM338 is as follows:

```
MSH10_I06BE  **  SPM338 APR21 14:33:54 7801 INFO SPM Has Been In Holdover
Over 24 Hours
              Location: SPM: 2   CEM: 0
              Reason: No available sync references.
              Alarm: HLDOVR24
              Action: Raise
              Location: SPM 2  Type: IW        Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM339

Log report SPM339 indicates that the clock oscillator tuning range has reached 70% of the maximum range. Correlates to a VCXO70 alarm.

Format

The format for log report SPM339 is as follows:

```
MSH10_I06BE    *  SPM339 APR21 14:27:48 7749 INFO Clock Range
               Location: SPM: 7   CEM: 1
               Reason: Clock oscillator tuning range has reached 70%.
               Alarm: VCXO70
               Action: Raise
              Location: SPM 7  Type: SMG4      Fabric: ATM


MSH10_I06BE       SPM339 APR21 14:27:55 7750 INFO Clock Range
               Location: SPM: 7   CEM: 1
               Reason: Clock oscillator within nominal tuning range.
               Alarm: VCXO70
               Action: Clear
               Location: SPM 7  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM340

Log report SPM340 generates during a computing module (CM) warm switch of activity (SWACT). The CM sends a message to both common equipment modules (CEM) in the Spectrum to update the existing EXECS to those that correspond to the new CM load. If the update fails, this log generates.

Format

The format for log report SPM340 is as follows:

```
<office> SPM340 <date> <time> <sequence number> <severity>
SPM <spm number>
Failed to send EXECS to CEM <cem number>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
spm number	0 to 63	SPM where CM SWACT message failed
cem number	0 to 1	CEM where CM SWACT message failed

Action

Manually busy the SPM, then return it to service.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM341

The SPM341 log report generates when a Sync Resource Module (SRM) in an MG 4000 enters a holdover condition.

Format

The SPM341 log report format is as follows:

```
<office> <severity> SPM341 <timestamp> <ssdd> INFO SyncRM Entered Holdover
             Alarm: < Alarm name >
             Action: Alarm Raised
             Location: <SPM #>  Type:<SPM type> Fabric: <switching type>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
TimeStamp	mmm dd hh:mm:ss.eee	The time the alarm was raised.
Location	SPM 0-85	The MG 4000 where the alarm occurred.
Alarm Name	HLDOVR	The name of the alarm that generated the log report, HLDOVR
Action	Alarm Raised	This log was generated because an SRM entered a holdover condition.

Action

Follow the procedure *Clearing an SRM HLDOVR alarm*, located in NN10076-911 (MG 4000 Fault Management).

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM342

The SPM342 log report generates when a Sync Resource Module (SRM) in an MG 4000 enters a holdover condition for 24 hours.

Format

The SPM342 log report format is as follows:

```
<office> <severity> SPM342 <timestamp> <ssdd> INFO SyncRM Entered Holdover 2
             Alarm: < Alarm name >
             Action: Alarm Raised
             Location: <SPM #>  Type:<SPM type> Fabric: <switching type>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
TimeStamp	mmm dd hh:mm:ss.eee	The time the alarm was raised.
Location	SPM 0-85	The MG 4000 where the alarm occurred.
Alarm Name	HLDOVR24	The name of the alarm that generated the log report, HLDOVR24
Action	Alarm Raised	This log was generated because an SRM entered a holdover condition for 24 hours.

Action

Follow the procedure *Clearing an SRM HLDOVR24 alarm*, located in NN10076-911 (MG 4000 Fault Management).

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM344

The SPM344 log report generates when a Sync Resource Module (SRM) in an MG 4000 experiences a loss of BITS redundancy (LOR) alarm.

Format

The SPM344 log report format is as follows:

```
<office> <severity> SPM344 <timestamp> <ssdd> TBL Loss of BITS Redundancy
              Alarm: < Alarm name >
              Action: Alarm Raised
              Location: <SPM #>  Type:<SPM type> Fabric: <switching type>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
TimeStamp	mmm dd hh:mm:ss.eee	The time the alarm was raised.
Location	SPM 0-85	The MG 4000 where the alarm occurred.
Alarm Name	LOR	The name of the alarm that generated the log report, LOR.
Action	Alarm Raised	This log was generated because an SRM experienced a loss of BITS redundancy alarm.

Action

Follow the procedure *Clearing an LOR Level Alarm*, located in NN10076-911 (MG 4000 Fault Management).

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM350

Log report SPM350 generates to warn of a potential for resource exhaustion of one specific resource type on a specific SPM node. The log is also output when the alarm goes to the off state. It is an alarmed log that is generated to indicate the corresponding SPM node-level alarm changed state.

Outputs are resource type, SPM node number, and number of resources of that type currently free and in use.

Default severity is minor. However, this can be changed through table control. The default low-water-mark is 60% of the pool size, and this can be changed byway of datafill. When the low-water-mark is reached, the alarm and alarmed log are generated. Thresholds are changed in table MNNODE.

In order to avoid flooding the computing module (CM) with logs when call processing is operating near the threshold and repeatedly crossing it, local SPM resource management implements a latching algorithm that waits before outputting the next change in the alarm state if the previous state occurred within ten seconds.

Note: An OM register is pegged every time the low-water-mark threshold has been crossed.

Local SPM resource management also ensures that the alarm does not get stuck on or off.

The log is given for each resource type.

Format

The format for log report SPM350 is as follows:

```
MSH10_I06BE  *  SPM350 APR22 15:18:33 9127 TBL  Resource Alarm State Changed
             ALARM_STATE = ON
             POOL        = ECAN
             SPM_NUM     = 5
             NUM_FREE    = 25
             NUM_INUSE   = 75
             Location: SPM 5  Type: SMG4      Fabric: ATM
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
ALARM_STATE	ON, OFF	An indication of whether the alarm has gone on or off
RESOURCE_TYPE	ECAN COT TONESYN DTMF MF	The resource type of the pool that is being depleted. They are • echo canceller • CCS7 continuity testers • tone synthesizers • DTMF receivers
NUM_FREE	0-32767	Number of free or unallocated resources in the pool at the time of threshold crossing
NUM_INUSE	1-32767	Number of resources in use at the time of threshold crossing

Action

When the alarm goes on, the expected action is to provision for extra capacity by adding one or more RMs to the affected SPM; add another SPM to the office if the SPM in trouble is fully loaded; or to decrease the call rate on the node.

Associated OM registers

ECANRMAN: ECANLOW, ECANUTIL, ECANHI.

DSPRMAN: COTLOW, DTMFLOW, TONELOW, COTUTIL, DTMFUTIL, TONEUTIL, MFLOW, MFUTIL, COTHI, DTMFHI, TONEHI, MFHI

Additional information

This log report requires no additional information.

SPM352

The SPM352 log report generates when an MG 4000 equipped with dual Sync Resource Modules (SRMs) enters a Stratum 3E Holdover alarm status which indicates that both SRMs are in an ST3E holdover state.

Format

The SPM352 log report format is as follows:

```
<office> <severity> SPM352 <timestamp> <ssdd> TBL SPM Entered ST3E Holdover
             Alarm: < Alarm name >
             Action: Alarm Raised
             Location: <SPM #>  Type:<SPM type> Fabric: <switching type>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
TimeStamp	mmm dd hh:mm:ss.eee	The time the alarm was raised.
Location	SPM 0-85	The MG 4000 where the alarm occurred.
Alarm Name	ST3EHLD	The name of the alarm that generated the log report, ST3EHLD.
Action	Alarm Raised	This log was generated because both SRMs are in a ST3E Holdover condition.

Action

Follow the procedure *Clearing a ST3EHLD alarm*, located in NN10076-911 (MG 4000 Fault Management).

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM353

Log report SPM353 indicates that both of the Sync RMs are in holdover for 24 hours, so the SPM has entered Stratum 3E Holdover24. Alarm ST3EHLDOVR24 is raised. Correlates with SPM653.

Format

The format for log report SPM353 is as follows:

```
MSH10_I06BE *** SPM353 APR22 11:47:20 7132 TBL  SPM Entered ST3E Holdover24
               Location: SPM: 6
               Alarm: ST3EHD24
               Action: Alarm Raised
               Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM354

The SPM354 log report generates when both Sync Resource Modules (SRMs) in an MG 4000 are out-of-service which places the active CEM in an SMC Holdover (SMCHLD) alarm status.

Format

The SPM354 log report format is as follows:

```
<office> <severity> SPM354 <timestamp> <ssdd> TBL SPM Entered SMC Holdover
             Alarm: < Alarm name >
             Action: Alarm Raised
             Location: <SPM #>  Type:<SPM type> Fabric: <switching type>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
TimeStamp	mmm dd hh:mm:ss.eee	The time the alarm was raised.
Location	SPM 0-85	The MG 4000 where the alarm occurred.
Alarm Name	SMCHLD	The name of the alarm that generated the log report, SMCHLD.
Action	Alarm Raised	This log was generated because both SRMs are out of service and the active CEM is in an SMC Holdover condition.

