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DMS-100 Family
North American DMS-100
TOPS References Change Guide
DS, Logs, OMs, Office Parameters

TOPS15 and up   Standard   01.01   May 2001

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DMS-100 Family

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Contents

About this document

When to use this document

This document describes changed and new Data Schema, Logs, Operational Measurements (OMs), and Office Parameters since the last release.

How to check the version and issue of this document

The version and issue of the document are indicated by numbers, for example, 01.01.

The first two digits indicate the version. The version number increases each time the document is updated to support a new software release. For example, the first release of a document is 01.01. In the next software release cycle, the first release of the same document is 02.01.

The second two digits indicate the issue. The issue number increases each time the document is revised but rereleased in the same software release cycle. For example, the second release of a document in the same software release cycle is 01.02.

To determine which version of this document applies to the software in your office and how documentation for your product is organized, check the release information in *Product Documentation Directory, 297-8991-001*.

References in this document

The following documents are referred to in this document:

- Advanced Business Services Log Report Reference Manual
- Advanced Business Translations Guide
- Advanced Intelligent Network 0.1 Complete Maintenance Guide, 297-5161-510
- Advanced Intelligent Network 0.1 Cookbook, 297-5161-352
- Advanced Intelligent Network 0.1 Feature Interactions, 297-5161-107
- Advanced Intelligent Network 0.1 Response Translation Guide, 297-5161-353

- Advanced Intelligent Network Essentials Service Implementation Guide

- Advanced Intelligent Network Service Enablers Service Implementation Guide

- Advanced Intelligent Network Service Switching Point (SSP) Provisioning Cookbook

- Basic Administration Procedures

- Basic Translations Tools Guide, 297-1001-360

- BCS35 ISDN Primary Rate UNI Specifications (NIS A211-1)

- Bellcore Format Automatic Message Accounting Reference Guide, 297-1001-830

- Bellcore Technical Reference, TR-TSY-000350

- CCS/CCIS6 and CCITT6 System Description

- CCS7 Maintenance Reference Manual

- Commands Reference Manual, 297-2663-819

- Common Channel Signaling 7 Maintenance Reference Manual, 297-1001-531

- Core Translations Guide

- Cost of Ownership Reduction Feature Specification

- Customer Data Change (CDC) Operating Company Guide, 297-2061-312

- Customer Data Schema Reference Manual, 297-8021-351

- Dialable Wideband Service Services Guide, 297-2663-110

- Digital Recorded Announcement Machine DRAM and EDRAM Guide, 297-1001-527

- Digital Recorded Announcement Machine Maintenance Reference Manual, 297-1001-527

- DMS-100 Alarm Clearing Procedures, 297-8021-543

- DMS-100 Family Commands Reference Manual, 297-1001-822

- DMS-100 Family Maintenance and Operations Manual, 297-8991-500

- DMS-100 Provisioning Manual, 297-1001-450

- Equal Access Maintenance Manual

- Feature Description Manual

- GSF Metering Guide, 297-8601-020

- Hardware Description Manual

- Integrated Business Network Services Meridian M5009 Basic (9 Button) Business Set Description, Installation and Maintenance

- Integrated Business Network Services Meridian M5112 Handsfree (12 Button) Business Set Description, Installation, Operation and Maintenance

- ISDN SERVORD Reference Manual, 297-2041-310

- Location Routing Number-Local Number Portability Service Implementation Guide

- Log Reports Reference Manual

- Meridian Digital Centrex Simplified Message Desk Interface Set-up and Operation, 297-2051-104

- Meridian Digital Centrex Station Message Detail Recording Reference Guide, 297-2071-119

- Office Parameters Reference Manual

- One Night Process and Hybrid Software Delivery Procedures, 297-1001-303

- Operational Measurements Reference Manual

- Recovery Procedures

- SERVORD Reference Manual

- TOPS MP Force Management Guide

- TOPS MP Operator Guide

- TOPS MPX Force Management Guide

- TOPS TAMI User Guide

- TOPS VSN Installation Manual

As of NA011 (LEC and LET) and EUR010 (EUR) releases, any references to the data schema section of the Translations Guide will be mapped to the Customer Data Schema Reference Manual.

The Advanced Business Services suite does not include an Advanced Maintenance Guide. Consult one or more of the following documents:

- Bellcore Format Automatic Message Accounting Maintenance Guide, 297-1001-570

- Input/Output Devices Maintenance Guide, 297-1001-590

- Lines Maintenance Guide, 297-1001-594

- Networks Maintenance Guide, 297-1001-591

- Peripheral Modules Maintenance Guide, 297-1001-592

- Trunks Maintenance Guide, 297-1001-595

What precautionary messages mean

The types of precautionary messages used in NT documents include attention boxes and danger, warning, and caution messages.

An attention box identifies information that is necessary for the proper performance of a procedure or task or the correct interpretation of information or data. Danger, warning, and caution messages indicate possible risks.

Examples of the precautionary messages follow.

ATTENTION - Information needed to perform a task

ATTENTION

If the unused DS-3 ports are not deprovisioned before a DS-1/VT Mapper is installed, the DS-1 traffic will not be carried through the DS-1/VT Mapper, even though the DS-1/VT Mapper is properly provisioned.

DANGER - Possibility of personal injury

DANGER
Risk of electrocution
Do not open the front panel of the inverter unless fuses F1, F2, and F3 have been removed. The inverter contains high-voltage lines. Until the fuses are removed, the high-voltage lines are active, and you risk being electrocuted.

WARNING - Possibility of equipment damage

WARNING
Damage to the backplane connector pins
Align the card before seating it, to avoid bending the backplane connector pins. Use light thumb pressure to align the card with the connectors. Next, use the levers on the card to seat the card into the connectors.

CAUTION - Possibility of service interruption or degradation

> **CAUTION**
> **Possible loss of service**
> Before continuing, confirm that you are removing the card from the inactive unit of the peripheral module. Subscriber service will be lost if you remove a card from the active unit.

How commands, parameters, and responses are represented

Commands, parameters, and responses in this document conform to the following conventions.

Input prompt (>)

An input prompt (>) indicates that the information that follows is a command:

```
>BSY
```

Commands and fixed parameters

Commands and fixed parameters that are entered at a MAP terminal are shown in uppercase letters:

```
>BSY CTRL
```

Variables

Variables are shown in lowercase letters:

```
>BSY  CTRL  ctrl_no
```

The letters or numbers that the variable represents must be entered. Each variable is explained in a list that follows the command string.

Responses

Responses correspond to the MAP display and are shown in a different type:

```
FP 3 Busy CTRL 0: Command request has been submitted.

FP 3 Busy CTRL 0: Command passed.
```

x

1 Data Schema

This chapter contains new and changed data schema since the last release that affect the TOPS office.

ICNTRY

Table name

GTOPS International Country INW and DA Operator Table

Functional description

Table ICNTRY contains information that is unique to a particular country. This information is used by the Global Traffic Operator Position System (GTOPS) for inward (INW) and directory assistance (DA) dialing. See table IALTRE for related information.

The following restrictions apply

- the maximum number of entries is 512

- a country cannot be deleted from this table if there is an entry in either table IFORDA or table IFORINW for that country

- table IALTRTE must be datafilled before any alternate routes can be added to this table

Datafill sequence and implications

Table IALTRTE must be datafilled before table ICNTRY

Table size

0 to 512 tuples

Datafill

The following table lists datafill for table ICNTRY

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CNTRCODE		numeric (vector of up to 18 digits)	Country code key. Enter a country code datafilled in table CCTR. This is the key field to table ICNTRY.
CNTRNAME		A to Z, 0 to 9, and _ (vector of up to 12 characters)	Country name. Enter the name of the country associated with the country code. The end of the name is marked by a blank. This name is displayed on the operator screen when a foreign number is entered by the operator, using either the KP CLG or the FOR (keypulse foreign) keys. A blank is displayed for the _ (underscore) at the operator (or incharge or assistance) screen.

ICNTRY (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DIRRTE		see subfield	Direct route. This field consists of subfield DIRRTE.
	DIRRTE	Y or N	Direct route selector. Enter Y if a direct route to the country is available. Datafill subfields INWTYPE and DATYPE.
			Enter N if a direct route to the country is not available; the first alternate route displays when the operator attempts to outpulse to the country using the FOR key.
	INWTYPE	see subfields	Inwards type. This field consists of subfields INWTYPE and NUMBER.
	INWTYPE	COUNTRY, CITY, or NONE	Inwards type selector. Enter COUNTRY if there is only one INW number for this country and datafill refinement NUMBER.
			Enter CITY if there is more than one INW number for this country and datafill refinement NUMBER.
			Enter NONE if there are no INW numbers for this country.
	NUMBER	up to 18 digits	Inwards number. Enter the INW number if the entry in field INWTYPE is COUNTRY or CITY.
			Enter the default INW number if the entry in field INWTYPE is CITY.
			Leave blank if the entry in field INWTYPE is NONE.
	DATYPE	see subfields	Directory assistance type. This field consists of subfields DATYPE and NUMBER.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	DATYPE	COUNTRY, CITY, or NONE	Directory assistance type selector. Enter COUNTRY if there is only one DA number for this country and datafill refinement NUMBER.
			Enter CITY if there is more than one DA number for this country and datafill refinement NUMBER.
			Enter NONE if there are no DA numbers for this country.
	NUMBER	up to 18 digits	Directory assistance number. Enter the DA number if the entry in field DATYPE is COUNTRY or CITY.
			Enter the default DA number if the entry in field DATYPE is CITY.
			Leave blank if the entry in field DATYPE is NONE.
ARTELIST		1 to 128 (vector of up to 6 routes)	Alternate route list. Enter the alternate route numbers.
			Each alternate route must be datafilled in table IALTRTE. At least one alternate route must be entered if there is no direct route to the country.
FALSESUP		Y or N	False supervision. Enter Y to indicate that false supervision is to be expected from the country. False supervision results in the following
			• SUP appears on the operator screen after the CLD called number to tell the operator to wait for an answer.
			• The system then waits for the operator to depress the ST TMG (start timing) key to start timing the call.
			Otherwise, enter N.
TIMEDIFF		see subfields	Time difference. This field consists of subfields SENSE and TIME.

ICNTRY (end)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	SENSE	MINUS, ZERO, or PLUS	Sense. Enter ZERO if there is no time difference between the country and the GTOPS.
			Enter MINUS or PLUS if there is a time difference between the country and the GTOPS and datafill refinement TIME.
	TIME	1 to 12	Time difference. Enter the time difference in hours between the country and the ITOPS if the entry in subfield SENSE is MINUS or PLUS.
			Leave blank if the entry in subfield SENSE is ZERO.

Datafill example

The following example shows sample datafill for table ICNTRY.

MAP display example for table ICNTRY

```
              CNTRCODE       CNTRNAME
                                                         DIRRTE
                              ARTELIST FALSESUP TIMEDIFF

    _____
                    33          FRANCE
        Y COUNTRY              33151 COUNTRY               33161
                              (  1) (  2)$        N   PLUS  5
                    43          AUSTRIA
        Y    CITY            43522151   CITY             43522161
                                    $        N   PLUS  5
```

IPINV

Table name

Internet Protocol Inventory

Functional description

Use table IPINV to provision an NT7X07 Internet Protocol (IP) Gateway (IPGW) card.

Datafill sequence and meaning

Enter datafill into table SITE (Site) and table LTCPSINV (Line Trunk Controller P-Side Link Inventory) before table IPINV.

Table size

0 to 1024 tuples

Datafill

The table that follows lists datafill for table IPINV.

Field descriptions (Sheet 1 of 3)

Field	Subfield	Entry	Explanation and action
IPNO		alphanumeric	IP number. The field consists of the site identifier, frame, and unit of the IPGW card. The site consists of the 4-character name that was datafilled in table SITE. The frame consists of a number from 0 to 255. The unit consists of a number from 0 to 9. **Note:** The recommended provisioning scheme is for the frame to represent the LTC number and for the unit to represent the port number (as datafilled in the PORT field) divided by 2.
PMTYPE		DTC, DTCI, or LTC	Peripheral module type. This field specifies the peripheral module (PM) type that indicates the location of the IPGW card. Enter DTC for digital trunk controller, DTCI for ISDN digital trunk controller, or LTC for line trunk controller.
PMNO		0–255	Peripheral module number. Enter the PM number from 0 to 255 to indicate the location of the IPGW card.
IPPEC		7X07AA	IP product engineering code. Enter 7X07AA as the product engineering code for the IPGW card.

IPINV (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield	Entry	Explanation and action
LOAD		alphanumeric (up to 19 characters)	Load file name. Enter the load file name of the IPGW card. (The default value is NILLOAD.)
PORT		0–18	Port number. Enter an even number from 0 to 18 that corresponds to the host XPM P-side port.
IPZONE		numeric	IP zone. Enter the primary and secondary IP address for the IPGW card. (The default value is 0 0 0 0 0 0 0 0.)
			For a primary IPGW card: Enter the logical IP address in the first four fields of IPZONE. Enter the Gatekeeper IP address in the last four fields of IPZONE.
			For a spare IPGW card: Enter only the Gatekeeper IP address in IPZONE. The logical IP address must be set to 0s.
			Note: For a spare IPGW card to takeover for a primary IPGW card, they must reside in the same Gatekeeper zone.
GWTYPE		L, TB, PRIGW, or TOPS	GW type. Enter L to indicate a local loop function. Enter datafill in subfields INTRASW and SPARE.
			Enter TB to indicate a toll bypass function. There are two subfields for the TB selector, TRKCLLI and TRKSGRP. (This selector is reserved for future use.)
			Enter PRIGW to indicate a primary rate interface (PRI) Gateway. Enter datafill in subfields TRKCLLI and TRKSGRP.
			Enter TOPS for the TOPS application. Enter datafill in subfields TRKCLLI and MEMSTART. Notes are as follows:
			• The GWIP must be entered in table IPINV before table OCIPVL, field VLXPM.
			• The specific TOPS application is given in table TRKOPTS, subfield OPTION = DYNAMIC, subfield APPLICATION.