Action

Follow the procedure *Clearing an SMCHLD alarm*, located in NN10076-911 (MG 4000 Fault Management).

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM355

The SPM355 log report generates when both Sync Resource Modules (SRMs) in an MG 4000 are out-of-service due for 24 consecutive hours which places the CEM into an SMC Holdover 24 (SMCHLD24) alarm status.

Format

The SPM355 log report format is as follows:

```
<office> <severity> SPM355 <timestamp> <ssdd> TBL SPM Entered SMC Holdover24
             Alarm: < Alarm name >
             Action: Alarm Raised
             Location: <SPM #>  Type:<SPM type> Fabric: <switching type>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
TimeStamp	mmm dd hh:mm:ss.eee	The time the alarm was raised.
Location	SPM 0-85	The MG 4000 where the alarm occurred.
Alarm Name	SMCHLD24	The name of the alarm that generated the log report, SMCHLD24.
Action	Alarm Raised	This log was generated because both SRMs are out of service for 24 hours and the active CEM is in an SMC Holdover24 condition.

Action

Follow the procedure *Clearing an SMCHLD24 alarm*, located in NN10076-911 (MG 4000 Fault Management).

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM356

The SPM356 log report generates when one Sync Resource Module (SRM) in an MG 4000 is out-of-service which raises an SPM Loss of Clock unit Redundancy (LOCUR) alarm.

Format

The SPM356 log report format is as follows:

```
<office> <severity> SPM356 <timestamp> <ssdd> TBL SPM Loss of Clock Unit
Redundancy
             Alarm: < Alarm name >
             Action: Alarm Raised
             Location: <SPM #>  Type:<SPM type> Fabric: <switching type>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
TimeStamp	mmm dd hh:mm:ss.eee	The time the alarm was raised.
Location	SPM 0-85	The MG 4000 where the alarm occurred.
Alarm Name	LOCUR	The name of the alarm that generated the log report, LOCUR.
Action	Alarm Raised	This log was generated because one SRM is out of service and a LOCUR alarm was raised.

Action

Follow the procedure *Clearing a LOCUR alarm*, located in NN10076-911 (MG 4000 Fault Management).

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM357

The SPM357 log report generates when an MG 4000 experiences non-critical faults on more than two of the four BITS Links and raises an SPM Timing Link Degradation (SPMSRMNTD) alarm.

Format

The SPM357 log report format is as follows:

```
<office> <severity> SPM357 <timestamp> <ssdd> TBL SPM Input timing Signal
Degradation
            Alarm: < Alarm name >
            Action: Alarm Raised
            Location: <SPM #>  Type:<SPM type> Fabric: <switching type>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
TimeStamp	mmm dd hh:mm:ss.eee	The time the alarm was raised.
Location	SPM 0-85	The MG 4000 where the alarm occurred.
Alarm Name	SPMSRMNTD	The name of the alarm that generated the log report, SPMSRMNTD.
Action	Alarm Raised	This log was generated because non-critical faults occurred on more than two of the four BITS Links of an MG 4000 and an SPMSRMNTD alarm was raised.

Action

Follow the procedure *Clearing an SPMSRMNTD alarm*, located in NN10076-911 (MG 4000 Fault Management).

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM358

The SPM358 log report generates when a timing reference field change in the MNNODE table, between LINE and EXTERNAL, fails and causes an SPM Timing Reference Source Fail (TMCFAIL) alarm.

Format

The SPM358 log report format is as follows:

```
MSH10_I06BE ***  SPM358 APR22 09:02:17 4568 TBL  SPM Timing Mode Change Fail
             Location: SPM: 6
             Reason: ATM STS3 Carrier Clock Degradation Reported
             Alarm: TMCFAIL
             Action: Alarm Raised
             Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

Follow the procedure *Clearing a TMCFAIL alarm*, located in NN10076-911 (MG 4000 Fault Management).

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM370

Log report SPM370 indicates an SPM health monitor event. Connection errors have been corrected by the DLC Audit. This log correlates with SPM670.

Format

The format for log report SPM370 is as follows:

```
MSH10_I06BE   SPM370 APR22 14:42:17 8730 FLT  SPM Health Monitor Event
             Location: SPM : 5 CEM : 1 active
             Status : Info
            Fault  : CEM Swact due to excessive PTS trunks in lockout or RMB
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM399

The SPM399 log generates when an SPM-based node enters or leaves an overload condition caused by peak traffic levels that are in excess of the SPM engineering limit.

In addition to the log report, a Maintenance in Progress (MIP) indicator appears when the CEM is posted using MAPCI. The text shown in the flag consists of one of the following:

- Check Overload OMs
- Ovld Pending
- Ovld

The SMP399 log text contains four reasons that represent the log generation cause. The following table defines those reasons.

SPM399 Log Reason Definitions

Reason	Definition
Overload OMs initiated	The CPU occupancy meets or exceeds; or falls below 75% • Meets or exceeds - the MIP indicator appears at the active CEM MAP level; no effect on call processing; no alarms • Falls below - new calls no longer go into queue
CEM in Overload Pending state	The CEM is either approaching or has recovered from an overload condition. In both instances, new calls are placed in queue. • Approaching - occupancy meets or exceeds the CPU threshold of 88%; call flow control is initiated; messages from new calls are queued • Recovered - the backlog of queued calls has been processed; the CEM changes back to In-Service (INSV); call flow control continues

SPM399 Log Reason Definitions

Reason	Definition
CEM experiencing Overload	2% of calls have been lost or a call has been delayed by flow control for greater than four seconds; the CEM state changes to In-Service Trouble (ISTB)
Overload Cleared	CPU occupancy has dropped below 60%

Format

The SPM399 log report adheres to the following format:

```
MG4K107BH ** SPM366  <mmmdd hh:mmm:ss seq#> TBL  SPM Overload Report
       SPM   <xx> CEM   <y> : <Activity> <state> Time: <hh:mm:ss.SSS>
        Reason: <Reason string>
      Prev: <previous state> Curr: <current state> Diagnostic: <#HHHH>
        Action: <Action string>
        Location: SPM  <SPMNUM>  Type: <SPM Class>      Fabric: <Fabric>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
y	0,1	The CEM number of the SPM for which the log is generated.
Activity	A,I	The CEM activity status, either active or inactive.
State	INSV, ISTB, MANB, SYSB	The CEM service state.

Field	Value	Description
Reason	1. Overload OMs initiated 2. CEM in Overload Pending state 3. CEM experiencing Overload 4. Overload Pending cleared 5. Overload cleared	The four possible reasons associated with the log generation. The first three reasons are for error scenarios and the fourth is for the error-clearing scenario. Refer to SPM399 Log Reason Definitions for more information.
Prev	1. None 2. Monitor OMs 3. Overload Pending 4. Overload	The overload condition of the SPM-based node before the error/error-clearing event occurred.
Curr	1. None 2. Monitor OMs 3. Overload Pending 4. Overload	The current overload condition of the SPM-based node at the time the log was generated.
Diagnostics	#0000 to #FFFF	Reserved for Nortel Networks support trouble-shooting.
Action	1. Check SPMACT and SPMOLVD OMs 2. Contact your next level of support 3. None	Refer to the table SPM399 Actions and associated Reasons for more information.

Action

The following table lists the actions specified in the SPM399 log and their associated reasons.

SPM399 Actions and associated Reasons

Action	Reason
Check SPMACT and SPMOLVD OMs	overload pending overload
Contact your next level of support	overload
None	no action required

Associated OM registers

The SPMACT group contains a CAPINDEX register that provides the SPM-based node CEM capacity level.

The SPMOVLD group contains the following associated registers:

Register	Definition
OVLDNUM	pegs when the node enters an overload condition
OVLDUSG	maintains the number of seconds the node was in an overload condition for the present OM collection interval
OVLDPNUM	pegs when the node enters an overload pending condition
OVLDPUSG	maintains the number of seconds the node was in the overload pending condition for the present OM collection interval

Additional information

This log report requires no additional information.

SPM500

Log report SPM500 generates when a device changes states, such as from inactive to active.

Format

The format for log report SPM500 is as follows:

```
MSH10_I06BE   *  SPM500 APR22 10:28:43 5224 INFO Device State Change
              Location: SPM : 6   DSP : 0
              From    : InSv (Active)
              To      : ISTb (Inactive)
              Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM501

Log report SPM501 generates when the clock mode changes from sync, freerun, holdover, or acquire to sync, freerun, holdover, or acquire. Alarm severity is provisioned.

Note: This log is not generated when the clock mode changes from synchronization to holdover. See log SPM332 for more information.

Format

The format for log report SPM501 is as follows:

```
MSH10_I06BR   SPM501 JUN11 17:08:22 1802 INFO Sync Operation Mode Change
              Location: SPM: 6   SRM : 1
              Reason: SRM  changed modes from Sync     to Holdover
              Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM502

Log report SPM502 generates when the local common equipment module (CEM) software sends a single alarm report. The alarm report generates when an ATM Connection changes state in the local. This state change must be propagated to the core. Once propagated, the core reflects the state change in its state database and the MAP display and then generates this log report.

Format

The format for log report SPM502 is as follows:

```
SPM Number              <0 to 63>
Connection Number       <0 to 181>
From State              <InSv, Almd, CAlm, COOS, UnEq>
To State                <InSv, Almd, CAlm, COOS, UnEq>
Alarm ID                <0 to 255>
Alarm Name              <8 character string>
Alarm Reason            <50 character string>
```

Note 1: The local CEM generates the “Alarm ID" value; however, the core has no knowledge of the contents other than the range.

Note 2: The local CEM generates the “Alarm Name" and “Alarm Reason" strings; however, the core has no knowledge of the contents.

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
SPM Number	0 to 63	This is the SPM number as datafilled in table MNNODE.
Connection Number	0 to 181	This is an external connection number provisioned.
From State	InSv, Almd, CAlm, COOS, UnEq	This is a string which represents the ATM Connection state we are changing from.
To State	InSv, Almd, CAlm, COOS, UnEq	This is a string which represents the ATM connection state we are changing to.

Field	Value	Description
Alarm ID	0 to 255	This is a BYTE value that the local CEM generates to represent an alarm generating on a particular connection. Note: Multiple alarms can generate on the same connection.
Alarm Name	Determined by the local CEM software	This string represents the ATM connection alarm name. It can have up to 8 characters. The local CEM generates the string.
Alarm Reason	Determined by the local CEM software. The string passed up by the local CEM is 32 characters in length. When it reaches the core either “detected" or “cleared" is added to the end of the string.	This string represents the ATM connection alarm reason. It can have up to 50 characters. The local CEM generates the string.

Action

This log generates if an alarm condition occurs or an alarm condition clears. Usually, the condition is generated by the far-end ATM edge switch.

SET--no action required. The trunks associated with this connection are taken out-of-service (OOS) by ATM maintenance.

CLEAR--no action required. The trunks associated with this connection are returned to service by ATM maintenance.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM503

Log report SPM503 generates when the associated carrier on an SPM goes out-of-service (OOS) and signals the Asynchronous Transfer Mode (ATM) Maintenance of the carrier state change. When this carrier goes OOS, change the state of every connection associated with that carrier. Up to 84 connections may require a state change. In order to eliminate the large number of logs, only one log generates to indicate the problem.

Format

The format for log report SPM503 is as follows:

```
SPM Number          <0 to 63>
Carrier Number      <0 to 181>
Log Reason          <50 character string>
Log Results         <56 character string>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
SPM Number	0 to 63	The is the SPM number as datafilled in table MNNODE.
Carrier Number	0 to 181	The is the Carrier number as datafilled in table MNHSCARR.

Field	Value	Description
Log Reason	Parent Carrier has gone OOS or Parent carrier has returned to service	The first string indicates the parent STS3cP Carrier has gone OOS. This results in all the ATM connections associated with that carrier to go COOS or CAlm. The second string indicates the STS3cP carrier has returned to service. This results in the ATM connections going InSv or Almd.
Log Results	All ATM connections on this carrier have gone COOS/CAlm or All ATM connections on this carrier have gone InSv/Almd	The first string results from the STS3cP carrier going OOS. The second string results from the STS3cP carrier returning to service.

Action

Correct the problem that has occurred in the carrier.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM504

Log report SPM504 generates for the Spectrum Peripheral Module (SPM) when both of the associated Asynchronous Transfer Mode (ATM) Resource Module (RM) devices on an SPM go out-of-service (OOS) and the Integrated Device Maintenance (IDM) signals ATM Maintenance of the device state change. When these devices go OOS, change the state of every Connection associated with that device. Up to 84 connections may require a state change. In order to eliminate the large number of logs, only one log generates to indicate the problem.

Format

The format for log report SPM504 is as follows:

```
SPM Number      <0 to 63>
Log Reason      <50 character string>
Log Results     <56 character string>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
SPM Number	0 to 63	The is the SPM number as datafilled in table MNNODE.

Field	Value	Description
Log Reason	Both ATM RM devices have gone OOS or The active ATM RM device has returned to service	The first string indicates that both ATM RM devices have gone OOS. This results in all the ATM connections associated with that RM device to go COOS. The second string indicates at least one ATM RM device has returned to service. This results in the ATM connections going InSv.
Log Results	All ATM connections on this device have gone COOS or All ATM connections on this device have gone INSV	The first string results from both RM devices going OOS. The second string results from at least one ATM RM device returning to service.

Action

Correct the problem that has occurred in the ATM RM device.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM510

Log report SPM510 indicates a PM Timing Mode change indicating a line to external and vice versa.

Format

The format for log report SPM510 is as follows:

```
MSH10_I06BE      SPM510 APR21 14:17:23 7661 INFO Sync Reference Switch
                 Location: SPM: 7   CEM: 0
                 Reason: System switch: from ATM 1 to CEM 1 SYS FP
                 Location: SPM 7  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM600

Log report SPM600 generates for the DMS-Spectrum Peripheral Module (SPM) when the message switch (MS) changes modes and is not able to notify the in-service SPM of the mode change.

Format

The format for log report SPM600 is as follows:

```
SPM600 <alarm>: MS Mode Change
        SPM: <#> CEM: <$>
       Reason: MS changed modes and was not able to notify
        the SPM.
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
#	0-63	Node number
$	0-1	Unit number

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM605

An SPM605 log report generates when the SPMRESALIGN tool excludes a resource module (RM) protection group from the Resource Module ID-ProtWhom ID (RMID-PWID) alignment process due to one of the following reasons:

- PWID duplication
- an invalid RM state
- a sparing failure

Format

The format for the SPM605 log report is as follows:

```
MSH10_I06BE  SPM605 <mmmdd hh:mm:ss seq#> INFO RMID-PWID Alignment
              Prot group: <PROT_GRP>
              Prot grp id: <PROT_GRPID>
              Result: Not Aligned
              Reason: <REASON>
              Action: <ACTION>
              Location: SPM  <SPMNUM> Type: <SPM Class>  Fabric: <Fabric>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
Prot group	alpha numeric	This field displays the SPM-based node and number; and the RM protection group type. For example, SPM 1 VSP.
Prot grp id	numeric	This field displays the identification number of the protection group that was excluded from the alignment process.
Result	Not Aligned	This field indicates the Protection Group alignment failure.

Field	Value	Description
Reason	• PWID duplication • VSP # not in INSV/ISTB • Unsuccessful sparing	This field displays the reason for the alignment failure.
Action	• rectify the duplication and execute SPMRESALIGN • bring this RM to INSV and execute SPMRESALIGN • review the logs related to sparing	This field suggests the corresponding action required to correct the problem.

Action

Follow the actions described in the log.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM610

Log report SPM610 is generated whenever an SPM node and SSM value changes.

Format

The format for log report SPM610 is as follows:

```
MSH10_I06BR   SPM610 JUN11 17:08:22 1800 INFO Reference Quality Change
              Location    : SPM : 6    SRM : 1
              From SSM    : STU
              To SSM      : S3E
              Location: SPM 6  Type: SMG4       Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM611

Log report SPM611 indicates that a reference node switch has occurred either manually or through the system.