Field descriptions (Sheet 3 of 3)

Field	Subfield	Entry	Explanation and action
	INTRASW	N or Y	Intraswitching. This subfield appears if GWTYPE = L. Indicate if the Gateway card is capable of intraswitching. The default value is N.
	SPARE	Y or N	Spare. This subfield appears if GWTYPE = L. This subfield indicates if the Gateway card is a spare. The default value is N.
	TRKCLLI	CLLI name	Common language location identifier. This subfield appears if GWTYPE = TB, TOPS, or PRIGW. Enter a trunk CLLI name defined in table TRKGRP.
			For GWTYPE = PRIGW, enter the name of the trunk group in table CLLI that has the IP option.
			For GWTYPE = TOPS, notes are as follows:
			• The CLLI must not currently be datafilled in table TRKMEM. The CLLI must be entered in IPINV before TRKMEM.
			• The CLLI must be assigned the DYNAMIC OC option in table TRKOPTS.
			• When a gateway card is datafilled, 48 trunk members are automatically datafilled in table TRKMEM.
	TRKSGRP	0 or 1	Trunk subgroup. This subfield appears if GWTYPE = TB or PRIGW. Enter the trunk subgroup number for the trunk in subfield TRKCLLI. For GWTYPE = PRIGW, enter 0.
	MEMSTART	0 or a multiple of 48 that is less than 2016 (so 1968 is the maximum)	Trunk member start. This subfield appears if GWTYPE = TOPS. This field indicates the starting trunk member number for the allocation of the block of 48 members. Since up to 2016 OC voice link trunks are allowed, 0 can be entered or a multiple of 48 up to 1968. The trunk members are allocated sequentially starting with the entered value. So an entry of 96 would cause automatic datafill of trunk members 96 through 143 in table TRKMEM. The CLLI name used is in the TRKCLLI subfield above.
			The MAP display shows the range is 0 to 9999, but only the indicated range is valid.

IPINV (continued)

Datafill example

The figures that follow show sample datafill for table IPINV.

MAP display example for table IPINV for TOPS

```
IPNO
            PMTYPE PMNO      IPPEC                      LOAD
    PORT                              IPZONE     GWTYPE
_____
OCGW 10 0
            DTC    1         7X07AA                  NILLOAD
    12        47 192 3 114 0 0 0 0          TOPS OFC1VL 48
```

MAP display example for table IPINV for Centrex IP

```
IPNO
          PMTYPE PMNO     IPPEC                  LOAD
  PORT                              IPZONE     GWTYPE
_____
GWIP  10 0
          LTC 10        7X07AA                 NILLOAD
    10        47 174 68 31     47 174 68 130     L N N
```

Table history
TOPS15

Error messages were added for TOPS IP by feature 59022293.

NA013

The changes are as follows:

- Field GWTYPE new value TOPS is added by feature A59007550 in functionality TOPS IP Evolution, OSB00001.

- Changed the rules for existing field IPZONE for primary and spare IPGW cards for feature A59007761, "Gateway Survivability Phase 1".

NA012

The following changes were made to table IPINV for NA012:

- Added the subfields INTRASW and SPARE under selector L in field GWTYPE for Release 2 of Centrex IP.

- Changed the range of the unit number in field IPNO. Added an explanation of the provisioning scheme for field IPNO.

- Added the selector PRIGW to table IPINV in field GWTYPE.

- Added information about the IP option for IBNT2 type trunks.

NA011

Feature AF7808 introduced table IPINV for the NA011 release.

Additional information

Table IPINV does not require reformatting for a dump and restore for the NA013 load.

Table IPINV requires a reformat before the dump and restore for the NA012 load. This allows the additional subfields in field GWTYPE to appear.

Table IPINV does not require reformatting for a dump and restore for the NA011 load. Table IPINV is always active. To protect store, this table can require a patch before operating company personnel resave datafill entries.

IPINV (continued)

Error and warning messages

Error and warning messages are as follows.

Notification, warning, and error messages for table IPINV

Message	Description
`ERROR:ONLY IBNT2 with ISDN SGRPVAR supported.`	While the IP option can be assigned to all IBNT2 type trunks, only those IBNT2 trunks datafilled in table TRKSGRP SGRPVAR as ISDN can be entered in table IPINV. The DMS-100 switch displays this error message for all other entries in field SGRPVAR
`INFO: Datafilling Table TRKMEM.`	The 48 trunk members in TRKMEM are being automatically datafilled by the addition of an IPINV tuple This message is for information only.
`INFO: Trunks added to Table TRKMEM.`	The 48 trunk members in TRKMEM have been automatically datafilled by the addition of an IPINV tuple. This message is for information only.
`ERROR: Trunks not added to Table TRKMEM.`	The 48 trunk members in TRKMEM have NOT been automatically datafilled by the addition of an IPINV tuple. Correct whatever condition caused the automatic addition of the tuples to fail (such as previously existing members in TRKMEM for this TRKGRP).Re-attempt the definition of the IPINV tuple.
`INFO: Trunks deleted from Table TRKMEM.`	The 48 trunk members in TRKMEM have automatically been removed by the deletion of an IPINV tuple. This message is for information only.

Notification, warning, and error messages for table IPINV

Message	Description
WARNING: Tuple <CLLI member No> was not deleted from table TRKMEM.	When trying to delete a tuple from table IPINV, tuples were not able to be deleted from TRKMEM; therefore the deletion of the IPINV tuple was aborted.
	Determine why tuples from TRKMEM associated with the IPINV tuple could not be removed. Correct the condition preventing the automatic deletion of tuples from TRKMEM. Re-attempt the removal of the IPINV tuple.
ERROR: IPGW must be offl to delete tuple.	The state of the IPGW gateway node was not OFFL (offline) when tuple deletion was attempted.
	Ensure the gateway is in the offline state and re-attempt to delete the IPINV tuple.
ERROR: CLLI not datafilled in Table TRKGRP	The trunk group information for the CLLI does not exist.
	Assign and datafill the TRKGRP, TRKSGRP, and TRKOPTS tuples, then re-attempt the addition of the IPINV tuple.
ERROR: Table TRKSGRP not datafilled for this CLLI.	The trunk subgroup information for the CLLI does not exist.
	Assign and datafill the TRKGRP, TRKSGRP, and TRKOPTS tuples, then re-attempt the addition of the IPINV tuple.
ERROR: CLLI not assigned DYNAMIC option in Table TRKOPTS.	The trunk group's CLLI is not assigned the DYNAMIC option in Table TRKOPTS.
	Assign and datafill the TRKGRP, TRKSGRP, and TRKOPTS tuples, then re-attempt the addition of the IPINV tuple.

IPINV (continued)

Notification, warning, and error messages for table IPINV

Message	Description
ERROR: Trunk group size too small in table CLLI.	In Table CLLI the tuple's trunk group size is smaller than the minimum of 48 members required. Change the trunk group size in CLLI to be greater than 48.
ERROR: TRKCLLI does not use OC application in Table TRKOPTS.	The craftsperson has datafilled a gateway type selection of TOPS in the tuple, but the CLLI name in the tuple is not assigned the DYNAMIC OC application in Table TRKOPTS. Use a CLLI name assigned to the OC application in Table TRKOPTS.
ERROR: MEMSTART not 0 or a multiple of 48.	The craftsperson has datafilled a starting trunk member number which is not 0 or a multiple of 48. Use a MEMSTART which is 0 or a multiple of 48.
ERROR: MEMSTART must not be greater than 1968.	The craftsperson has datafilled a starting trunk member number which is above the limit of 1968. Use a MEMSTART which is 0 or a multiple of 48, up to 1968.
ERROR:TRKCLLI and MEMSTART combination already datafilled INFO: The next lower available MEMSTART for this TRKCLLI is <nn>. INFO: No lower MEMSTART is available for this TRKCLLI. INFO: The next higher available MEMSTART for this TRKCLLIS is <nn>. INFO: No higher MEMSTART is available for this TRKCLLI.	A CLLI name and starting trunk member number combination has been datafilled that is already datafilled in Table IPINV. Use a different CLLI name and MEMSTART combination. The applicable INFO messages are given.

Notification, warning, and error messages for table IPINV

Message	Description
ERROR: For TOPS gateway type, only fields LOAD and IPZONE may be changed.	For TOPS, only the LOAD and IPZONE fields may be changed with deleting and re-adding tuples in table IPINV. To change other fields, the craftsperson must delete and re-add.
For OC-IP call processing, field IPZONE: PRIMARY must be datafilled.	This warning exists to prevent an inadvertent entry of the gateway card's IP address in the SECONDARY portion of the IPZONE field. Table control does not validate IP addresses, but if the PRIMARY field is set to "0 0 0 0", this warning appears. Datafill the card's IP address in the PRIMARY field.
ERROR: Host PM must be a DTC for the TOPS variant.	For TOPS, the XPM must be a digital trunk controller (DTC). Use the appropriate XPM.
ERROR: Host PM must be a LTC or a DTC or a DTCI.	For non-TOPS, the XPM must be a DTC, LTC or DTCI. Use the appropriate XPM.
INFO: This IPGW will be used for TOPS OC-IP remote processing. INFO: Its trunk members cannot be datafilled in Table OCIPVL.	These information messages are given when adding a tuple for an IPGW card in the remote.
INFO: This IPGW will be used for TOPS OC-IP host processing. INFO: Its trunk members cannot be datafilled in Table OCIPVL.	These information messages are given when adding a tuple for an IPGW card in the host.
WARNING: In an OC host, field IPZONE: PRIMARY must contain a valid IP address.	This warning is given when adding a tuple for an IPGW card in the host with a field IPZONE of 0 0 0 0 0 0 0 0.

IPINV (continued)

Notification, warning, and error messages for table IPINV

Message	Description
ERROR: Table OCIPVL tuples associated with this IPGW must be deleted before this IPGW can be deleted. Delete member (CLLI><nn>. Delete members in range <nn> to <nn>. ERROR: Operation disallowed by TOPS checks.	An attempt was made to delete a tuple from table IPINV with an associated tuple in table OCIPVL.
ERROR: PORT must be in range 0 to 18.	An attempt was made to enter a value outside the range for field PORT.
ERROR: PMTYPE, PMNO, and PORT combination already datafilled.	The PMTYPE, PMNO, and PORT entry combination must be unique.
ERROR: CLLI assigned DYNAMIC option in Table TRKOPTS.	An attempt was made to enter a tuple with field GWTYPE = TB and the associated tuple in table TRKOPTS has the DYNAMIC option.
ERROR: For TOPS gateway type, only fields LOAD and IPZONE may be changed.	An attempt was made for a tuple with field GWTYPE = TOPS to change fields other than LOAD and IPZONE. In order to changes these other fields, the tuple must be deleted and re-added.

Notification, warning, and error messages for table IPINV

Message	Description
ERROR: Associated trunk members not INB.	When a TOPS IPGW is off-lined, the DMS automatically updates the IPGW's 48 trunk members to be installation busy (INB). This takes a short period of time, during which the deletion of the IPGW is not allowed.
	Wait a moment and then retry the delete command.
ERROR: Cside links must be MBsy to delete tuple.	This error message appears when trying to delete the IPGW while its C-side links are still in service. This can lead to problems later when trying to re-add the IPGW. The tuple delete is not allowed. So, manually busy the two C-side links to the IPGW card to allow the deletion.
	The C-side links in question can be determined by examining the PORT field. If the PORT is n, then the two C-side links are n and n+1. These links can be set to MBsy by posting the IPGW's parent XPM at the MAPCI;MTC;PM level, and then using the commands BSY LINK n and BSY LINK n+1.
	As an example, if the PORT field is 2, then the two commands are BSY LINK 2 and BSY LINK 3.

ISUPTRK

Table name

Integrated Services Digital Network User Part Trunk

Functional description

Table ISUPTRK is used for ISUP trunks that interact with the TOPS environment. It provides screening parameters, equal access information, call source type, an ANI forwarding parameter, an RLT parameter, a CLI Restriction parameter, and a DN lookup indicator.

Datafill sequence and implications

The following tables must be datafilled before table ISUPTRK.

- TRKSGRP, which provides the valid set of trunk CLLIs defined as ISUP.

- LCASCRCN, which specifies the valid set of LCA screening classes.

Table size

0 to 8191, where the maximum size is limited by the number of CLLIs.

Datafill

The following table lists datafill for table ISUPTRK.:

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield CLLI	Group key. This field consists of subfield CLLI.
	CLLI	Alphanumeric (up to 16 characters)	Common language location identifier. Enter an ISUP IT or ATC trunk datafilled in table TRKGRP.
CONNTYPE		TYPE_A TYPE_B TYPE_D CELL_MOBILE LOCAL_ TRANS NONE	Connection type. Indicate how to populate the connection type field in AMA module 150. Entry NONE does not record module 150. Otherwise, the field is recorded according to Bellcore standards.
			If CONNTYPE is set to a value other than NONE, datafill refinement CARTYPE.

ISUPTRK (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	CARTYPE	IEC or NBEC	Carrier type. Indicate how to populate the company ID field of AMA module 150 if CONNTYPE is not set to NONE. If CARTYPE = IEC, module 150 is populated with the carrier code from table TOPEATRK. If CARTYPE = NBEC, module 150 is populated with the NBEC code from table NBECCODE, if the calling number has an entry. Otherwise, the code is retrieved from the NBECID field of table TRKGRP for ATC trunks or from the NBECID field of ISUPTRK for IT trunks.
			Field CARTYPE is only visible if CONNTYPE is datafilled with a value other than NONE.
			Also, this field indicates how the trunk is treated for ADACC screening. If CARTYPE = IEC, the trunk is treated as an IEC. If CARTYPE = NBEC, the trunk is treated as an NBEC.
			If CARTYPE = NBEC, datafill refinement NBECID.
	NBECID	0000 to 9999	Non-Bell exchange company identifier. Enter the NBEC identifier for ISUP IT trunks if the carrier type is NBEC. This field is only visible for IT trunks if CARTYPE = NBEC.
LCANAME		alphanumeric (4 characters)	Local class of area screening name. Enter the LCA screening class name to reference table LCASCRCN for local call area screening.
BILLCD		see subfields	Billing code. This field consists of subfield BCTYPE and refinements.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	BCTYPE	TOPSBC or ENHBC	Billing code type. This subfield indicates the TOPS billing code method for this trunk group. The values are the following:
			• TOPSBC - The earlier TOPS billing code method, which is as follows:
			— For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TOPSBC field ACTUALBC (first 3 digits). Also, the NXX in ACTUALBC overwrites the NXX of the 7 digit DN.
			— For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA.
			— For calling number verification, the NXX is checked in table TOPSBC field BILLCODE.
			— For ONI and ANIF calls, the default NPA-NXX in table TOPSBC field ACTUALBC in the first tuple for the trunk group is displayed to the operator.
			— For class charge, table TOPSBC field CHGCLSS provides the index into table TOPSENTC.
			For value TOPSBC in this field, enter data in refinement NUMBC.