Format

The format for log report SPM611 is as follows:

```
OLSC_06BB      SPM611 FEB26 05:06:24 2582 INFO SYNC Reference Node Switch
               From        : SPM : 0   SRM
               To          : SPM : 1   SRM
               Source      : Manual
               Location: SPM 0  Type: IW        Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM619

The SPM619 log report generates for a Frame Supervisory Panel (FSP) alarm if an FSP_REMOTE_SMG4 scan function exists in the ALMSC table and the report field is set to “Y”. A log is generated whenever an FSP alarm is raised or cleared on a remote MG 4000.

Format

The following is an example of an SPM619 log report when an alarm is raised:

```
MG4K106BT  **  SPM619 MAY28 14:04:26 1370 INFO Remote MG4K Fault Details

              Alias : SPM_67       Floor : 1      Row   : C  Frame No : 1

                Frame Pos : 13       Fault : FAN    Alarm : Raised

                Location: SPM 67  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

Actions vary based on the information available in the log.

Associated OM registers

This log report has no associated OM registers.

Additional information

Information regarding frame location captured in the SPM619 log appears only for remote MG 4000 nodes.

SPM630

Log report SPM630 generates for the DMS-Spectrum Peripheral Module (SPM) when a successful sparing event occurs.

Format

The format for log report SPM630 is as follows:

```
MSH10_I06BE    SPM630 APR21 13:11:31 5478 INFO Device Protection Switch
               Location    : SPM : 6    OC3 : 1
               Description: Automatic switch from  OC3 0 to OC3 1.
               Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM632

Log report SPM632 is generated when the REX test on the SPM starts.

Format

The format for log report SPM632 is as follows:

```
MSH10_I06BE    SPM632 APR30 02:24:08 5080 INFO SPM REX start time
               SPM: 6    Type : SMG4
               Reason: Rex started at APR 30 02:24:08
               Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM637

Log report SPM637 indicates that the clock mode has changed from Holdover to Sync. Correlates with the HLDOVR alarm.

Format

The format for log report SPM637 is as follows:

```
MSH10_I06BE   SPM637 APR21 14:32:43 7796 INFO SPM Has Exited Holdover
              Location: SPM: 7   CEM: 1
              Reason: Sync has been restored.
              Alarm: HOLDOVR
              Action: Clear
              Location: SPM 7  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM638

Log report SPM638 indicates that the SPM recovers from the 24 hour Holdover state. The clock mode changes from Holdover to Sync. Correlates to the HLDOVR24 alarm.

Format

The format for log report SPM638 is as follows:

```
MSH10_I06BE   SPM638 APR21 14:34:15 7803 INFO SPM Has Exited 24 Hour Hold-
over
              Location: SPM: 2   CEM: 0
              Reason: Sync has been restored.
              Alarm: HLDOVR24
              Action: Clear
              Location: SPM 2  Type: IW        Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM641

The SPM641 log report generates when a Sync Resource Module (SRM) in an MG 4000 exits from a holdover alarm condition.

Format

The SPM641 log report format is as follows:

```
MSH10_I06BR    SPM641 JUN12 18:33:11 2516 INFO SyncRM Exited Holdover
               Location: SPM: 6   SRM: 1
               Alarm: SRMHLDOV
               Action: Alarm Cleared
               Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM642

Log report SPM642 indicates that a SyncRM has exited 3E Holdover 24 state.

Format

The format for log report SPM642 is as follows:

```
MSH10_I06BR   SPM642 JUN12 18:33:11 2517 INFO SyncRM Exited Holdover 24
              Location: SPM: 6   SRM: 1
              Alarm: SRMHLD24
              Action: Alarm Cleared
              Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM644

The SPM644 log report generates when a Sync Resource Module (SRM) in an MG 4000 a loss of BITS redundancy (LOR) alarm clears.

Format

The SPM644 log report format is as follows:

```
MSH10_I06BR  SPM644 JUN11 17:08:22 1799 INFO Loss Of BITS Redundancy Cleared
             Location: SPM: 6   SRM: 1
             Alarm: SRMLOR
             Action: Alarm Cleared
             Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM645

Log report SPM645 generates the Link Protocol and Messaging Interface Controller (LPMIC) Event Report. This log is generated on every CEM and transported to the core. This log is also generated periodically and whenever the number of events crosses a threshold value.

Format

The format for log report SPM645 is as follows:

```
MSH10_I06BE      SPM645 APR22 01:41:12 1755 INFO LPMIC Event Report
                 SPM  2 CEM   1 : A
                 Port Event Occurrences    Start Time       End Time
                   2  #0000       8       01:36:26.085    01:40:57.785
                   3  #0000      11       01:36:25.000    01:40:57.350
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM650

Log report SPM650 indicates that a successful in-service loading procedure has occurred.

Format

The format for log report SPM650 is as follows:

```
MSH10_I06BE   SPM650 APR22 09:24:26 4779 PASS
              SPM Device Loader Success
              Report:           1 OF 1
              Device:           SPM 6 ATM 1 Activity : I
              Result:           Passed
              Load File:        ATC19AY_010024
              Elapsed Time:     00:12:14
              KiloByte Loaded: 8694
              Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM651

Log report SPM651 indicates that an in-service loading procedure has failed.

Format

The format for log report SPM651 is as follows:

```
MSH10_I06BE    *  SPM651 APR22 09:30:42 4838 FAIL
               SPM Device Loader Failure
               Report:           1 OF 1
               Device:           SPM 6 ATM 1  Activity : I
               Result:           Failed
               Load File:        ATC19AY_010024
               Elapsed Time:     00:00:58
               Failure Reason:   Loading Aborted
               Location: SPM 6   Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM652

Log report SPM652 indicates that the SPM has exited Stratum 3E Holdover. Alarm ST3EHLDOVR is cleared.

Format

The format for log report SPM652 is as follows:

```
MSH10_I06BE    SPM652 APR21 15:04:40 8099 INFO SPM Exited ST3E Holdover
               Location: SPM: 6
               Alarm: ST3EHLD
               Action: Alarm Cleared
               Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM653

Log report SPM653 indicates that the SPM has exited Stratum 3E Holdover24. Alarm ST3EHLDOVR24 is cleared.

Format

The format for log report SPM653 is as follows:

```
MSH10_I06B  ESPM653 APR22 11:02:07 0501 INFO SPM Exited ST3E
Holdover24
       Location: SPM: 6
       Alarm: ST3EHD24
       Action: Alarm Cleared
       Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM654

The SPM654 log report generates when at least Sync Resource Modules (SRM) in an MG 4000 returns to service from an active CEM in an SMC Holdover (SMCHLD) alarm status.

Format

The SPM654 log report format is as follows:

```
MSH10_I06BE    SPM654 APR21 13:11:11 5361 INFO SPM Exited SMC Holdover
               Location: SPM: 6
               Alarm: SMCHLD
               Action: Alarm Cleared
               Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM655

The SPM655 log report generates when at least one Sync Resource Module (SRM) in an MG 4000 returns to service from a 24 consecutive hours out of service condition which placed the CEM into an SMC Holdover 24 (SMCHLD24) alarm status.

Format

The SPM655 log report format is as follows:

```
MSH10_I06BE   SPM655 APR22 08:53:22 4473 INFO SPM Exited SMC Holdover24
              Location: SPM: 6
              Alarm: SMCHLD24
              Action: Alarm Cleared
              Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM656

The SPM656 log report generates when one Sync Resource Module (SRM) in an MG 4000 returns to service after an SPM Loss of Clock unit Redundancy (LOCUR) alarm.

Format

The SPM656 log report format is as follows:

```
MSH10_I06BR   SPM656 JUN11 17:08:52 1818 INFO SPM Loss of Clock Unit
Redunadancy Cleared
              Location: SPM: 6
              Alarm: LOCUR
              Action: Alarm Cleared
              Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM657

Log report SPM657 indicates that the input timing signals degradation has cleared. Alarm SPMTLD is cleared.

Format

The format for log report SPM657 is as follows:

```
MSH10_I06BE   SPM657 APR22 08:59:24 4548 INFO SPM Node Timing Degradation -
              Cleared
              Location: SPM: 6
              Alarm: SPMSRMNTD
              Action: Alarm Cleared
              Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM658

Log report SPM658 indicates that a PM timing mode change has occurred with explicit reason (e.g. line to external due to manual request).

Format

The format for log report SPM658 is as follows:

```
MSH10_I06BE   SPM658 APR22 09:03:14 4577 INFO SPM Timing Mode Change Fail -
              Cleared
              Location: SPM: 6
              Alarm: TMCFAIL
              Action: Alarm Cleared
              Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM660

Log report SPM660 generates each time a continous performance monitored trunk member is involved in an answered echo canceller enabled call. This data is sent to the computing module (CM) when the call is disconnected, resulting in the generation of the SPM660 log report. With SP12, the performance data also generates under the following conditions.

- When enabling continuous performance monitoring for a range of ECAN based on its RM/RN, ensure that the OUTPUT is LOG or BOTH.
  - SPMECMON <SPM#> <RM#> <1st RN#> <last RN#>ONOUTPUT LOG
  - SPMECMON <SPM#> <RM#> <1st RN#> <last RN#>ONOUTPUT BOTH
- When enabling continuous performance monitoring for a range of ECAN based on trunk member, ensure that the OUTPUT is LOG or BOTH
  - SPMECMON <CLLI> <1st member#> <last member#> ON OUTPUT LOG
  - SPMECMON <CLLI> <1st member#> <last member#> ON OUTPUT BOTH

The ECAN performance data consists of Echo Return Loss (ERL) and the sum of Echo Return Loss Enhancement (ERLE) and Nonlinear Processing Loss (ANLP). This data is sent to the computing module (CM), which results in the generation of the SPM660 log report.

ATTENTION
ECAN does not apply to all markets.

Format

The format for log report SPM660 is as follows:

```
SPM660 <date> <time> <seq num> INFO ECHO CANCELLER REPORT
<monitor mode> <orientation>
MON TRK: <clli><mem>SPM<spm num><cct_no><cct_ts>
         RM:<rm num>RN:<rn num>

ASSOC TRK: <clli><mem>SPM<spm num><cct_no><cct_ts>

ECAN DATA
   ERL: xx dB ERLE+ANLP: xx dB MERL: x dB ACOM: xx dB
   Delay of Loudest Echo Reflection: <rfl_dla>


                    Near-End      Far-End
        Talk-time   <ne_act>      <fe_act>
     Signal level   <ne_lvl>      <fe_lvl>
    Bckgrnd Noise   <ne_ns>       <fe_ns>
ECAN CONTROL PARAMETERS
TONDS     TONMG    TD mode     S56KB     AUTON     NLP
<Y or N> <Y or N> <G.164 or G.165> <Y or N> <Y or N> <Y or N>

NSMAT     CNVRG     ESTRS     SOS     TDINC     LAW
<Y or N> <Y or N> <Y or N> <Y or N> <Y or N> <uLaw or ALaw>

ECAN CURRENT STATE
DCDET   DCNOW   ENABLE   CVRGD
<Y or N>  <Y or N>  <Y or N>  <Y or N>

<performance text>
```

Note: A_{NLP} may be 0 if NLP is off.

Selected field descriptions

The following table explains selected fields in the log report:

Field	Subfield	Value	Description
monitor mode		MONITOR	Continuous monitoring mode causes this report to be generated
orientation value		Near-End, Far-End	Echo canceller orientation
MON TRK	clli	String	Reporting trunk CLLI group name
	mem	0000-9999	Reporting trunk CLLI group member number

Field	Subfield	Value	Description
	spm num	00-63	Reporting trunk member is assigned to this SPM number.
	cct_no	00-181	OC-3 DS1 as datafilled in table TRKMEM
	cct_ts	1-24	OC-3 DS0 as datafilled in table TRKMEM
	rm num	1-28 (except 7-10, which are reserved for CEMs and OC3s)	Reporting trunk member is assigned to this resource module
	rn num	0-387	Reporting trunk member is assigned to this resource number
ASSOC TRK	clli	string	CLLI group name of the trunk member is connected to reporting trunk
	mem	0000-9999	CLLI group member number of trunk connected to reporting trunk
	pm type	SPM, DTC, DTCI, others	Type of peripheral associated with the trunk connected to the monitored trunk
	pm num	PM number	Trunk connected to reporting trunk member is assigned to this PM number
	cct_no	00-181	Trunk connected to reporting trunk member is assigned to this circuit number as datafilled in table TRKMEM
	cct_ts	1-24	Trunk connected to reporting trunk member is assigned to this time slot as datafilled in table TRKMEM
orientation	value	Near-End, Far-End	Echo canceller orientation

Field	Subfield	Value	Description
ERL	value	00-70	Echo return loss reading specified in decibels Note: ERL measurements are not possible when the echo canceller cannot converge. The value reported in the SOS message is set to MERL - 3dB. If this results in a negative value, zero is reported.
ERLE	value	00-70	Echo return loss enhancement reading specified in decibels.
MERL	value	0, 3, 6	Minimum ERL; datafilled in table SPMECAN
ERL+ERLE	value	00-140	Total loss of echo as a result of echo cancellation. Default is 33 dB
rfl_dla	value	00-255	The delay of the main reflection in the echo-path specified in milliseconds. This value is set to 255 if the echo canceller is not currently converged.
ne_act	value	00-255	The number of seconds of near-end speech activity since the beginning of the call. Activity greater than 255 is reported as 255.
fe_act	value	00-255	The number of seconds of the far-end speech activity since the beginning of the call. Activity greater than 255 is reported as 255.
ne_lvl	value	-80-80	Average near-end signal (voice) level specified in dBm. Valid only if ne_act is greater than 30 seconds.
fe_lvl	value	-80-80	Average far-end signal (voice) level specified in dBm. Valid only if fe_act is greater than 30 seconds.

Field	Subfield	Value	Description
ne_ns	value	-80-80	The measured near-end absolute average background noise level, specified in dBm
fe_ns	value	-80-80	The measured far-end absolute average background noise level, specified in dBm
performance text		Text string	Evaluation of echo canceller performance or reason ERL and ERLE data not displayed. See Performance text explanations for actual text and reasons.

Action

Data call detected
The echo canceller channel being monitored detected a data call.

Action: no action is required; this is not a problem.

Echo canceller not enabled
The echo canceller is not enabled.

Action: no action is required.

Speech activity < 30 seconds. Performance data not reliable
This is a warning message. Returned performance data represents a long-term average. Data is considered reliable when there is at least 30 seconds of far-end speech activity.

Action: no action is required; this is the expected result.

Delay of loudest echo reflection is 255ms. Ecan is not converged
This message generates when an ECAN cannot converge. The message usually indicates an ECAN configuration or a network problem.

Action: no action is required.

Potential network problem; ERL should be at least MERL
The ERL read from the echo canceller is less than MERL. This may indicate a problem within the network. An ERL of at least MERL is required by the echo canceller if it is expected to cancel echo correctly.

Action: determine the reason why ERL is less than MERL, then correct it.

Echo canceller performance problem; ACOM < datafilled value
This message generates when speech activity and MERL are within nominal expected ranges, but ERL + ERLE is less than the value datafilled by the user in table SPMECAN. The message indicates a network problem.

Action: troubleshoot possible sources of echo cancellation problem, then correct it.

Echo canceller performing within expected limits
The received ERL and ERLE readings fall within the expected range of ERL greater than MERL and the sum of ERL and ERLE data is not less than 33 dB.

Action: no action is required; these are expected results.

Associated OM registers

This log report has no associated OM registers.

Additional information

Use this log to collect data to detect potential echo cancellation or network troubles.

SPM661

Log report SPM661 generates for the DMS-Spectrum Peripheral Module (SPM) whenever a continuous monitoring ON/OFF command, or an SPMECMON AUTO command completes successfully.

ATTENTION
The echo canceller (ECAN) does not apply to all markets.

This log also generates when one of the following events occur:

- an SPM with continuously monitored trunks is taken out of service
- a trunk selected for continuous monitoring is removed from datafill
- an RM selected for continuous monitoring is removed from datafill

With SP12 software release, this log also generates when the following commands are executed:

- SPMECMON <SPM#> <RM#> <1st RN#> <last RN#> ON OUTPUT LOG
- SPMECMON <SPM#> <RM#> <1st RN#> <last RN#> ON OUTPUT BOTH
- SPMECMON <SPM#> <RM#> <1st RN#> <last RN#> ON OUTPUT MAP
- SPMECMON <CLLI> <1st member#> <last member#> ON OUTPUT LOG
- SPMECMON <CLLI> <1st member#> <last member#> ON OUTPUT BOTH
- SPMECMON <CLLI> <1st member#> <last member#> ON OUTPUT MAP

Format

The format for log report SPM661 is as follows for RM- and RN-based commands:

```
SPM661 <date> <time> <seq num> INFO ECHO CANCELLER REPORT
<reply text>
SPM: <spm num> RM: <rm num> RN: <rn num>
   or
SPM: <spm num> RM: <rm num>
```

The format for log report SPM661 is as follows for trunk-member-based commands:

```
SPM661 <date> <time> <seq num> INFO ECHO CANCELLER REPORT
<reply text>
Trunk: <clli> <mem> - SPM <spm num> <cct_no> <cct_ts>
```

The format for log report SPM661 is as follows for AUTO-based commands:

```
SPM661 <date> <time> <seq num> INFO ECHO CANCELLER REPORT
<reply text>
SPM: <spm num>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Subfield	Value	Description
reply text		Text string	Function successfully processed by SPMECMON command
Trunk (optional)	clli	String	Reporting trunk CLLI group name
	mem	0000-9999	Reporting trunk CLLI group member number
	spm num	00-63	Reporting trunk member is assigned to this SPM number
	cct_no	00-181	OC-3 DS1 as datafilled in table TRKMEM
	cct_ts	1-24	OC-3 DS0 as datafilled in table TRKMEM
	rm num	1-28 (except 7-10, which are reserved for CEMs and OC3s)	Reporting trunk member is assigned to this resource module

Field	Subfield	Value	Description
	rn num	0-387	Reporting trunk member is assigned to this resource number
SPM (optional)	spm num	00-63	SPM number specified in SPMECMON command

Reply text explanation

An explanation of reply text strings possible for SPM661 logs are provided in the following paragraphs.