ISUPTRK (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	BCTYPE		Billing code type (continued).
			• ENHBC - The enhanced TOPS billing code method, which is as follows:
			— For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TRKGRP or TCLG7DIG (if trunk is present). Table TCLG7DIG does not overwrite the NXX of the calling number.
			— For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA.
			— For calling number verification, if subfield CLGVER = Y, the NXX is checked in table TCLGVER. This verification is preformed after 7 to 10 digit expansion.
			— For ONI and ANIF calls, the NPA-NXX displayed to the operator is taken from table ISUPTRK field DISPDIGS.
			— For class charge, value TOPS is always used to index table TOPSENTC.
			For ENHBC in this field, enter data in refinements CLGVER and DISPDIGS.
	NUMBC	1 to 999	Number of billing codes. Enter data in this field if field BCTYPE = TOPSBC. Enter the number of billing codes (NXXs allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC.
			The MAP display indicates the range is 0-999. However, the system does not allow 0. (Note, this field replaces field NOBILLCD.)
	CLGVER	Y or N	Calling number verification. Enter data in this field if field BCTYPE = ENHBC. Enter Y to verify the calling NXX in table TCLGVER. Otherwise, enter N for no verification.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	DISPDIGS	6 digits	Display digits. Enter data in this field if field BCTYPE = ENHBC. Enter the NPA-NXX for display to the operator for ONI and ANIF calls.
CALLSRC		ORIG, TERM, or OPER	Calling source. Enter the call source for the given trunk. Originating end (ORIG), terminating end (TERM), or operator (OPER).
ANI2CLI		N or Y	Automatic number identification. Indicate if a call routing to this outgoing trunk should forward the incoming ANI as CLI in the outgoing IAM for an MF to ISUP call. Entry N does not forward CLI. If set to Y, CLI may be forwarded, depending on tables TOPSTOPT and TOPSPARM.
			CLI is forwarded if field ANI2CLI is set to Y in tables ISUPTRK and TOPSTOPT, and parameter FORWARD_ANI_AS_CLI is set to Y in table TOPSPARM.
RLT		see subfield	Release link trunking. This field consists of subfield RLTVAR and refinements.

ISUPTRK (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	RLTVAR	NONE, RLT_FAR, RLT_REL	Release link trunking variable. This field indicates if RLT Is supported on this trunk group. The values are as follows:
			• NONE - RLT is not supported.
			• RLT_REL - RLT is supported for TOPS05 functionality GR317/GR394 ISUP to/from TOPS, OSEA0005. REL is a protocol message that is specific to this functionality. This functionality only supports ADACC. If call completion fails in the previous office, no alternate, additional support is available.
			Datafill subfield RLT_VERSION.
			As of TOPS15, NA0015 feature EAEO:RLT must be available in the DMS-100 end office for this functionality to work correctly.
			Only RLT transfer is supported which uses one trunk for a call.
			This value is also referred to as variant 1.
			• RLT_FAR - RLT is supported for TOPS07 functionality TOPS Carrier RLT, OSEA0007. FAR is a protocol message that is specific to this functionality. This functionality supports more services than RLT_REL. If call completion fails in the previous office, alternate, additional support is available.
			Datafill subfield RLT_VERSION.
			RLT transfer and RLT bridging are supported. RLT bridging uses two trunks for a call.
			This value is also referred to as variant 2.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	RLT_ VERSION	1 to 15	RLT version. This field keeps the TOPS switch in synchonization with the DMS-250 switch. The values are:
			• 1 - Enter this value for either of the following two cases:
			— Enter this value if field RLTVAR = RLT_REL. This value causes RLT to operate at a TOPS05 (OSEA0005) level.
			— Or, enter this value if field RLTVAR = RLT_FAR and the DMS-250 is at software load UCS06 or UCS07. This causes RLT to operate at a TOPS07 (OSEA0007) level.
			• 2 - Enter this value if field RLTVAR = RLT_FAR and the DMS-250 is at software load UCS08 or higher. This causes RLT to operate at a TOPS09 (OSEA0009) level.
			The default is 1.
SNTPDRST		N or Y	Sent paid restricted. Indicate if calls incoming on this trunk should be restricted from being billed station paid. Enter Y for restriction or N for no restriction.
DNLKUPP		N or Y	Directory number lookup. Indicate if the directory number (charge number or calling number if no charge number) should be searched for in tables DNSCRN and SPLDNID for calling station type and billing restrictions. If set to Y and the OLI = 0 or is not present, then the DN lookup is performed. Otherwise, enter N for no search.
DISPLAY		0 to 254	Display. This field is an index into table TOPSDISP to specify the special instructions for display to the operator on a trunk group basis.

ISUPTRK (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ININTWRK		NONE, FAR, FAC	Intelligent network interworking. This field indicates the type of IN interworking messaging with the SSP on an ANSI SS7 ISUP trunk for IN operator backup calls. The values are as follows: • NONE: IN interworking is not supported for this trunk group. • FAR: ISUP FAR messages are used. • FAC: ISUP FAC messages are used.
BRANDCHC		Y or N	Brand choice. This field determines on a trunk group basis if the call is branded based on the CIC or SPID if both are present on the call. Note that this functionality requires UNBN0101 and UNBN0103 SOCs to be active. Enter Y to Other wise, enter N and do not datafill refinement CHOICE. • Y - Do front-end branding based on the CIC or SPID when both are present for a carrier call and datafill refinement CHOICE. This capability is supported only for ISUP trunks. • N - Use the prior method where if both the CIC and SPID are present for a carrier call, use the CIC for front end branding. Do not datafill refinement CHOICE.
	CHOICE	CIC or SPID	Choice. If field BRANDCHC = Y, datafill this refinement. Indicate the front-end branding choice. If SPID is entered and the SPID is the same as the office-wide SPID defined in table TOPSPARM, parameter DEFAULT_SPID, then parameter BRAND_USING_DEFAULT_SPID in TOPSPARM determines branding as follows: • Y - The call is branded based on the SPID. • N - The call is branded based on the CIC. The table below shows combinations that determine branding.

The table below shows the combinations that determine branding.

Branding matrix for BRANDCHC

Table ISUPTRK field BRANDCHC value	Orig AO SPID present?	CIC present?	Table TOPSPARM parameter DEFAULT_ SPID value	Table TOPSPARM parameter BRAND_ USING_ DEFAULT_ SPID value	Brand based on
N	yes	yes	n/a	n/a	CIC
Y SPID	yes	yes	N	n/a	SPID
Y SPID	yes (CLEC)	yes	Y ILEC	n/a	SPID (CLEC)
Y SPID	yes (ILEC)	yes	Y ILEC	N	CIC
Y SPID	yes (ILEC)	yes	Y ILEC	Y	SPID (ILEC)
Y CIC	yes	yes	n/a	n/a	CIC

Datafill example

The following example shows sample datafill for table ISUPTRK.

MAP display example for table ISUPTRK

```
 GRPKEY    CONNTYPE        LCANAME  BILLCD          CALLSRC  ANI2CLI
   RLT           SNTPDRST  DNLKUP  DISPLAY  ININTWRK  BRANDCHC
 ----------------------------------------------------------------
 IUPTRK1   TYPE_A          NLCA      TOPSBC 20        ORIG     N
   NONE          N         N        0       NONE      N
 IUPTRK2   TYPE_A          LCA1      TOPSBC 63        TERM     Y
   RLT_REL  1   N          Y        0       NONE      N
 IUPTRK3   IEC             LCA1      ENHBC Y 619320   TERM     Y
   RLT_FAR  1   N          Y        0       NONE      Y CIC
 IUPTRK4   IEC             LCA1      TOPSBC 63        TERM     Y
   RLT_FAR  2   N          Y        0       NONE      Y SPID
```

In the above example, trunk ISUPTR1 does not support RLT, trunk ISUPTRK2 RLT is operating at release TOPS05, trunk ISUPTRK3 RLT is at release TOPS07, and trunk ISUPTRK4 RLT is operating at release TOPS09.

ISUPTRK (continued)

Table history

TOPS15

Field BRANDCHC is added by feature 59026113 in functionality TOPS15 CM Enhancements, OSB00101.

A new requirement is added to field RLTVAR that EAEO:RLT must be available in the end office. This addition is made by 50332563 in support of DMS-100 end office feature 59026484.

TOPS12

Field ININTWRK is added by feature AF7805 in functionality IN Operator Backup, ENSV0106.

TOPS11

The range of field DISPLAY in increased from {0 to 31} to {0 to 254} by feature AF7833 in functionality Table TOPSDISP Expansion, OSB00001.

TOPS10

Field BILLCD is added and field NOBILLCD is deleted by feature AF7498 in functionality TOPS BC/STS/SNPA, OSB00001.

TOPS09

Subfield RLT_VERSION is added by feature AF7134 in functionality TOPS Carrier RLT-2, OSEA0009.

TOPS07

Field RLT is changed by feature AN1900 in functionality TOPS Carrier RLT, OSEA0007.

TOPS05

Table ISUPTRK was introduced by functionality GR317/GR394 ISUP to/from TOPS, OSEA0005.

Supplementary information

This release history of field RLT is shown in the following table.

Field RLT history

Release	Field RLT description
TOPS05	The values are Y (enable) and N (disable). The default is N.

Field RLT history

Release	Field RLT description
TOPS07	The values are NONE, RLT_REL, and RLT_FAR. The default is NONE.
TOPS09	Add refinement RLT_VERSION. The default is 1.

The dump and restore rules are as follows:

- If upgrading from a release prior to TOPS05 to any of the above releases, default values are used.

- If upgrading from TOPS05 to TOPS07, then RLT_VAR is set to NONE (if RLT was N) or RLT_REL (if RLT was Y).

- An upgrade from TOPS05 to TOPS09 is not supported.

- If upgrading from TOPS07 to TOPS09, field RLT_VAR is unchanged and RLT_VERSION is set to 1.

TOPSPARM

Table name

TOPS Office Parameter Table

Functional description

Table TOPSPARM lists office parameters unique to TOPS offices.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table TOPSPARM.

Table size

25 to 34 tuples

Memory is automatically allocated for 25 tuples.

TOPSPARM (continued)