Monitoring enabled for
This text is output when one of the following CLLI-based commands is successfully processed:

- Trunk: <clli> <mem> - SPM <spm num> <cct_no> <cct_ts>

Monitoring disabled for
This text is output when a CLLI-based SPMECMON OFF command is successfully processed:

- Trunk: <clli> <mem> - SPM <spm num> <cct_no> <cct_ts>

Monitoring disabled for <spm #>
This text is output when a SPM-based SPMECMON OFF command is successfully processed.

Automatic monitoring enabled for SPM <spm#>
When the SPMECMON AUTO ON command is issued, this log generates to indicate enabling of automatic continuos monitoring.

Automatic monitoring disabled for SPM <spm#>
When the SPMECMON AUTO OFF command is issued, this log generates to indicate disabling of automatic continuos monitoring.

Automatic monitoring is in TABLE mode for SPM <spm#>
When the SPMECMON AUTO TABLE command is issued, this log generates to indicate automatic continuos monitoring is in table mode.

All monitoring disabled for system
This text is output when a system-based SPMECMON OFF command is successfully processed.

Action

This information log provides a history of successful SPMECMON ON, SPMECMON OFF, and SPMECMON AUTO command execution.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM670

Log report SPM670 generates an INFO log to report that the health monitor “CallCount PTS no setup fault” has been cleared. This log correlates with SPM370.

Format

The format for log report SPM670 is as follows:

```
MSH10_I06BE   SPM670 APR22 16:29:29 0757 INFO SPM Health Monitor Event
            Location: SPM : 5 CEM : 1 active
           Status : Excessive pts trunk lockout or RMB condition has cleared
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM680

Log report SPM680 indicates low MBM Application Buffers.

Format

The format for log report SPM680 is as follows:

```
MSH10_I06BE      SPM680 APR25 01:52:20 6761 INFO MBM Appl Low
        SPM:   6  CEM   1  :  I
        Application: MGFTSRTIN           Buffer Size:  2048
        Normal:     10   Peak:         10  Mtc Trigger:     0
        In Use:      0   Hi Water:      4
        ---------------------------------------------
        Pool    Number   In Use   Hi Water     In Use By
        Size   Buffers    Total       Mark   Application
        ---------------------------------------------
          64       118        0          3             0
         128       123        0          6             0
         256       128        0          5             0
         512      3486        1          4             0
        1024      3348        0          1             0
        2048      4347       39         64             4
        Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM681

Log report SPM681 indicates low MBM Application Buffer Pools.

Format

The format for log report SPM681 is as follows:

```
MSH10_I06BE      SPM681 APR25 01:42:39 6684 INFO MBM Pool Low
                 SPM:   6  CEM   1  :  I
                 Pool Size:  1024   Num Buffers:  3348
                 In Use:    65535   Hi Water:        2
                 ------------------------------------------------
                 Application   In Use   Normal     Peak   Mtc Trig
                  ------------------------------------------------
                 HMONTASK           2        0        0      65535
                 DSAPPL             1        5       10          0
                 Location: SPM 6  Type: SMG4      Fabric: ATM
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM682

The SPM682 log report generates when a manual reset is performed on a common equipment module (CEM) or resource module (RM) in an SPM-based node due to the following conditions:

- a resetmod command initiates from the MAP
- a resetmod command completes
- a resetmod command fails
- a resetmod command aborts
- a reset via mate initiates on a CEM from the MAP
- a reset firmware initiates from the MAP

Format

The format for the SPM682 log report is as follows:

```
SPM682  mmmdd hh:mm:ss ssdd  INFO RESETMOD
   Location:  SPM : <spm_number> <cpk_type> : <cpk_number>
   Userid : <userid>
    Description  : <Description string>
    Location   : <SPM node_no> Type: <spm_type> Fabric: <fabric_type>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
spm_number	0 through 85	Identifies the number of the affected SPM-based node.
cpk_type	Text string	Identifies the type of circuit pack (CEM or RM).

Field	Value	Description
cpk_number	Numeric string	Identifies the number of the affected CEM or RM.
Description string	Text string	Describes the resetmod status as one of the following: • Resetmod Initiated • Resetmod Completed • Resetmod Aborted • Resetmod Failed • Resetmod Firmware Initiated • Resetmod ViaMate Initiated • Resetmod Rejected

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM683

The SPM683 log report generates whenever a switch of activity (SWACT) occurs on a common equipment module (CEM) in an SPM-based node.

Format

The format for the SPM683 log report is as follows:

```
SPM683  mmmdd hh:mm:ss ssdd  INFO CEM Swact Trigger
      Location:  SPM : <spm_number> CEM : <Unit number>
       Swact Reason  : <Description string>
      Location   : <SPM node_no> Type: <spm_type> Fabric: <fabric_type>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
spm_number	0 through 85	Identifies the number of the affected SPM-based node.
Unit number	0 or 1	Identifies the number of the affected CEM
Description string	Text string	Describes the reason for CEM SWACT

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM684

Log report SPM684 (Erase Flash) indicates that the:

- Erase flash task is initiated
- Erase flash task is completed
- Erase flash task failed
- Erase flash task is rejected

The log displays the CEM and SPM number on which the Erasefl command is executed. The userid of the craft who initiated the command is also displayed.

The first log is generated when the craft issues an “Erasefl” command from the MAPCI CEM level. The second log is generated when the erase flash task is successfully completed (Flash memory of CEM is erased). The erase flash failed log is generated when the erase flash task fails. The last log is generated if the erase flash task is rejected.

Format

The format for log report SPM684 is as follows:

```
<Office id> SPM684 <mmmdd hh:mm:ss ssdd>INFO ERASE FLASH
Location: SPM : <spm no> CEM : <unit no> Activity : <act>
Userid : <userid>
Description:<one of the 4 strings given below>


STRING1  : ERASE FLASH INITIATED
STRING2  : ERASE FLASH COMPLETED
STRING3  : ERASE FLASH FAILED
STRING4  : ERASE FLASH REJECTED
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
INFO Erase Flash	constant	Indicates that the log is related to erase flash.
spm no	numeric	Indicates the SPM number on which the command is executed.

Field	Value	Description
unit no	numeric	Indicates the CEM number on which the command is executed
act	A or I	Indicates the CEM status as either active or inactive.
Userid	alphanumeric	Indicates the userid of the crafts who issued the command.
Description	String	Indicates if the eraseflash is initiated/completed/failed/rejected.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report helps to get the userid of the crafts who initiated the Erasefl command.

SPM685

Log report SPM685 is generated to indicate that a force action has been performed on a resource module.

Format

The format for log report SPM685 is as follows:

```
MSH10_I06BR  SPM685 JAN01 02:52:47 1884 INFO SPM Force Warnings Ignored
             SPM : 2      Type : PM_TYPE         User : OPERATOR
           Device : CEM    Unit : 1              Action : BSY
          WARNING: If this FORCE action is required due to system problems
         please generate a Problem Report to Nortel. Force actions should
          typically not be required.
```

Selected field descriptions

This log report has no selected fields.

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM700

Log report SPM700 generates when a DDM audit fails for a particular subgroup on a specified SPM. When the failure occurs, a dynamic update is sent to both SPMs.

Format

The format for log report SPM700 is as follows:

```
<office> SPM700 <date> <time> <sequence number> <severity> <title>
Description: DDM Audit Failed for Group: <clli> Subgroup: <subgroup
number> SPM: <SPM number> Unit <Unit Number>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
clli		CLLI name associated with the subgroup; its value is defined in table CLLI
subgroup number	0 or 1	Subgroup number as defined in table TRKSGRP
spm number	0 to 63	SPM number for which the audit failed
unit number	0 to 1	Unit number for which the unit failed

Action

This log report requires no action. A dynamic update was sent to the SPM to synchronize the computing module and the SPM. The same entry will be audited again during the next audit cycle.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM701

Log report SPM701 generates when a DDM audit successfully updates a subgroup on a specified SPM. The audit automatically turns off for that su group on the SPM unit. The audit is automatically turns on when the SPM node comes in service or when provisioning data are modified through table control.

Format

The format for log report SPM701 is as follows:

```
<office> SPM701 <date> <time> <sequence number> <severity> <title>
DDM Audit Succeeded for Group: <clli> Subgroup: <subgroup number>
SPM: <SPM number>, Unit <Unit Number>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
clli		CLLI name associated with the subgroup; its value is defined in table CLLI
subgroup number	0 to 1	Subgroup number as defined in table TRKSGRP
spm number	0 to 63	SPM number for which the audit failed
unit number	0 to 1	Unit number for which the unit failed

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM702

Log report SPM702 generates when a DDM dynamic update fails for a subgroup in a specified SPM. When the failure occurs, the DDM audit automatically turns on. Correction of the problem occurs during the next audit cycle.

Format

The format for log report SPM702 is as follows:

```
<office> SPM702 <date> <time> <sequence number> <severity> <t
Description: DDM Dynamic Update Failed for Group: <clli> Subgroup
<subgroup number> SPM: <SPM number>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
clli		CLLI name associated with the subgroup; its value is defined in table CLLI
subgroup number	0 or 1	Subgroup number as defined in table TRKSGRP
spm number	0 to 63	SPM number for which the audit failed

Action

Either wait for the next audit cycle or use the SPMPTSCI tool.With this tool, the subcommand SGRPUDATE manually updates the SPM with the same data that the audit failed to update.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM703

Log report SPM703 generates when a DDM audit updates a trunk member in a DMS-Spectrum Peripheral Module (SPM) with a data entry for a trunk that failed to be added during a dynamic update.

Format

The format for log report SPM703 is as follows:

```
<office> SPM703 <date> <time> <sequence number> <severity> <ti
CKT <trunk member>
Description: DDM Audit updated trunk in SPM <spm number>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
trunk member		Trunk being updated by audit
spm number	0 to 63	SPM where trunk is being updated

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM704

Log report SPM704 generates when a DDM dynamic update fails for a trunk member in a DMS-Spectrum Peripheral Module (SPM).

Specifically, this log reports after a trunk member is added to the SPM. A dynamic update is sent to the SPM with data for the new trunk. If the dynamic update fails, this report generates. The dynamic update could fail due to running out of resources in the computing module (CM) or the SPM. An audit tries to clear this problem; when cleared, report SPM703 generates.

Format

The format for log report SPM704 is as follows:

```
<office> SPM704 <date> <time> <sequence number> <severity> <ti
CKT <trunk member>
Description: DDM Dynamic Update failed for trunk in SPM <spm number>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
trunk member		Consists of CLLI and trunk member number
spm number	0-63	SPM where trunk is being updated

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM705

Log report SPM705 generates after a trunk is set either to a lockout (LO) or system busy (SB) state. When particular conditions are detected on a trunk on the SPM, this log generates with the reason indicating the problem. To avoid generating too many logs, the list of affected time slots is added to the logs.

Format

The format for log report SPM705 is as follows:

```
MSH10_I06BE   SPM705 mmmdd hh:mm:ss ssdd TBL  SPM PTS Trunk Maintenance
              Trunks state changed to <new trunk state>
              Location: SPM <spm number> Circuit <circuit number>
              Reason: <reason>
              Timeslot: <list of timeslots>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
New trunk state	LO or SB	This field describes the state of new trunks.
SPM number	0 to 63	This field describes the SPM number for which the problem was detected.
Circuit Number	0 to 181	This field describes the circuit number (that is, the DS1 number) for which the problem was detected.
Reason	Refer to the table under “Action.”	This field describes the reason why the trunks were taken out of service.
List of timeslots	1 to 24	This field describes the list of affected trunks.

Action

The following table describes the actions the user takes when the PTS trunk goes out of service.

Reason	Trunk State	Take this action
Trunk not provisioned in the SPM	SB	Deprovision the trunk from table TRKMEM and then reprovision it.
Trunk subgroup data not found	SB	Enter directory SPMPTSCI. Under this directory, enter the SGRPUPDATE or the SGRPBUILD command to update the SPM.
DSP with AB Bit resources went out of service	LO	Correlate this log with an SPM500 log to determine the faulty DSP. This log generates when a DSP goes out of service, and there is either no DSP spare defined or sparing failed. In all cases, any calls using that DSP are dropped. An automatic trunk recovery is attempted. An SPM706 log generates in case of a successful recovery; or an SPM705 log with reason set to 'Not enough DSP AB Bit resources in service' generates in case of failure.
Not enough DSP AB Bit resources in service	LO	The system configuration must allow one AB Bit resource (defined in table MNCKTPAK) defined for each DS1 with PTS trunks. However, there is no need to define AB Bit resources for DS1s without PTS trunks. This log generates if the DSP configured with AB Bit resources is not in service during trunk RTS.
AB Bit Packed Slink (OC3 - DSP) not connected	LO	Unable to make the timeswitch connection between the OC3 and the DSP. Try to make this connection on every trunk RTS. If the problem persists, call Nortel's second level of support.

Reason	Trunk State	Take this action
Robbed Bit Signaling not enabled in OC3 RM	LO	If the setting for Robbed Bit Signaling (RBS) is detected as not enabled, try to enable RBS in the OC3 on every trunk that is being RTSed. If the problem persists, call Nortel's second level of support.
Internal SPM messaging failure	SB	Check for SPM SWERRs. If the problem persists, call Nortel's second level of support.
Robbed Bit Signaling not initialized in DSP RM	LO	Failed to send the initialization message to the DSP. Try to resend this message to the DSP for every trunk that is being RTSed. If the problem persists, call Nortel's second level of support.
No reply from SPM	SB	Received a No reply within the time-out period (that is, 15 seconds). Either BSY and RTS all affected trunks or let the CM trunk audit (performed every 15 minutes) to automatically recover the trunks.
CM transaction pool temporarily exhausted	SB	Too many trunk RTS's were issued simultaneously. Either BSY the trunks in SB state and RTS them, or wait for the CM audit to recover the trunks.
CM messaging failure	SB	Messaging failure occurred between the CM and the SPM. Call Nortel's second level of support.
Office parameters download failure	SB	This may be a temporary problem. BSY and RTS one trunk on this SPM. If the problem persists, call Nortel's second level of support.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM706

Log report SPM706 generates when a trunk automatically returns to service (RTS) after being in a lockout (LO) state.

Format

The format for log report SPM706 is as follows:

```
<office> SPM706 <date> <time> <sequence number> severity INFO <title>
             Trunk state changed to <new trunk state>
             Location: SPM <spm number> Circuit: <circuit number>
             Reason: <reason>
             Timeslot: <reason>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
New trunk state	IDL	This field describes the state of new trunks.
SPM number	0 to 63	This field describes the SPM number for which the problem was detected.
Circuit number	0 to 181	This field describes the circuit number (that is, the DS1 number) for which the problem was detected.
Reason	Refer to the table under “Action.”	This field describes the reason why the trunks were taken out of service.
List of timeslots	1 to 24	This field describes the list of affected trunks.

Action

The following table describes the action the user takes when the PTS trunk goes out of service.

Field	Value	Description
AB Bit resources available	IDL	No action required. All trunks in LO state on this DS1 are automatically RTSed.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM707

Log report SPM707 generates when the dynamic update fails for the ISDNPARM table.

Format

The format for log report SPM707 is as follows:

```
SPM707 mmmdd hh:mm:ss ssdd ISDNPARM Table dynamic update
failure for SPM spmno alarm type
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
SPM_NUM	1-64	Node number of the SPM
Alarm_Type	Minor/Major/ Critical	Alarm type

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM708

Log report SPM708 generates when the DDM audit updates the ISDNPARM table.