Datafill

The following table lists datafill for table TOPSPARM.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
AABS_ OPTIMIZATION	ON or OFF	This parameter determines whether optimization can be used for Automated Alternate Billing System (AABS) calls. This parameter has two states: ON and OFF. When set to OFF and the parties go on-hook, the DMS switch waits for a message from the automated voice system (Voice Service Node - VSN, or Interactive Voice System - IVS) before releasing the port. When this parameter is set to ON, the DMS switch automatically releases the port when the parties go on-hook.
		This parameter must be set to OFF for AABS calls to the VSN and ON for AABS calls to the IVS. The following paragraph explains this requirement.
		This parameter is created by functionality GR317/GR394 ISUP to/from TOPS (OSEA0005). The VSN is upgraded in release TOPS05 to support this functionality, but the IVS is not upgraded. Since ISUP calls cannot use AABS optimization, this parameter must be OFF for the VSN and ON for the IVS. This is also true for non-ISUP calls since the VSN does not differentiate between ISUP and non-ISUP calls. When the IVS is upgraded, this parameter will not be necessary.
ACCOUNT_ CODE_ BILLING_ ENABLE	Y or N	Enter ACCOUNT_CODE_BILLING_ENABLE to allow the operating company to turn the Account Code Billing feature on or off.
		Enter Y (yes) to allow the operating company to turn the Account Code Billing feature on. Otherwise, enter N (no). If the parameter is set to N, it only disables account code billing for calls designated with the Account Code Billing feature. This parameter also exists in table VSNOPT. Field PARMVAL must be set to the same value in both tables TOPSPARM and VSNOPT for the feature to function properly.
		The default is Y. Activation is immediate.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
ACTS_ DOLLAR_ COINTEST	Y or N	Automatic Coin Toll Service dollar coin test. This parameter enables coin testing using dollars. Set this parameter to Y for phones that do accept dollars, or to N for phones that do not accept dollars. The default is N. If the test fails, a TOPS117 log is produced. For further information on coin testing, refer to functionality Automatic Coin Toll Service, ENSV00002.
ADAS_ CASSETTE_ ICON	Y or N	Enter ADAS_CASSETTE_ICON to allow the operating company to enable or disable the cassette icon. This icon is used to indicate that the directory assistance call was automated.
		Enter Y if the cassette tape icon is displayed on call origination for directory assistance calls that have been routed to the Automated Directory Assistance Service (ADAS) Voice Processing System (VPS). Enter N if the cassette tape icon is not displayed on call origination for ADAS-handled calls.
		The default is N. Activation is immediate.
		Note that if you are using IBM DA, a text string will appear instead of an icon.
ADAS_BARGE_ IN	Y or N	This parameter enables or disables ADAS Barge-In. The values are Y (enable) and N (disable). For more information, refer to functionality ADAS Base Barge-In, ALPP0001.
ADAS_ ENABLE	Y or N	Enter ADAS_ENABLE to allow the operating company to enable or disable the Automated Directory Assistance Service (ADAS) Voice Processing System (VPS) feature.
		Enter Y to enable the ADAS VPS feature. Otherwise, enter N. If the parameter is set to N, this feature is disabled and all directory assistance calls are routed directly to the operator, bypassing ADAS.
		The default is N. Activation is immediate.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
ADAS_INWARDS_ENABLE	Y or N	Enter ADAS_INWARDS_ENABLE to allow the operating company to enable or disable the ADAS for 131 inward calls.
		Enter Y to allow 131 inwards calls to route to ADAS prior to receiving operator assistance. Enter N to disallow service for 131 inwards calls.
		The default is N. Activation is immediate.
ADAS_OPR_PROFILE_ICON	Y or N	Enter ADAS_OPR_PROFILE_ICON to allow the operating company to enable or disable the operator profile icon. The operator profile icon is used to indicate that a call was not automated.
		Enter Y to display the operator profile icon for non-automated (non-ADAS) directory assistance calls. Enter N to disable the display.
		The default is Y. Activation is immediate.
		Note that if you are using IBM DA, a text string will appear instead of an icon.
ADASPLUS_ARU_WINK	N or Yx (x is 1-20)	This parameter disables/enables and determines the duration of the reverse wink (on-hook or off-hook) sent on the ADASPLUS ARU when it is connected to the operator. If set to N, no wink is sent. If set to Y, plus a value in the range 1-20 (10ms), a wink of the value duration is sent. For example, a value of 5 sends a wink of 50 milliseconds.
ADASPLUS_CALLER_JOINED_TONE	NONE, REGDACA, LOWHIGH, and HIGHLOW	For ADAS+, this parameter is used to choose a tone to be played to the operator when the calling party is joined to the operator. This occurs after ADAS+ playback to the operator or when the operator split/joins or RLS CLD during playback. ADAS+ is provided by feature AN0880 in DA Automation I/F, OSDA0006. The values are as follows: • NONE - No call arrival tone. • REGDACA - Regular DA call arrival tone. • LOWHIGH - Low to high ADAS+ call arrival tone. • HIGHLOW - High to low ADAS+ call arrival tone. The default is NONE.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
ADASPLUS_ ENABLE	Y or N	This parameter enables (Y)/disables (N) routing of eligible calls to ADAS+. ADAS+ is provided by feature AN0880 in DA Automation I/F, OSDA0006. In order for ADAS+ to function properly, the following conditions must be met:
		• ADASPLUS_ENABLE must be set to Y
		• In table SERVICES:
		— the protocol must be set to CCI
		— ADASPLUS must be set to Y
		— VERSION must be greater than or equal to 3
		• SOC option OSDA0006 must be ON
		Value Y can only be set if SOC option OSDA0006 has been set to ON. It can be set to N at anytime.
		Option OSDA0006 can only be set to IDLE if ADASPLUS_ENABLE is set to N. The correct setting is described in section "Activation" of DA Automation I/F, OSDA0006.
		The default is N.
ADASPLUS_POST _ DEFLECT	Y or N	ADAS Plus post deflect. This tuple allows ADAS Plus calls to be deflected from queue to treatment after ADAS Plus processing based on table QMSCQDEF field DEFLAREA. This field indicates the wait time and number of calls in the queue before deflection. Enter Y for deflection. Otherwise, enter N for no deflection.
		The default is N.
ADAS_ RINGING_ DURING_ PLAYBACK	Y or N	When set to Y, the subscriber is connected to ringing while ADAS plays the recordings to the operator. When set to N, the subscriber hears nothing while ADAS play the recordings to the operator. ADAS+ is provided by feature AN0880 in DA Automation I/F, OSDA0006.
		The default is N. Activation is immediate.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
ADAS_WITH_ PARS_ENABLE	Y or N	Enter ADAS_WITH_PARS_ENABLE to allow the operating company to route ADAS-handled calls to the personal audio response system (PARS) when the call is presented to an operator.
		Enter Y if the subscriber is played an introductory greeting by PARS. Enter N if no introductory greeting is played.
		The default is N. Activation is immediate.
ALERT_ TONE_TIME	5 to 30	Prior to the expiry of the allocated time for a fixed-duration call, a warning tone warns the subscriber that the call is about to end. Enter ALERT_TONE_TIME to specify the number of seconds that a warning tone is heard before the subscriber's call is disconnected.
		Enter the number of seconds that the warning tone is heard before the subscriber is disconnected.
		The default is 5. Activation is immediate.
ALL_CALLS_USE_ OPR_SVC_ AGRMTS	Y, N	This parameter allows the operator services provider to wholesale their billing agreements when CLECs do not want to secure their own agreements. The values are as follows:
		• Y - All calls incoming on TOPS/ISUP trunks use the operator services billing agreements for the checks. The agreement groups are obtained from TOPSPARM parameter OPR_SVC_AGRMTS, if OPR_SVC_AGRMTS is set to Y.
		• N - Determine whether to use the operator services agreements on an individual basis by field BILAGRMT in table TOPEACAR or SPIDDB.
APS_DISPLAY_ DOLLAR_SIGN	Y or N	This parameter controls display of the dollar sign in the CHARGE field of the APS log in the range APS100-APS121. Enter Y to display $ in front of the charge. Enter N for no $.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
ARAN_ STATUS	NONE, BOTH, HOTEL, INSTN	This parameter activates/deactivates ARAN on an office wide basis. Allowable values are:
		• NONE - ARAN deactivated for hotel and institution subscribers. Both hotel and institution calls are not routed to ARAN. Instead, hotel calls that require room number collection are sent to an operator for manual room number collection and institution calls tandem through the TOPS office.
		• BOTH - ARAN activated for hotel and institution subscribers. Both hotel calls that require room number collection and institution calls are routed to ARAN.
		• HOTEL - ARAN activated for hotel subscribers only. Only hotel calls that require room number collection are routed to ARAN. However, institution calls tandem through the TOPS office.
		• INSTN - ARAN activated for institution subscribers only. Only institution calls are routed to ARAN. However, hotel calls that require room number collection are sent to an operator for manual room number collection.
		The default is NONE.
		Note: If ARAN_STATUS is activated for hotel subscribers, then it is activated for numbers datafilled in tables SPLDNID and TDBCLASS.
AUTO_MDS_ QMS_CQPROF	N or Yxx (xx is queue)	Enter AUTO_MDS_QMS_CQPROF to enable a coin subscriber's keypad upon presentation to the automated message delivery system (MDS).
		If the call queue profile number of the automated MDS is datafilled as the parameter value for parameter AUTO_MDS_QMS_CQPROF and the origination station is a coin phone, the subscriber's keypad is enabled.
		Enter Yxx, where xx is the desired call queue number; otherwise, enter N.
		The default is N. Activation is immediate.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
AUTO_ OUTPULSE_ UPON_CCV_ SUCCESS	Y or N	This parameter determines whether the DMS switch automatically outpulses the forward number if a valid calling card is entered. The values are Y (auto outpulse, the same as prior to OSSAIN) and N (no auto outpulse). The default is Y.
BRAND_ USING_ DEFAULT_SPID	Y or N	This parameter enables front end (calling party) branding for non-carrier calls using the SPID in TOPSPARM parameter DEFAULT_SPID. The values for BRAND_USING_DEFAULT_SPID are Y (enable) and N (disable). Therefore, if BRAND_USING_DEFAULT_SPID = Y and no SPID is given in table DNSCRN for the calling party's DN, then the default SPID in TOPSPARM parameter DEFAULT_SPID is used for front end branding. Also, data in table SPIDDB is used for the branding.
		If BRAND_USING_DEFAULT_SPID = N or no SPID is assigned to the calling DN, the NBEC code is used for branding of non-carrier calls. No SPID is assigned if an SPID is not provided by an OSSAIN SN or OLNS query, there is no SPID entry in table DNSCRN, or parameter DEFAULT_SPID is not datafilled with a default SPID.
		Note: This parameter does not automatically appear in the table, it must be added.
CCARD_ SALES_ REPORT_ ACTIVE	Y or N	This parameter enables the commercial credit card sales report. The values are Y (enable) and N (disable). This capability is described in functionality TOPS Commercial Credit Card, ABS00008.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
CC_CARRIER_ SELECT_ DEFAULT	ALLOW or BLOCK	This parameter determines default outpulsing of calling card calls when selecting a terminating carrier. This parameter is used if a match is not found in table CCCSOPTS. The values are:
		• ALLOW - Outpulse the existing translations: network prefix + country code + national number. Note that there is no carrier code, so the following network (international gateway) needs to perform translations to select the carrier.
		• BLOCK - Disallow outpulsing. A display is presented on the operator screen.
		The default is ALLOW.
		For further information, refer to feature AF7021 in functionality Carrier Selection, ENSV0001.
CC_CARRIER_ SELECT_ ENABLE	Y or N	This parameter enables calling card carrier selection. The values are Y (enable) and N (disable). This functionality introduces a serious operator outpulsing restriction; therefore, this parameter is required to limit the application of this restriction. The restriction is that an operator is blocked from outpulsing an outbound call until a valid billing method is selected. This restriction is enforced when this parameter is activated and the called number is foreign.
		The default is N.
		For further information, refer to feature AF7021 in functionality Carrier Selection, ENSV0001.
CCV_ACCS_ 15TH_DIGIT_ TIMER	1 to 15	Specifies the time that ACCS will wait for entry of a 15th digit after the 14th digit is entered. This parameter does not apply to AABS. It does apply to ACCS, as the name implies. Range is 1 to15 seconds. The default is 2.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
CDIR_ CARRIER_ SELECT_ DEFAULT	ALLOW or BLOCK	This parameter determines default outpulsing of country direct calls when selecting a terminating carrier. This parameter is used if a match is not found in either table CDCSOPTS nor CDCSOPT2. The values are:
		• ALLOW - Outpulse the existing translations: network prefix + country code + national number. Note that there is no carrier code, so the following network (international gateway) needs to perform translations to select the carrier.
		• BLOCK - Disallow outpulsing. A display is presented on the operator screen.
		The default is ALLOW.
		For further information, refer to feature AF7021 in functionality Carrier Selection, ENSV0001.
CDIR_ DEDICATED_DN	Y or N	Determines the calling number. If set to N, the digit stream is used. If set to Y, a 10 digit DN (datafilled after the Y) is used (with possible modification) as the calling number for all Country Direct calls in that office. If a country code is sent, it replaces the last 3 digits of the datafilled DN. If no country code is sent, the datafilled DN is used without change.
CDIR_RATING	Y or N	This parameter is used in a GOS environment to indicate which signalled codes to base rating of country direct calls. The values are:
		• Y (the default) - Base the rate on the signalled country and carrier codes. Then, use the special country direct tables to derive an SSETNAME for entering the GOS rating system.
		• N - Base the rate on the signalled access, country and carrier codes. These codes are used to index table CLGSSET which gives an SSETNAME for entering the GOS rating system.
		For further information, refer to functionality Auto Country Direct, ENSV0010.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
CHECK_BILL_ AGRMT_USING_ BSP_SPID	Y or N	The LIDB can return both an AO SPID and a BSP SPID. This feature allows for screening on both the AO and BSP SPIDs. Screening is always done on the AO SPID. Optional screening on the BSP SPID is controlled by this parameter.
		If no AO or BSP SPID is returned from the LIDB, the default behavior is defined by field NOSPDERR in applicable table SPIDDB or TOPEACAR.
		The values of this parameter are as follows:
		• Y - screen on both the AO and BSP SPID.
		If both an AO and a BSP SPID are returned by the LIDB, then screening is done on the basis of the AO SPID first. If an agreement based on the AO SPID is not found, then the BSP SPID is used to screen. If, however, an agreement is found based on the AO SPID, then no further screening on the basis of the BSP SPID is done.
		• N - screen only on the AO SPID
CHG_ DISPLAY_ DECIMAL	0 to 3	Enter CHG_DISPLAY_DECIMAL for a TOPS Global Operator Services (GOS) office. This parameter specifies how many decimal digits to place to the right of the decimal point for display of call charge values. This is useful for countries with decimal currency systems since charge values can be displayed in a format familiar to the TOPS operator.
		If the monetary system is not based on decimal units, then the GOS rating system is not able to convert the results into the proper units. However, the calculations are still valid in the base units.
		This parameter is not available in North American TOPS offices.
		If this parameter is set to 0, then no decimal point is displayed.
		The default is 2. Activation is immediate.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
CLD_DNSCRN_ ENABLED	Y or N	This parameter determines whether or not the called number is screened for restricted attributes (UNPAID, BLCKCALL) in table DNSCRN. The range is Y (screen) and N (do not screen). The default is N.
COIN_PAY_ SEQUENCE	POSTPAY or PREPAY	Enter COIN_PAY_SEQUENCE to select either pre-pay or post-pay for all coin phones that are routed to a TOPS Global Operator Services (GOS) office. This selection determines how calls are charged.
		If the value is set to POSTPAY, the customer is asked to deposit the necessary amount for the initial coin recall period. When this period has expired, no additional payment deposit is required. After each subsequent recall period expires, the call is brought back to the TOPS position and the customer is requested to deposit the necessary amount to cover the charges for the period that just expired. When the call is terminated, the call is brought back to the TOPS position so that the charges for the unpaid portion of the call can be collected.
		If the value is set to PREPAY, the customer is requested to deposit the necessary amount before each recall period. When the call is terminated, the call does not recall to the TOPS position since no incurred charges are unpaid.
		The default is POSTPAY. Activation is immediate.
CZECH_ OFFICE	Y or N	This parameter was created for use by SPT (the Czech Republic Telephone Company). When set to Yes, this parameter allows the table TQMSOPT parameter, QMS_BLOCK_RECALL_SERVICE_CHANGE, to be activated. In order to set CZECH_OFFICE=Y, table TOPSPARM parameter NUMBERING_PLAN must first be set to OPEN_NUMBERING. For more information, refer to feature AN1085 in GOS Enhancements, GOS00001.
		This parameter only appears in a global load.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
DACC_CIC_ OVERRIDE_ ENABLE	Y or N	This parameter enables an override of the carrier associated with an interLATA ADACC call. Then, a replacement carrier is selected in one of the following ways: • office wide basis in TOPSPARM parameter DACC_OVERRIDE_CIC • service provider basis in table SPIDDB, field DACICOVR The values are Y (enable) and N (disable). If the carrier override functionality is not required, then this parameter should be set to N.
DACC_OVERRIDE _CIC	Y and cic or N	This parameter overrides the carrier associated with an interLATA ADACC call. This parameter is valid only if TOPSPARM parameter DACC_CIC_OVERRIDE_ENABLE = Y. Then, DACC_OVERRIDE_CIC is checked, which has the following values: • Y - Enable override on an office wide basis. Refinement CARRNO appears, which is a 4-digit carrier number. The carrier must be datafilled in table TOPEACAR. If DACC_OVERRIDE_CIC and table SPIDDB, field DACICOVR are both set to Y, then DACC_OVERRIDE_CIC has precedence. • N -Disable override. This value is required for override on a service provider basis in table SPIDDB, field DACICOVR.
DANI_ DISPLAY_ CLG_NUM	Y or N	Enter DANI_DISPLAY_CLG_NUM to specify whether the calling number is displayed to the operator for all calls over TOPS trunk groups with a calling group identification (CLGID) of DANI. Enter Y to display the calling number. Otherwise, enter N. The default is Y. Activation is immediate.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
DEFAULT_ LOCLZONE	Y or N	This parameter is used for calls with no incoming trunk group (Delay and system initiated) to enable local screening and select an initial zone name. The values are as follows: • Y - use GOS Local Determination to determine if the call is local and datafill refinement LOCLZONE with a zone name defined in table TLCLZONE. • N - use the universal translations method with the CLASS option. This value is the default. For calls on a trunk group, table TRKGRP, subfield LOCLZONE provides this equivalent function.
DEFAULT_ PRODUCT	NA100 or GLOBAL	This parameter determines which TOPS product controls processing of switch originated calls (that is, Operator and OSSAIN service node originated calls). This parameter is necessary when multiple TOPS products are combined. The values are NA100 and GLOBAL. In TOPS07, this is a read-only parameter where the value is automatically set according to the environment and cannot be changed. Therefore, no data entry is required or allowed for this TOPS07 release since only single product loads are available. For future releases with loads that contain multiple products, this parameter is automatically initialized but can be changed.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
DEFAULT_SPID	Yxxxx or N (xxxx are characters	This parameter indicates the default account owner (AO) SPID on an office wide basis. This parameter is used if no AO SPID is assigned by an OSSANI SN, OLNS query, calling or ANI digits, table DNSCRN, or table TOPSTOPT.
		The AO SPID is used for TOPS protocols, screen updates, AMA processing, and front end (calling party) branding of non-carrier calls. Table SPIDDB provides supportive data.
		The values for DEFAULT_SPID are Y and N, indicating a default SPID is or is not specified, respectively. If Y is entered, also enter the default SPID, previously datafilled in table SPID.
		If BRANDING_USING_DEFAULT_SPID = N or no SPID is assigned to the calling DN, the NBEC code is used for branding of non-carrier calls. This is dependent upon the service being enabled in table SPIDDB.
		If a DEFAULT_SPID is specified and parameter BRANDING_USING_DEFAULT_SPID = Y, the DEFAULT_SPID is used for branding This is dependent upon the service being enabled in table SPIDDB. If the service is disabled, no branding is provided, not even using the NBEC code.
		An SPID cannot be removed from table SPID if it is datafilled as the DEFAULT_SPID in table TOPSPARM.
		Note: This parameter does not automatically appear in the table, it must be added.
DELAY_ SPECIFIED_ SNPA	SNPA from HNPACONT or SNPANAME	This parameter specifies the SNPA used to expand a 7-digit calling number to 10 digits for a delay call.
		Enter an SNPA that is defined in table HNPACONT or SNPANAME.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
DEVICE_ OUTPUT_CR	Y or N	Device output carriage return. This parameter determines if an extra LF/CR is put into a character string that is longer than 80 characters. This parameter should be set to N (do not include extra LF/CR) for a Call Store Buffer/TLCS VQ made by CGI. For all other VQ TTYs, set this parameter to Y. The default is N.
		With functionality TOPS IDDD 15 Digit Expansion (OSB00001), some Hobic devices require more than 80 ASCII characters to display one billing record. The calling and called number fields are increased to handle up to 19 digits. Since the TOPS device buffer is only 80 characters, an extra LF/CR is used to send the record in two lines.
		However, the VQ TTY in some sites is not a TTY but a Call Store Buffer/TLCS made by CGI and the VQ uses the LF/CR as a flag to indicate end/beginning of a new record. Since the CGI equipment cannot be modified to allow for the extra LF/CR, one billing record looks like two.
DISPLAY_ CALLED_ NUMBER	NONE, MP, OPP, or BOTH	This parameter indicates the type of TOPS position to receive the called number from the DMS switch, if sent. Following are the values:
		• NONE - The called number is not sent to any TOPS position.
		• MP - The called number is sent and displayed at TOPS MP positions.
		• OPP - The called number is sent and displayed at OPP-compatible positions.
		• BOTH - The called number is sent and displayed at both TOPS MP and OPP-compatible positions.
		The default is N.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
DISTINCT_ NUM_CALL_ ARRIVAL_ TONES	Y or N	Enter DISTINCT_NUM_CALL_ARRIVAL_TONES to activate or deactivate the Distinct Number of Call Arrival Tones feature.
		If the parameter is set to Y, one call arrival tone indicates a toll assistance (TA) call arrival at the operator's position, two call arrival tones indicate an intercept call arrival or operator number identification (ONI) call arrival, and three call arrival tones indicate a directory assistance (DA) call arrival.
		If the parameter is set to N, one call arrival tone indicates a TA or DA call, and two call arrival tones indicate an intercept or ONI call.
		The default is Y. Activation is immediate.
DOM_CCARD_ FORMAT_ CHECKS	Y or N	Domestic calling card format checks. This parameter allows disabling of RAO and NPA checks on North American 14-digit domestic calling card number formats. This parameter is provided for countries in North America that have open numbering, so do not have these format requirements. The values for this parameter are:
 • Y - Enable the RAO and NPA checks as prior to this parameter. These checks are the following:
 — In North America, domestic calling card number formats are checked for one of the following:
 – The card number has a 0 or 1 as its forth digit, making it an RAO card.
 – The card number begins with a valid North American NPA; that is, the first digit is in the range 2-9.
 — Also, the following requirements are enforced:
 – The card number does not begin with 700, 800, or 900.
 – The card number begins with a valid North American NPA; that is, the first digit is in the range 2-9.
 –The four digit personal identification number (PIN) does not begin with 0 or 1.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
DOM_CCARD_ FORMAT_ CHECKS (continued)		Domestic calling card format checks (continued). The values for this parameter are:
		• N - Disable the RAO and NPA checks as follows:
		— The domestic calling card number is not checked to determine if it is an RAO card.
		— Since the domestic calling card number is not an RAO card, checks in tables RAO and RAOCHECK are skipped. Also, the RAO number is not removed from the billing number field of module codes 061 and 066. Additionally, the RAO number is not recorded as a "special number" in the Billing Type Identification field of module codes 052 and 061; it is instead recorded as a calling card.
		— Since this card is not an RAO card but a valid NPA card, checks in tables NPACHECK are skipped. And, since datafill in table NPACHECK determines whether further checks in table CHKDIGIT are involved, table CHKDIGIT is also ignored.
		— "Vfy" is no longer displayed to the operator if a non-RAO domestic calling card's first three digits are not in table NPACHECK and table CHKDIGIT is no longer checked.
		— The following check is not performed: Verification that a domestic calling card number does not begin with digits 700, 800, or 900, or have 555 as digits 4-6.
		— Verification that the PIN begins with a digit in the range 2-9 is skipped.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
DOM_CCARD_ FORMAT_ CHECKS (continued)		The default is Y. The following calling card checks are independent of card format and numbering plan so are not affected by this parameter: • regional domestic credit card checks in tables DOMBILL and REGNUM • table HOTLIST checks This parameter is checked on all TOPS office call types that may be billed to a domestic calling card number. This includes operator-assisted (OA), MCCS, AABS, and OSSAIN calls. This parameter is checked in North American and open numbering plan offices. This parameter also affects card numbers in table INTCCFMT that require transitional validation. These card numbers use an ITU-T format, but are subject to the same format validation as 14-digit domestic calling cards. For further information, refer to SR 50058693 in functionality TOPS Call Processing Features (Call Processing), OSB00001.
FIXED_ DURATION	ALL, COIN, HOTEL, NONE, RESTRICT, STATION	Enter FIXED_DURATION to specify the set of call types that are marked as fixed duration calls upon call arrival. Enter the call types that are marked as fixed duration calls upon call arrival. The default is NONE. Activation is immediate.
FIXED_ DURATION_APS	Y or N	This parameter indicates if APS calls are marked as fixed duration. APS calls are marked as fixed duration by either this parameter or the operator. When a call is marked as fixed duration, the operator must first enter a duration for the call. Then, the operator can release the call. When the duration period ends, the switch ends the call and generates a record with the charges. The values are Y (yes, APS calls are fixed duration) and N (no, APS calls are not fixed duration). Table TOPSPARM parameter ALERT_TONE_TIME indicates the number of seconds before the duration period ends that a notification tone sounds.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
FORWARD_ ANI_AS_CLI	Y or N	Forward Automatic Number Identification as Calling Line Identification. Enables conversion of ANI on an incoming trunk to CLI for an outgoing ISUP trunk. If set to N, ANI is not forwarded as CLI. If set to Y, ANI may be forwarded as CLI. Forwarding of CLI also depends on table ISUPTRK, field ANI2CLI, and table TOPSTOPT, field ANITOCLI. ANI is forwarded as CLI only if all 3 values are set to Y. The default is N.
FOUR_DIGIT_ CIC_STATUS	THREEDIG, FOURDIG, or PERMISSIVE	Enter FOUR_DIGIT_CIC_STATUS to specify how many carrier identification codes (CIC) the office can process.
		Enter THREEDIG if the office can only process three-digit CICs. Enter FOURDIG if the office can only process four-digit CICs that begin with 0 (zero), 5, or 6 (that is, 0xxx, 5xxx, or 6xxx). Enter PERMISSIVE if the office can handle both three-digit and four-digit CICs.
		The default is THREEDIG. Activation is immediate.
GCACALL_ DEFAULT	Y or N	This parameter is used if there is no tuple for the call in table GCASCRN. It determines if the call should be considered a GCA call. If set to Y, the call is a GCA call; otherwise, it is an Operating Company call.
		The default value is N.
		This parameter is visible only in a TOPS global load.
GCA_PHASE	PHASE_1 or PHASE_2	This parameter allows a graceful change of GCA from phase 1 to phase 2. At installation, the value is set to PHASE_1. While preparing datafill to convert from phase 1 to phase 2, the value should be set to PHASE_1. Once datafill is complete or the site is a new GCA site, set the value to PHASE_2.
		The default value is PHASE_1.
		This parameter is visible only in a TOPS global load.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
GEN_DNSCRN_ INVALID_CIC_ LOG	Y or N	This parameter specifies if the TOPS130 log should be generated when an invalid CIC is encountered in table DNSCRN. If Y, the log is generated. If N, the log is not generated.
		A CIC is invalid if it is not datafilled in table TOPCACAR. Due to the size of table DNSCRN, there are no cross checks to prevent deletion of a CIC from table TOPCACAR that is datafilled in table DNSCRN.
		The default value is Y.
		This parameter is visible only in a TOPS global load.
GEN_NO_BILL_ AGRMT_LOG	Y or N	This parameter enables generation of new log TOPS612, No Billing Agreement, which is generated under the following conditions.
		• billing is blocked due to the lack of a billing agreement
		• no Billed AO or BSP SPID is returned from the LIDB database
		• no Calling AO SPID and TOPSPARM parameter OPR_SVC_AGRMTS is set to N BLOCK
		The values of the parameter are as follows:
		• Y - enable generation of the log
		• N - disable generation of the log
IN_ NTERWORKING_ RESPONSE_ TIMER	1 to 60	This parameter indicates the amount of time in seconds that the TOPS switch waits for a message from the SSP after sending a response to a previous Invoke.
		The default is 5.
		The timer is started when the TOPS switch sends an ISUP FAR or FAC message to the SSP. When the timer expires, the following occurs
		• The ISUP connection is released.
		• The operator terminal is notified of the release.
		• Log TOPS 608, IN Interworking Response Timer Popped, is generated.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
IPPOS_AUDIT_ INTERVAL	5 to 15	This parameter specifies the interval of time between each audit cycle. The values are in seconds and the default is 5.
		Setting this parameter higher saves CM realtime and messaging but may delay the time it takes for the audit and position to recognize a loss of data connectivity. Setting it lower has the opposite effect.
IPPOS_AUDIT_ THRESHOLD	2 to 5	The parameter specifies how many consecutive times an OPP Audit Request should be sent to a position without receiving a response before the state of the position is changed to SYSB. The default is 3.
		Increasing the threshold increases the messaging and real time but it also reduces the number of positions being put into a SYSB state because of an occasional packet loss.
LANG_ ERROR_ SCREEN_ DISPLAY	alphanumeric (1 to 4 characters)	Enter LANG_ERROR_SCREEN_DISPLAY for error display on TOPS 4 operator consoles. It provides a method of displaying error conditions to the operator when one or more incorrect digits are entered by the operator. The displayed message is a character string that can be customized by the operating company.
		Enter the customized message.
		The default is LANG. Activation is immediate.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action

LNP_QUERY_ FOR_AMA_ ONLY	CLG, SPL, ALL, or NONE	This parameter specifies which numbers are valid for LNP queries for AMA module 720 recording purposes only. The values are:
		
		• CLG - calling number
		
		  Including CLG in the set has no effect unless TOPSTOPT field LNPCLGAM is `Y' for the originating trunk group.
		
		• SPL - Special (third and 14-digit line-based calling card) numbers
		
		• ALL - All (CLG and SPL) numbers. This is the default value.
		
		  A value of ALL does not always cause LNP modules to be appended. For example, if table TOPSTOPT has the LNPCLGAM field set to N (for calling number), then no LNP information for AMA is required. So no LNP module would be appended.
		
		• NONE - No numbers.
		
		  A value of NONE does not prevent appending LNP modules for calling and special billing numbers since:
		
		  — Queries for these numbers can be made for reasons other than AMA recording. For example, in a delay call, an LNP query is made for the calling number so it can route to the back party.
		
		  — The LRN associated with the calling number may be datafilled against the incoming trunk group.
		
		The called number is not included as a value, because if LNP information is required, the query is made for routing rather than for AMA purposes. AMA information on a called number is recorded without consulting this parameter.
		
		This parameter is specific to North American TOPS switch loads and is only referenced when TOPS LNP is active.