Format

The format for log report SPM708 is as follows:

```
SPM708 mmmdd hh:mm:ss ssdd ISDNPARM Table update: SPM
spm_num alarm_type
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
SPM_NUM	1-64	Node number of SPM
Alarm_Type	Minor/Major/ Critical	Type of alarm

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

SPM709

Log report SPM709 generates when the dynamic update fails for the ISDNPROT table.

Format

The format for log report SPM709 is as follows:

```
SPM709 mmmdd hh:mm:ss ssdd ISDNPROT Table dynamic
update failure for SPM <spmno><alarm type>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
SPM_NUM	1-64	Node number of the SPM
Alarm_Type	Major/Minor/ Critical	Alarm type

Action

This log report requires no action.

Associated OM registers

This log report has no associated OM registers.

Additional information

This log report requires no additional information.

XPKT301

The XPKT301 log generates when one of the following peripheral nodes sends a UNI Release/Release Complete message with a switched virtual circuit (SVC) failure release cause in the message:

- MG 4000
- IW SPM
- DPT SPM
- MG 9000 through a Gateway Controller (GWC)
- MG 9000 access bridge interface (ABI)

MG 9000 nodes through a GWC display as logical group names derived from the LGRPINV table. MG 9000 ABI nodes display the name of the appropriate DS-512 connected ABI peripheral which can be one of the following:

- LGC
- LTC
- RCC
- RCC2
- SMA1
- SMS
- SMSR

For SPM-based nodes, the XPKT301 log reports ATM SVC setup and established call failures. A MAP banner alarm displays when the number of XPKT301 logs meet or exceed thresholds defined in the OFCENG table. The banner alarm, identified as PKT (packet), displays under the APPL heading and also indicates the current number of nodes that have met or exceeded the threshold for XPKT301 logs. In addition to the banner alarm, an XPKT806 log generates when the XPKT301 log counter threshold is met.

The OFCENG table XPKT301 log counter threshold field, depends on the node type (MG 4000, IW SPM, DPT SPM). The Fault Management section of the appropriate node documentation contains the procedure for setting the threshold. The OCFCENG field is one of the following:

- XPKT806_SMG4_RAISE_CLEAR
- XPKT806_IW_RAISE_CLEAR
- XPKT806_DPT_RAISE_CLEAR

For MG 9000 nodes, the XPKT301 log reports ATM SVC setup failures and the XPKT302 log reports established call failures.

Note: The XPKT301 and XPKT302 log reports together replace the ATM606 log report from an earlier release.

Format

The format for log report XPKT301 is as follows:

```
MSH10_I06BE      XPKT301 <mmmdd hh:mm:ss seq#> INFO UNI Connection Failure
             Location: <NODE_ID>
             Type: <NODE_TYPE>
             Orig Agent: <ORIG_INFO>
             Orig Node: <NODE_TYPE>
             Term Agent: <TERM_INFO>
             Term Node: <NODE_TYPE>
             Called Number:  <CALLED_DN>
             CallID: <CALL_ID>
             Cause: <CAUSE_CODE>
             DEBUG: <NIL>
        Location: SPM  <SPMNUM> Type: <SPM Class>    Fabric: <Fabric>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
Type	SMG4 IW MG9K MG9K-ABI	This field displays the node associated with the failure message.
Orig Agent	CKT/DPT CLLI CIC LEN DN	This field identifies a trunk or line associated originating agent.
Orig Node	SPM <nn> MG9K<lgrp> MG9K-ABI<pm>	This field identifies the originating node type.
Term Agent	CKT/DPT CLLI CIC LEN DN	This field identifies a trunk or line associated terminating agent.

Field	Value	Description
Term Node	SPM <nn> MG9K<lgrp> MG9K-ABI<pm>	This field identifies the terminating node type.
Called Number	numeric	This field displays the directory number of the affected call.
CallID	numeric	This field displays the DMS Core Call Identifier for the affected call.
Cause	alpha numeric	This field displays the UNI release/release complete cause value and associated text as defined in the Q2931 standard. For more information, refer to the ATM Cause Codes SVC Call Failures table.
DEBUG		Reserved for future use.

The following ATM Cause Codes SVC Call Failures table describes the possible codes that could appear in the XPKT301 log report Cause field.

ATM Cause Codes SVC Call Failures

Code	Name	Description
3	NRTEDEST	No route to destination
18	NOUSRRES	No user responding
35	VPCINAVL	Requested VPI/VCI not available
37	BWTHNAVL	User cell rate not available
41	TEMPFAIL	Temporary failure (SVC call failure reference)
47	RESUNAVL	Resources unavailable
	OTH_CC	All other ATM cause codes SVC call failures

Action

For SPM-based nodes, follow the procedure "Clearing an APPL PKT banner alarm" located in the Fault Management section.

Associated OM registers

The AL1SVCOM OM group.

Additional information

This log report requires no additional information.

XPKT806

The XPKT806 log generates, along with a MAP banner APPL alarm, when the number of XPKT301 logs for an SPM-based node meets or exceeds the RAISE_THRESHOLD during a RAISE_CYCLE defined in the XPKT806_RAISE_CLEAR parameter of the OFCENG table.

Format

The XPKT806 log report adheres to the following format:

```
MG4K107BH ** XPKT806  <mmmdd hh:mmm:ss seq#> TBL  Packet Alarm
       Status  : Alarm Raised
       Problem : Node reached threshold of <hits> XPKT301 failures
                 at <CycleDur> minutes into a <CycleMax> minute raise cycle.
       Troubleshooting : MAPCI;MTC;APPL;PKT;SPM_ATM or refer to NTPs
       Location: SPM  <SPMNUM>  Type: <SPM Class>      Fabric: <Fabric>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
hits	0 to 32767	This field displays the number of XPKT301 logs generated for the SPM-based node during the cycle. The value will match the RAISE_THRESHOLD value of the XPKT806_RAISE_CLEAR parameter in the OFCENG table, which served as the criteria for raising the alarm.
CycleDur	1 to 1440	This field displays the number of minutes that elapsed in the current cycle when the alarm was raised.
CycleMax	1 to 1440	This field displays the maximum minutes in the cycle. The value matches the RAISE_CYCLE value of the XPKT806_RAISE_CLEAR parameter in the OFCENG table, which served as the criteria for raising the alarm.

Action

The alarm automatically clears when the number of XPKT301 failures drops below the clear threshold value. To manually clear the alarm, follow the procedure "Clearing an APPL PKT banner alarm" located in the Fault Management section.

Associated OM registers

The AL1SVCOM OM group increments when a node fails to get an ATM switched virtual circuit (SVC) and correspondingly generates an XPKT301 log.

Additional information

This log report requires no additional information.

XPKT807

The XPKT807 log generates when the number of XPKT301 logs for an SPM-based node meets or exceeds the CLEAR_THRESHOLD during a CLEAR_CYCLE defined in the XPKT806_RAISE_CLEAR parameter of the OFCENG table.

Format

The XPKT807 log reports adheres to the following format:

```
RSN07BD     XPKT807  <mmmdd hh:mmm:ss seq#> INFO Packet Alarm
            Status : <ClearMeth>
            Reason : <ClearRes>
            Location: SPM  <SPMNUM>  Type: <SPM Class>      Fabric: <Fabric>
```

Selected field descriptions

The following table explains selected fields in the log report:

Field	Value	Description
ClearMeth	text	One of the following alarm clearing methods: • Alarm Cleared Automatically • Alarm Cleared Manually by User <user>
ClearRes	text	One of the following reasons for alarm clearing: • Node had <hits> XPKT301 failures in a <CycleMax> minute clear cycle with a threshold of <Thresh> XPKT301 failures • Cleared by MAPCI;MTC;APPL;PKT;SPM_ATM;CLEAR command. Node had <hits> XPKT301 failures before clear cycle aborted. • Cleared by disabling feature in Table OFCENG. Node had <hits> XPKT301 failures before clear cycle aborted. • Cleared since node has been deleted. Node had <hits> XPKT301 failures before clear cycle aborted.

Field	Value	Description
hits	0 to 32767	This field displays the number of XPKT301 logs generated for the SPM-based node during the cycle.
CycleMax	1 to 1440	This field displays the maximum minutes in the cycle defined in the CLEAR_CYCLE value of the XPKT806_RAISE_CLEAR parameter in the OFCENG table
thresh	1 to 32767	This field displays the number of XPKT301 logs defined in the CLEAR_THRESHOLD value of the XPKT806_RAISE_CLEAR parameter in the OFCENG table.

Action

This log report requires no action.

Associated OM registers

The AL1SVCOM OM group increments when a node fails to get an ATM switched virtual circuit (SVC) and correspondingly generates an XPKT301 log.

Additional information

This log report requires no additional information.