LNP_ TIMEOUT	1 to 60	This parameter is referenced when an LNP query is launched to determine how long TOPS call processing waits for a response to its query. The range is 1 - 60 seconds. The default is 2. This parameter is specific to North American TOPS loads and is only referenced when TOPS LNP is active.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
MF_TRUNK_ WINK_ REQUEST_ DELAY	1 to 200	Enter MF_TRUNK_WINK_REQUEST_DELAY to specify the delay time before a wink is sent from a TOPS office to an end office to request automatic number identification (ANI). This parameter also controls the delay before a wink is sent by a TOPS office for treatment supervision. This parameter only applies to multifrequency (MF) TOPS trunks utilizing MF receivers that gather automatic number identification (ANI) digits spilled from the end office.
		Enter the delay time, in 10-ms increments, before a wink is sent from a TOPS office to an end office to request ANI.
		The default is 25. Activation is immediate.
MP_DISPLAY_ POSSIBLE_ AUTOMATION	Y or N	Enter MP_DISPLAY_POSSIBLE_AUTOMATION to control the display of an icon indicating whether calls reaching the TOPS position could have been automated.
		Enter Y if a question mark icon is displayed on the screen whenever a call reaches the TOPS position that could have been automated, but was not. Enter N if the display is the same as before and no indication of possible automation is provided.
		The default is N. Activation is immediate.
MULTI_NPA_ INWARD_XLA	Y or N	Enter MULTI_NPA_INWARD_XLA to determine whether the inwards code entered by the operator on an inwards call is translated using information from tables TRKGRP and TOPSBC instead information from table OPRTRANS alone.
		Enter Y if inwards calls are routed using the calling party's trunk group data. Enter N if translations are performed using the operator's translations data for routing.
		The default is N. Activation is immediate.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
MULTI_NPA_ NO_AMA_XLA	Y or N	Enter MULTI_NPA_NO_AMA_XLA to activate or deactivate the Multiple Trunk Group per NPA feature.
		Enter Y for an operator assisted call that is not billable, the called number entered by the operator is translated with information from tables TRKGRP and TOPSBC.
		Enter N if the called number entered by the operator is translated with information from table OPRTRANS.
		The default is N. Activation is immediate.
NOTIFY_RECALL_ OPTIONS	Y or N	When set to Y (yes), this parameter enables the following functions (fields) provided by feature AN1085 in GOS Enhancements, GOS00001:
		• MUTED_NFY_RECALL (muted notify recall)
		• AUTO_NFY_RECALL (automatic notify recall)
		• NFY_RECALL_CNT (notify recall count
		Each field is enabled by setting to Y. Refer to the datafill example at the end.
NSC_800PLUS_ QUERY_AT_ POSITION	Y or N	This parameter indicates where NSC processing is done for an 800 Plus call at an operator position. The values are as follows:
		• Y - Do NSC processing at the current TOPS switch. The call is routed with the DN received from the database. LNP processing is done at an adjacent switch. This process is the same as before this functionality.
		• N - Do NSC processing at an adjacent switch. The calling and toll-free numbers are signalled to the adjacent switch. LNP processing also is done at the adjacent switch. If the adjacent switch is not a tandem switch, a looparound trunk to the same office ensures that LNP processing occurs soon enough in the network to avoid last resort routing.
		For trunking recommendations, refer to the Operator handled calls section in functionality 800+ Interworking with LNP, OSB00001 of this manual.
		The default is Y.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
NUMBERING_ PLAN	N_ANERICAN, or OPEN_ NUMBERING	Enter NUMBERING_PLAN to allow the TOPS software to function in an Open Numbering Plan environment. This parameter is used for internal purposes only. It cannot be accessed by the operating company.
		The default is N_AMERICAN. Activation is set during software load-build.
OCIPDL_AUDIT_ THRESHOLD	2 to10	Operator Centralization Internet Protocol Data Link (OCIPDL) maintenance audit threshold in seconds.
		OCIPDL audits typically occur every 30 seconds for in-service links. So, every 30 seconds an audit message is sent by the near end switch over the OCIPDL to maintenance at the far end switch. The near end waits up to 5 seconds for an audit response, which indicates the far end is in-service. If a response is not received within 5 seconds. the audit is considered a failure; however, the audits continue.
		If a consecutive number of audit failures equals this parameter, the ODIPDL changes state from INSV to SYSB. The link can be recovered as follows:
		• The continuing audits become successful, which is automatic.
		• The far end initiates recovery.
		• The near end manually busies and RTSes to initiate recovery.
		The default value is 3.
OC_PMIST_ FORMAT	OFF or FULL	This parameter enables decoding and formatting of the PMIST message for the operator centralization (OC) protocol. The range is OFF and FULL. When set to OFF, the message is displayed in hexadecimal format. When set to FULL, the message is displayed in both the hexadecimal and decoded formats. The default is OFF.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
OFFER_LOCAL_ DACC	NONE, LCL, NLCL, or ALL	This parameter indicates the DA call completion choice for Operating Company calls. The values are as follows:
		• NONE - call completion is not allowed.
		• LCL - call completion is allowed only for local calls
		• NLCL - call completion is allowed only for non-local calls.
		• ALL - call completion is allowed for both local and non-local calls.
OFFER_LOCAL_ STDCC	NONE, LCL, NLCL, or ALL	This parameter indicates the standard call completion choice for Operating Company calls. The values are as follows:
		• NONE - call completion is not allowed for local calls
		• LCL - call completion is allowed only for local calls
		• NLCL - call completion is allowed only for non-local calls.
		• ALL - call completion is allowed for both local and non-local calls.
OLNS_EAANI_ DACC	Y or N	This parameter determines whether or not the DACC indicator is considered when determining what ANI ID digits to spill to the carrier on interLATA calls. The range of values is Y and N. Enter Y to consider the DACC indicator. Refer to section "Spilling ANI ID to carrier on InterLATA calls" in functionality TOPS OLNS Interface (ABS00012) for more details. The default is N.
OLNS_EAANI_ ADD_BILLSRV	Y or N	This parameter determines whether or not the Additional Originating Billing Services Indicator is considered when determining what ANI ID digits to spill to the carrier on interLATA calls. The range of values is Y and N. Enter Y to consider the DACC indicator. Refer to section "Spilling ANI ID to carrier on InterLATA calls" in functionality TOPS OLNS Interface (ABS00012) for more details. The default is N.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
OLNS_ILP_ DACC	Y or N	Originating line number screening intraLATA presubscription directory assistance call completion. This parameter indicates whether ILP should be offered on intraLATA toll DACC calls. The values are Y (offer ILP) and N (do not offer ILP). Refer to functionality OLNS IntraLATA Presubscription, OSEA00006. The default is N.
OLNS_ RESTRICTED_ DACC	Y or N	This parameter is used to determine if a call is restricted when an ANI ID 7 is signalled. The values are:
		• Y - The TA (sent paid, collect, third, calling card, and special BNS) and DA (sent paid, collect, third, calling card, special BNS, and DACC) indicators are checked.
		• N - The TA (sent paid, collect, third, calling card, and special BNS) and DA (sent paid, collect, third, calling card, and special BNS) indicators are checked.
		Note that error handling is applied to calls with no billing restriction which are signalled with an ANI ID 7. These calls are treated as ANIF, routed to an operator, and a TRK118 log is generated.
		Note: This parameter does not automatically appear in the table, it must be added.
OLNS_ TIMEOUT	1 to 15	This parameter indicates the timeout period in seconds for an OLNS response message. This value can range from 1 to 15 seconds with a default value of 2 seconds.
OPP_ALWAYS_ SEND_SPID_ INFO	Y or N	This parameter indicates whether both trunk group and SPID display information should be sent to an OPP compatible position if both are applicable. If this parameter is N, then the switch passes either the SPID display or the trunk group display to the position as applicable. Otherwise, both displays are sent if available. For further information, refer to table SPIDDB.
		Note: This parameter does not automatically appear in the table, it must be added.
		This capability is avilable on a trunk group basis in table TOPSTOPT, field DISPSIPD.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
OPP_PMIST_ FORMAT	BRIEF, FULL, or OFF	Enter OPP_PMIST_FORMAT to control the formatted peripheral module intercept system test (PMIST) output for Open Position Protocol (OPP) messages.
		Enter BRIEF to select a condensed format, FULL to provide the full format, or OFF to turn off the formatting.
		The default is FULL. Activation is not applicable.
OPR_ COMPROMISED_ CALL_ OVERRIDE	Y or N	Enter OPR_COMPROMISED_CALL_OVERRIDE to specify how an operator can complete compromised calls. This option allows operators to be notified about possible billing problems without having to restrict the calls being handled.
		Enter Y if the operator can complete compromised calls without changing the billing method. Enter N if the operator can only complete compromised calls by changing the billing method and taking a manual ticket, or by just taking a manual ticket.
		The default is N. Activation is immediate.
OPR_SVC_ AGRMTS	Y or N	This parameter allows CLECs to use their own billing agreements or use the billing agreements already established by the Operator Services wholesaler. This parameter identifies the billing agreement groups of the Operator Services wholesaler. This parameter is used as the default behavior when no Calling AO SPID is associated with the call.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action

OPR_SVC_
AGRMTS
(continued)
		The values are as follows:
		
		• Y - There are operator services billing agreements. Datafill the following refinements:
		
		— CCVAGRMT - Call card validation. Enter a billing agreement group name defined in table BAGNAME. This name is used as part of an index into table CCVAGRMT.
		
		— BNSAGRMT - Billed number screening. Enter a billing agreement group name defined in table BAGNAME. This name is used as part of an index into table BNSAGRMT.
		
		— NOSPDERR - No SPID is returned from the database. The values for error handling are as follows:
		
		    – ACCPT—Accept the call.
		
		    – BLOCK—Block the call.
		
		    – OPER—Send the call to an operator if the call is not at an operator (that is, at an automated system), or if at an operator, block that billing method and allow the operator to prompt for another method of payment.
		
		• N - There are no operator services billing agreements. This value is allowed only if TOPSPARM parameter ALL_CALLS_USE_OPR_SVC_AGRMTS = N and no SPID in table SPIDDB nor CIC in table TOPEACAR is using the operator services billing agreements. Datafill refinement NO_CLG_AO_ACTION. This refinement allows the Operator Services wholesaler to define default handling when there is no Calling AO SPID associated with the call (for LEC calls only) and no Operator Services Agreements are datafilled. The values are as follows:
		
		— ACCPT - Accept the call (default). This value allows the feature to be activated through SOC and screening for billing agreement to be done on a per SPID basis. After all necessary datafill is in place for all SPIDs in table SPIDDB, this field can be changed to BLOCK if desired.
		
		— BLOCK - block the call

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
OPR_ SPECIFIED_ SNPA	SNPA from HNPACONT or SNPANAME	This parameter specifies the SNPA used to expand a 7-digit calling number to 10 digits for an operator call. Enter an SNPA that is defined in table HNPACONT or SNPANAME.
OSNC_OUTGOING _DEFAULT	Y or N	This parameter allows all outgoing ISUP calls to default to OSNC signalling. This parameter eliminates the need to add the OSNCCAP selector to all route lists that should be using OSNC signalling. The values are as follows: • Y - All outgoing ISUP traffic is routed with OSNC signalling unless overridden by the OSNCCAP selector indicating not to use OSNC signalling for incoming OSNC calls • N - All outgoing ISUP traffic is routed with TOPS/ISUP (functionality GR317/GR394 ISUP to/from TOPS, OSEA0005) signalling unless OSNC signalling is specified in the route list by selector OSNCCAP for incoming OSNC calls.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
OVERRIDE_ ANIFSPL_ HANDLING	Y or N	ANI ID failure special. This subfield determines on a switch wide basis whether an ANI failure call should be displayed as ANI success to the operator. An ANI failure occurs if the call is marked as special and no calling number is found in table SPLDNID or DNSCRN. The values are as follows:
		• Y - An ANI failure is allowed to proceed through the system, no restrictions are marked against the call, and the call is displayed as ANI success. This parameter has precedence over table TOPSTOPT field ANIFSPL. Therefore, when this parameter is set to Y, field ANIFSPL is not valid.
		• N - An ANI failure is displayed as ANI failure as prior to this feature. This value is the default. For this value only, an ANI failure can be displayed as ANI success on a trunk group basis according to table TOPSTOPS field ANIFSPL.
		This behavior applies to calls marked as special by the ANI ID tables (OSSCAT, BELLCAT, and OPENANI) that arrive on STATCLAS = DNLOOKUP or RESTBIL trunk groups.
		When a call arrives with an ANI ID marked as special, the screening tables are used to identify the calling service (for example, coin, restricted, and so forth). When there is no data in these tables for a call marked as special and the datafill indicates not to mark this call as ANI failure, the calling service is marked as station.
PARS_PMIST_ FORMAT	OFF or FULL	This parameter enables decoding and formatting of the PMIST message for the personal audio response (PARS) protocol. The range is OFF and FULL. When set to OFF, the message is displayed in hexadecimal format. When set to FULL, the message is displayed in both the hexadecimal and decoded formats. The default is OFF.
POSITION_ SANITY_TIMER	N or Yx (x is 1 to 60)	Enter POSITION_SANITY_TIMER to set the TOPS position sanity timer on or off in a TOPS office.
		Enter Y to turn on the sanity position timer and then enter a timer duration in the range of 1 to 60 seconds. Otherwise, enter N to turn off the timer.
		The default is N. Activation is immediate.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
POST_WINK_ PRE_OFFHOOK_ DELAY	1 to 200 (80 is the default value)	This parameter indicates the delay in 10ms increments between each trunk signalled ACK and OFFHK. That is, multiply the entry by 10ms. Therefore, the range is 1 (10ms) to 200 (2000ms).
		This parameter is used for the intermittent problem of calls routing to a position and then going to reorder. This happens when an end office takes the call down and generates a TRK121 log due to no start dial. This only occurs when the TOPS trunk is set for COMFGD. The end office is missing the OFFHK from the TOPS office and reports a CALL_FAILURE_MSG in the XPMIST.
		XPMIST shows the interval between the EXECS sent to the XPM for the final wink and the answer offhook to be a minimum of 300ms. The XPM data shows the DMS100 switch side of the TOPS switch is being sent these messages in 60—70ms. The LSSGR states that the minimum time between these two should be 250ms. If the table OFCSTD parameter WK_DD_PRE_DIAL_DELAY is set way below the default (80ms) to 40ms, the failures stop occurring. However, changing this OFCSTD parameter is difficult to activate and the change must be performed in each end office. Therefore, this table TOPSPARM parameter provides a convenient solution.
		If the above problem description occurs, increase the value. Start at the default value of 80 and increase the value in increments of 10 ms until the problem no longer occurs.
		Note: This parameter does not automatically appear in the table, it must be added.
PPCO_ DISCONNECT	Y or N	Pre-paid coin overtime disconnect. This parameter indicates whether to route a call to an operator when the caller does nothing after all the ACTS prompts and time-outs for overtime payment are finished. Enter N to route the call to an operator. Or, enter Y to disconnect the call.
		The default value is N.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
RONI_TAKE_ DOWN_DELAY	Y or N	Enter RONI_TAKE_DOWN_DELAY to indicate whether additional time is required to wait for a successful digits indication from centralized automatic message accounting (CAMA) offices.
		Enter Y if additional time is allocated. Enter N if no additional time is allocated to wait for the indication.
		The default is N. Activation is immediate.
RTRS_ADACC_ DAS_ANN_QUERY	Y or N	This parameter enables/disables the ADACC surcharge query sent to the external real-time rating system. The values are as follows:
		• Y - Perform the ADACC surcharge query. Use this value when ADAC calls can have different surcharges. This value is the default.
		• N - Disable the ADACC surcharge query. This value should only be used if all of the following conditions are met:
		— All ADACC calls have the same surcharge.
		— The DAS has a pre-recorded hardcoded announcement of the static surcharge or the charges are not announced.
RTRS_ADACC_ QUERY_FAIL_ ACTION	BLOCK, OPER, or FREE	This parameter indicates the error recovery action if a rate could not be obtained for the ADACC portion of a real-time rated call. This takes place from a coin or hotel phone. Following are the values:
		• BLOCK: The subscriber is given an announcement indicating technical difficulties and the call is terminated.
		• OPER: The subscriber is connected to an operator.
		• FREE: The subscriber is not charged for the ADACC service and the call progresses.
		The default is OPER.
RTRS_ DEFAULT_ COMPANY_ CODE	000000 to 999999	This parameter provides the default company code for calls requiring real-time rating which do not have an associated company code in table COMPCODE per their origination status (trunk, NPA-NXX). The range is 000000 to 999999. The default is 000000.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
RTRS_ DEFAULT_ SYSTEM	INTERNAL or EXTERNAL	This parameter determines the real-time rating system (INTERNAL or EXTERNAL) for calls requiring real-time rating which do not have an entry in table COMPCODE per their origination status (trunk, NPA-NXX), A value of INTERNAL selects the older table driven real-time rating system is used in determining the call's rate(s). A value of EXTERNAL selects the external real-time rating system (the RTRS) to query the call's rate(s). The default is INTERNAL.
RTRS_FIRST_ MTS_COIN_ QRYFL_ACTION	BLOCK, OPER, or FREE	This parameter indicates the error recovery action if a rate could not be obtained from the RTRS for the first period of a coin call (pre or post pay overtime) if at ACTS. Following are the values: • BLOCK: The subscriber is given an announcement indicating technical difficulties and the call is terminated. • OPER: The subscriber is connected to an operator. • FREE: The subscriber is not charged for the first coin time period and the call progresses. The default is OPER.
RTRS_SUBSE_ MTS_COIN_ QRYFL_ACTION	OPER or FREE	This parameter indicates the error recovery action if a rate could not be obtained from the RTRS for a non-initial period of a coin call (pre or post pay overtime) if at ACTS. • OPER: The subscriber is connected to an operator. • FREE: The subscriber is not charged for the coin time period and the call progresses. The default is OPER.
RTRS_TIMEOUT	0 to 600	This parameter indicates the time in seconds when a query to the RTRS is considered timed-out. The range is 0 to 600 (seconds). The default is 1.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
RTRS_VERSION	VERSION_1 or VERSION_2	This parameter indicates the external rater protocol version. The values are:
		• VERSION_1 - This version is the original release (TOPS04) of this functionality. This is the default value.
		• VERSION_2 - This version is the current release (TOPS09) and beyond of this functionality.
		For more information, refer to functionality External RTRS Interface, ENSV0009
SA_ QUEUEING_ BY_REQUEST_ AGE	Y or N	Enter SA_QUEUEING_BY_REQUEST_AGE to allow old SA/IC (service assistant/in-charge) requests to be dequeued on the basis of the time spent waiting in the queue to be serviced by the next available team. This allows an SA/IC request that has been waiting the longest in the queue to be connected to the most recently released SA/IC team, as long as the service is compatible.
		Enter Y to allow old SA/IC requests to be dequeued on the basis of the time spent waiting in the queue to be serviced by the next available team.
		Enter N if the enqueued request is only serviced by the team on which it was enqueued.
		The default is N. Activation is immediate.
SEND_SECONDS_ TO_HOBIC	Y or N	This parameter enables sending of minutes and seconds to the HOBIC device for display. This parameter applies only to the external real-time rater, not the internal rater. The values are as follows:
		• Y - Send minutes and seconds.
		• N - Send only minutes. This value is the default, the process before this functionality. Since down stream processors must be ready to use the seconds based information, use value N during preparation.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
SPECIAL_ HANDLING_ COLLECT	Y or N	This parameter activates the global functionality Special Handling for Collect Calls, GOS00101, and specifies a new route for collect calls when this feature is active. The values are Y (activate this feature) and N (disable this feature). For Y only, enter a valid XLASYS and XLANAME to index table PXCODE.
		This parameter is valid only in a global environment, not in North America.
SPLIT_CLG_FOR_ COLLECT	Y or N	This parameter indicates if the calling party should be split on collect calls when the called number is outpulsed. The values are Y (split) and N (do not split). This parameter is created by the global functionality Special Handling for Collect Calls, GOS00101.
		This parameter is valid only in a global environment, not in North America.
TBI_AUTO_ SPLIT	Y or N	Manual Toll Break-In (MTBI) automatic split. The values are as follows:
		• Y - The calling party (who is requesting the break-in) is automatically split from the call when the operator attempts MTBI via the Trunk Offer Start (TOS) function. When MTBI ends, the operator uses the Trunk Offer End (TOE) function. This causes the system to restore the calling party's voice path back to either split or joined as prior to the TOS function.
		• N - TOS does not autmatically split the calling party's voice path out of the call. The operator must use the split/join function.
		This parameter appears in global loads only.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
TMT_FOR_INTC_ FAILURES	Y or N	This parameter indicates handling of the following types of intercept failures: • failure to get an ARU • failure of the DAS to find a listing • timeout of the DAS to find a listing • failure of a facility during playback • a wake up message received during playback • split referral The values for this parameter are as follows: • Y - Send intercept failures to Emergency Route 6 (EMR6) in an Operator Centralization (OC) configuration. This value enables this feature. • N - Send intercept failures to the queue management system (QMS) refinement tables. This value is the default and disables this feature.
TOPS06_DEVICE_ ENHANCEMENTS	Y or N	This parameter enables additional information in the output reports for TOPS TTY devices for the commands listed below. Enter Y to enable or N to disable the new information. Value Y is the default. Following are the commands, devices, and new information: • RA/EA (assign a study register) - Used on TADS, SADS, SADSHADS, and QTADS devices. The response, when successful, now indicates how many study registers are in use by the team and how many are available for assignment. • RQ/EN (query study register assignments) - Used on TADS and QTADS devices. The response now indicates how many study registers are available for assignment. This parameter is non-optional, that is, it is valid regardless of the SOC state of functionality QMS Customer Service Enhancements, ADVQ0006. Also, this parameter is applicable in the TOPSACD and QMS environments. For more information about these commands, refer to the applicable (TOPS MP, MPX, or IWS) Force Management Guide.

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
TOPS11_ DEVICE_ ENHANCEMENTS	Y or N	This parameter controls appearance of the calling number in TOPS devices. The values are as follows: • N - The devices output the same as before this TOPS11 parameter. The calling number usually does not appear, but can appear in some cases such as a collect call billed to a hotel, or a charge adjustment not associated with an AQ or DUAQ device in table TOPSDEV or HOBICDEV. This parameter value is the default. • Y - The calling number appears in the billing records output by TOPS autoquote (AQ), voice quote (VQ), dial-up autoquote (DUAQ0, and record devices. Also, the calling number appears in charge adjust records generated on the hotel administration data system (HADS), VQ, or record devices. Charge adjust records appear when the operator makes a charge adjustment. This parameter is not optional and appears in all loads, North American and global. Refer to functionality TOPS Call Processing Features (Billing), OSB00001, under feature 50095068, in the Translations Guide for more information.
TOPS_RLT_REL_ VIA_CCTO	Y or N	This parameter provides support of release link trunking (RLT) in the end offiice. This parameter indicates the Serivce Activation Parameter (SAP) feature value sent to the DMS-100 end office if field RLT In table ISUPTRK Is set to RLT_REL 1. The values are:. • N - Send the SAP feature indicator value of RLT_REQUEST_MSG. This value is supported in NA0015 and up. • Y - Send the SAP feature indicator of CCTO_ALL_ISUP or CCTO_NOT_ALL_ISUP (as applicable). This value (Y) is the default. This value represents the behavior prior to this parameter. This value must be used if any DMS-100 end office connected to the TOPS office is below NA0015 and using RLT_REL.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
TWO_AMA_REC_ FOR_SERVED_ 0MINUS_EA	Y or N	This parameter applies to 0- call originations that turn out to be EA calls destined for carriers that are SERVed by the Operating Company. The term SERVed means table TOPEACAR, field OPSERV, subfield OPSERVSEL= SERV. For these calls, this parameter enables generation of two AMA records that are identical except as follows:
		• One record has a call code 190 and the other record has call code 192. For the record with the call code 192, if the operator enters a carrier ID but no called number and makes no attempt to outpulse (that is, cancels calls and releases position), then a call code 196 replaces 192.
		• The call code 190 record does not have a call completion module, Module Code 051, nor a Module Code 316. In addition, Module Codes 314, 315, 184, 186, and 187 are not included on the call code 190 record. These modules are only included on the call code 192, if applicable to the call.
		The values of this parameter are as follows:
		• Y - Enable generation of the two AMA records as described above. This feature only applies to 0- dialed calls. 00-, 10XXX0-, and 10XXX00- calls routed to the TOPS system do not generate the access record.
		• N - Generate one AMA record (Structure Code 752 with call code 192) with a call completion module (module code 51) indicating that completion service was provided for the call. In addition, module code 53 is also included to identify the carrier associated with the call.
		If Origination Line Number Screening (OLNS) is in use, then Structure Code 772 is generated instead of Structure Code 752.

TOPSPARM (continued)

Field descriptions

Field PARMNAME	Field PARMVAL	Explanation and action
ZENITH_EA_ ROUTING	Y or N	Enter ZENITH_EA_ROUTING to specify whether Zenith calls are to use TOPS equal access (EA) translations.
		Enter Y if calls receive local access and transport area (LATA) screening and are routed through equal access (EA) translations. Enter N if no LATA screening is performed and calls use standard non-EA translations.
		The default is N. Activation is immediate.
ZENITH_TEN_ DIGIT_DIALLING	Y or N	Enter ZENITH_TEN_DIGIT_DIALING to allow individual offices to select seven- or ten-digit Zenith numbers.
		Enter Y if the Zenith number remains ten digits. Enter N if the area code is stripped from Zenith numbers that have the same area code as the TOPS operator position.
		The default is N. Activation is immediate.

Datafill example

The following example shows sample datafill for table TOPSPARM.

TOPSPARM (continued)

MAP display example for table TOPSPARM

```
PARMNAME                              PARMVAL
_____

AABS_OPTIMIZATION                        OFF
ACCOUNT_CODE_BILLING_ENABLE               Y
ACTS_DOLLAR_COINTEST                      Y
ADAS_BARGE_IN                             Y
ADAS_CASSETTE_ICON                       Y
ADAS_ENABLE                              Y
ADAS_INWARDS_ENABLE                      Y
ADAS_OPR_PROFILE_ICON                    Y
ADASPLUS_ARU_WINK                        Y  5
ADASPLUS_CALLER_JOINED_TONE              REGDACA
ADASPLUS_ENABLE                           Y
ADASPLUS_POST_DEFLECT                    N
ADAS_RINGING_DURING_PLAYBACK             Y
ADAS_WITH_PARS_ENABLE                    Y
ALERT_TONE_TIME                          25
ALL_CALLS_USE_OPR_SVC_AGRMTS              Y
APS_DISPLAY_DOLLAR_SIGN                   Y
ARAN_STATUS                              BOTH
AUTO_MDS_QMS_CQPROF                      Y 16
AUTO_OUTPULSE_UPON_CCV_SUCCESS           Y
BRAND_USING_DEFAULT_SPID                 Y
CC_CARRIER_SELECT_DEFAULT                ALLOW
CC_CARRIER_SELECT_ENABLE                 Y
CCV_ACCS_15TH_DIGIT_TIMER                5
CDIR_CARRIER_SELECT_DEFAULT              ALLOW
CDIR_DEDICATED_DN                        Y  6193200000
CDIR_RATING                              Y
CHECK_BILL_AGRMT_USING_BSP_SPID           Y
CHG_DISPLAY_DECIMAL                      2
CLD_DNSCRN_ENABLED                       Y
COIN_PAY_SEQUENCE                        POSTPAY
CZECH_OFFICE                             N
DACC_CIC_OVERRIDE_ENABLE                  Y
DACC_OVERRIDE_CIC                         Y 1234
DANI_DISPLAY_CLG_NUM                     Y
```

TOPSPARM (continued)

MAP display example for table TOPSPARM (continued)

```
PARMNAME                            PARMVAL
_____

DEFAULT_LOCLZONE                      Y
DEFAULT_PRODUCT                       NA100
DEFAULT_SPID                          Y  12AB
DELAY_SPECIFIED_SNPA                  919
DEVICE_OUTPUT_CR                      Y
DISPLAY_CALLED_NUMBER                 NONE
DISTINCT_NUM_CALL_ARRIVAL_TONES       Y
DOM_CCARD_FORMAT_CHECKS               Y
FIXED_DURATION                        ALL
FIXED_DURATION_APS                    Y
FORWARD_ANI_AS_CLI                    N
FOUR_DIGIT_CIC_STATUS                 FOURDIG
GCACALL_DEFAULT                       Y
GCA_PHASE                             PHASE_2
GEN_DNSCRN_INVALID_CIC_LOG            Y
GEN_NO_BILL_AGRMT_LOG                  N
IN_INTERWORKING_RESPONSE_TIMER         Y
IPPOS_AUTIT_INTERVAL                   5
IPPOS_AUDIT_THRESHOLD                  3
LANG_ERROR_SCREEN_DISPLAY             LANG
LNP_QUERY_FOR_AMA_ONLY                CLG
LNP_TIMEOUT                           2
MF_TRUNK_WINK_REQUEST_DELAY           28
MP_DISPLAY_POSSIBLE_AUTOMATION        Y
MULTI_NPA_INWARD_XLA                  Y
MULTI_NPA_NO_AMA_XLA                  Y
NOTIFY_RECALL_OPTIONS                 Y Y Y N
NSC_800PLUS_QUERY_AT_ POSITION        Y
NUMBERING_PLAN                        N_AMERICAN
OCIPDL_AUDIT_THRESHOLD                 3
OC_PMIST__FORMAT                      FULL
OFFER_LOCAL_DACC                       ALL
OFFER_LOCAL_STDCC                      ALL
OLNS_EAANI_ADD_BILLSRV                Y
OLNS_EAANI_DACC                       Y
OLNS_ILP_DACC                         Y
OLNS_RESTRICTED_DACC                  Y
OLNS_TIMEOUT                          2
```

TOPSPARM (continued)

MAP display example for table TOPSPARM (continued)

```
PARMNAME                                    PARMVAL
_____

OPP_ALWAYS_SEND_SPID_INFO                   Y
OPP_PMIST_FORMAT                            FULL
PPCO_DISCONNECT                             Y
OPR_COMPROMISED_CALL_OVERRIDE               Y
OPR_SPECIFIED_SNPA                           619
OPR_SVC_AGRMTS                  Y OPRCCVGRP OPRBNSGRP OPER
OSNC_OUTGOING_DEFAULT                        Y
OVERRIDE_ANIFSPL_HANDLING                   Y
PARS_PMIST_FORMAT                           OFF
POSITION_SANITY_TIMER                       Y 6
POST_WINK_PRE_OFFHOOK_DELAY                 80
RONI_TAKE_DOWN_DELAY                        Y
RTRS_ADACC_DAS_ANN_QUERY                     Y
RTRS_ADACC_QUERY_FAIL_ACTION                BLOCK
RTRS_DEFAULT_COMPANY_CODE                   121543
RTRS_DEFAULT_SYSTEM                         INTERNAL
RTRS_FIRST_MTS_COIN_QRYFL_ACTION            OPER
RTRS_SUBSE_MTS_COIN_QRYFL_ACTION            OPER
RTRS_TIMEOUT                                1
RTRS_VERSION                                VERSION_1
SA_QUEUEING_BY_REQUEST_AGE                  Y
SEND_SECONDS_TO_HOBIC                        Y
SPECIAL_HANDLING_COLLECT                     Y PX ADDCOLDIG
SPLIT_CLG_FOR_COLLECT                        Y
TBI_AUTO_SPLIT                              Y
TMT_FOR_INTC_FAILURES                        Y
TOPS06_DEVICE_ENHANCEMENTS                  Y
TOPS11_DEVICE_ENHANCEMENTS                  Y
TOPS_RLT_REL_VIA_CCTO                        N
TWO_AMA_REC_FOR_SERVED_0MINUS_EA            Y
ZENITH_EA_ROUTING                           Y
ZENITH_TEN_DIGIT_DIALLING                   Y
```

TOPSPARM (continued)

Error messages

The following error messages apply to table TOPSPARM.

Error messages for table TOPSPARM

Error message	Explanation and action
Auto muted notify does not apply unless muted notify is set.	Muted notify recalls must be allowed for automatic muted notify recalls to be permitted. If an attempt is made to change the value of AUTO_NFY_RECALL to Y when MUTED_NFY_RECALL is N, then the change is not allowed.
Parameter NOTIFY_RECALL_OPTIONS only applies when the office numbering plan is open numbering.	Parameter NOTIFY_RECALL_OPTIONS only applies to open numbering offices. If a craftsperson attempts to change parameter NOTIFY_RECALL_OPTIONS in a North American office, the change is allowed and the warning message is displayed.

Table history

TOPS15

The changes are as follows:

- IPPOS_AUDIT_INTERVAL and IPPOS_AUDIT_THRESHOLD are added by feature 59006653 in functionality OPP Over IP, OSB00101.

- OCIP_DEFAULT_CODEC is deleted by feature 59022288 in functionality OPP Over IP, OSB00101.

- APS_DISPLAY_DOLLAR_SIGN is added by feature 59022816 in functionality GOS APS Log Enhancements, GOS00101.

- TOPS_RLT_REL_VIA_CCTO is added by 50332563 in support of DMS-100 end office feature 59026484.

- OCIPDL_AUDIT_THRESHOLD is added.

TOPS14

The changes are as follows:

- SPECIAL_HANDLING_COLLECT and SPLIT_CLG_FOR_COLLECT are added by feature 59020491 functionality Special Handling for Collect Calls, GOS00101.

- TMT_FOR_INTC_FAILURES is added by feature 59021348 in functionality Treatment for Intercept Failures, OSB00101.

TOPSPARM (continued)

- DACC_CIC_OVERRIDE_ENABLE and DACC_OVERRIDE_CIC are added by feature 59021116 in functionality DACC Enhancements I, OSDA0102.

- RTRS_ADACC_DAS_AN_QUERY is added by feature 59020353 in functionality External RTRS Interface, ENSV0009.

- OSNC_OUTGOING_DEFAULT is added by feature 59019041 in functionality OSNC Enhancements, OSEA0013.

- OFFER_LOCAL_DACC, OFFER_LOCAL_STDCC, and DEFAULT_LOCLZONE are added by feature 59015886 in functionality GOS Local Determination, GOS00001.

TOPS13

The changes are as follows:

- OCIP_DEFAULT_CODEC is added by feature 59012723 in functionality TOPS IP OC Infrastructure, ENSV0107.

- TWO_AMA_REC_FOR_SERVED_0MINUS_EA is added by feature 59013695 in functionality Billing Enhancements for EA Calls, OSB00001.

- The following parameters are added by feature 59011929 in functionality Screening for Billing Agreement, UNBN0007.

    — ALL _CALLS_USE_OPR_SVC_AGRMTS

    — OPR_SVC_AGRMTS

    — CHECK_BILL_AGRMT_USING_BSP_SPID

    — GEN_NO_BILL_AGRMT_LOG

- The following parameters are deleted by feature 59012553, in functionality Code Removal of TOPS IV, OSB00001.

    — ARAN_AUTH_DISPLAY

    — BLOCK_SP_PO_PB_CHARS

    — INSTITUTION_DISPLAY

    — LANG_DIGIT_INTERPRETATION

    — NON_PAYMENT_SCREEN_DISPLAY

    — QCD_SCREEN_DISPLAY

    — QCQ_SCREEN_DISPLAY

    — QCT_25_PCT_SCREEN_DISPLAY

    — QCW_SCREEN_DISPLAY

    — QUERY_FAIL_SCREEN_DISPLAY

    — SERV_DENIAL_SCREEN_DISPLAY

    — SERV_RESTRICTION_SCREEN_DISPLAY

    — SP_GEN_AMA_DISPLAY

    — SPLIT_CLG_LOOP1_DISPLAY

    — SPLIT_CLG_LOOP2_DISPLAY

    — THRESHOLD_EXCDED_SCREEN_DISPLAY

TOPS12

The following parameters are added

TOPSPARM (continued)

- SEND_SECONDS_TO_HOBIC by feature 59006873 in functionality Seconds Based Announcements, OSB00001.

- OVERRIDE_ANIFSPL_HANDLING by feature 59006832, in functionality UNBN Call Restrictions for Wholesaling, UNBN0006.

- IN_INTERWORKING_RESPONSE_TIMER by feature AF7805 in functionality IN Operator Backup, ENSV0023.

- ADASPLUS_POST_DEFLECT by feature 59011217 in functionality ADAS Plus Call Deflection, OSB00001.

TOPS11

The following parameters are added or changed:

- GCACALL_DEFAULT, GCA_PHASE, and GEN_DNSCRN_INVALID_CIC_LOG by feature AF7576 in functionality Global Competitive Access II, GOS00007.

- NSC_800PLUS_QUERY_AT_POSITION by feature AF7864 in functionality 800+ Interworking with LNP, OSB00001.

- TOPS11_DEVICE_ENHANCEMENTS by SR 50095068.

- POST_WINK_PRE_OFFHOOK_DELAY has a new instruction to add 10 ms increments according to a PRS. This change applies to TOPS09 and up.

TOPS10

The following parameters are added by feature AF7498 in functionality TOPS BC/STS/SNPA, OSB00001.

- DELAY_SPECIFIED_SNPA

- OPR_SPECIFIED_SNPA

TOPS09

The following parameters are added:

- ADAS_BARGE_IN is added by feature AF7135 in functionality ADAS Base Barge-In, ALPP0001.

- FIXED_DURATION_APS is added by feature AF7161 in functionality Attendant Pay Station, OSB00001.

  Note, during early development of TOPS09, parameter APS_CALL_RECORD_FORMAT was added and existing parameter FIXED_DURATION had new value APS. These changes were reported in

documentation. Later, these changes were replaced with new parameter FIXED_DURATION_APS.

- RTRS_VERSION is added by feature AF7163 in functionality External RTRS Interface, ENSV0009.

TOPS08.1

The following parameters are added:

- CCARD_SALES_REPORT_ACTIVE is added by feature AF6957 in functionality TOPS Commercial Credit Card, ABS00008.

- CC_CARRIER_SELECT_DEFAULT is added by feature AF7021 in functionality Carrier Selection, ENSV0001.

- CC_CARRIER_SELECT_ENABLE is added by feature AF7021 in functionality Carrier Selection, ENSV0001.

- CDIR_CARRIER_SELECT_DEFAULT is added by feature AF7021 in functionality Carrier Selection, ENSV0001.

- DOM_CCARD_FORMAT_CHECKS is added by SR 50058693 in functionality TOPS Call Processing Features (Call Processing), OSB00001.

- CDIR_RATING is added by sr 50058691 in functionality Auto Country Direct, ENSV0010.

TOPS08

Parameter OLNS_RESTRICTED_DACC is added by feature AN1565 in functionality TOPS OLNS Interface, ABS00012.

TOPS07

The following parameters are added or changed:

- LNP_TIMEOUT and LNP_QUERY_FOR_AMA_ONLY are added by feature AF6553 in functionality TOPS LNP, OSEA0008.

- OC_PMIST__FORMAT and PARS_PMIST_FORMAT are added by feature AN1856 in functionality TOPS Robustness, OSB00001.

- DEFAULT_PRODUCT is added by feature AF6428 in functionality Interface Signaling, OSB00001.

- CLD_DNSCRN_ENABLED is added by feature AF6712 in functionality GOS Miscellaneous Enhancements, GOS00001.

- BRAND_USING_DEFAULT_SPID, DEFAULT_SPID, and OPP_ALWAYS_SEND_SPID_INFO are added by feature AF6711 in functionality Branding via SPID, ENSV0017.

TOPSPARM (continued)

- The requirements in ADASPLUS_ENABLE are changed by feature AF6711 in functionality Branding via SPID, ENSV0017.

- The following parameters were added by a patch in release TOPS07 and then deleted in TOPS09 since they are moved to tables OAFUNDEF and OANODINV. These parameters never appeared in this document since their presence was discovered too late. However, details are provided in the *Translations Guide* under functionality OSSAIN 07 Enhancements, OSAN0003.

  — OAIN_AUDIT_FREQUENCY—moved in TOPS09 to table OANODINV field AUDFREQ for all ONPMTYPEs

  — OAIN_AUDIT_NUMBER_OF_TRIES—moved in TOPS09 to table OANODINV field AUDTRIES

  — OAIN_AUDIT_TIMER—moved in TOPS09 to table OANODINV field AUDTIMR

  — OAIN_SESSION_BEGIN_TIMER—moved in TOPS09 to table OAFUNDEF field SBTIMOUT

TOPS06

The following parameters are added:

- DISPLAY_CALLED_NUMBER and AUTO_OUTPULSE_UPON_CCV_SUCCESS by functionality Operator Services, ENSV0014.

- OLNS_EAANI_DACC, OLNS_EAANI_ADD_BILLSRV, and OLNS_TIMEOUT by functionality TOPS OLNS Interface, ABS00012.

- TOPS06_DEVICE_ENHANCEMENTS by functionality QMS Customer Service Enhancements, ADVQ0006.

- OLNS_ILP_DACC by feature AN1842 in functionality OLNS IntraLATA Presubscription, OSEA00006.

- ARAN_AUTH_DISPLAY, ARAN_STATUS, and INSTITUTION_DISPLAY by feature AN0819 in functionality Automated Room and Authorization Number, ABS00009. These parameters were proprietary in TOPS03, but are now generally available.

- SERV_DENIAL_SCREEN_DISPLAY, NON_PAYMENT_SCREEN_DISPLAY, THRESHOLD_EXCEEDED_SCREEN_DISPLAY, and SERV_RESTRICTION_SCREEN_DISPLAY by feature AN0820 in functionality Calling Card Denial Reasons, ABS00010. These parameters were proprietary in TOPS03, but are now generally available.

TOPSPARM (continued)

- ACTS_DOLLAR_COINTEST per functionality Automatic Coin Toll Service, ENSV00002

- BLOCK_SP_PO_PB_CHARS per PRS BY10279.

NA005

The following parameters were added:

- FORWARD_ANI_AS_CLI and AABS_OPTIMIZATION per functionality GR317/GR394 ISUP to/from TOPS, OSEA0005

- CDIR_DEDICATED_DN per functionality Auto Country Direct, ENSV0010

- DEVICE_OUTPUT_CR per functionality TOPS IDDD 15 Digit Expansion, OSB00001

- POST_WINK_PRE_OFFHOOK_DELAY per PRS UT50372.

TOPS04

The following parameters were added:

- TBI_AUTO_SPLIT per feature AN0881 in Manual Toll Break-In, GOS00001.

- RTRS_DEFAULT_COMPANY_CODE, RTRS_DEFAULT_SYSTEM, RTRS_FIRST_MTS_COIN_QRYFL_ACTION, RTRS_SUBSE_MTS_COIN_QRYFL_ACTION, and RTRS_TIMEOUT per feature AN1505 in External RTRS Interface, ENSV0009.

TOPS03

The following information was added:

- PPCO_DISCONNECT per feature AN0408 in Pre-paid coin, ENSV0007.

- CCV_ACCS_15TH_DIGIT_TIMER per feature AN0409 in TOPS Commercial Credit Card, ABS00008.

- ADAS_RINGING_DURING_PLAYBACK per feature AN1027 in ADAS, OSDA0004.

- ADASPLUS_CALLER_JOINED_TONE and ADASPLUS_ENABLE per feature AN0880 in DA Automation I/F, OSDA0006.

- Proprietary Canada only parameters: ARAN_STATUS, INSTITUTION_DISPLAY, ARAN_AUTH_DISPLAY, SERV_DENIAL_SCREEN_DISPLAY, NON_PAYMENT_SCREEN_DISPLAY, THRESHOLD_EXCDED_SCREEN_DISPLAY, and SERV_RESTRICTION_SCREEN_DISPLAY.

TOPSPARM (end)

- CZECH_OFFICE per feature AN1084 in GOS Enhancements, GOS00001.

- NOTIFY_RECALL_OPTIONS per feature AN1085 in GOS Enhancements, GOS00001.

- ADASPLUS_ARU_WINK per feature AN0880 in DA Automation I/F, OSDA0006.

CSP02

Parameters FOUR_DIGIT_CIC_STATUS, QCD_SCREEN_DISPLAY, QCQ_SCREEN_DISPLAY, QCT_25_PCT_SCREEN_DISPLAY, QCW_SCREEN_DISPLAY were added to field PARMNAME.

BCS36

The following information was added:

- field PARMNAME was split into field PARMNAME and subfield PARM_KEY

- in the description of office parameter DISTINCT_NUM_CALL_ARRIVAL_TONES, two arrival calls can also indicate an ONI call arrival

- refinement PSTIMER_DURATION

- refinement SP_GEN_AMA_CUSTOM_VALUE

- refinement SPLT_CLG_LP1_CUSTOM_VALUE

- refinement SPLT_CLG_LP2_CUSTOM_VALUE

- parameter AUTO_MDS_QMS_CQPROF to field PARMNAME

- value for parameter AUTO_MDS_QMS_CQPROF to field PARMVAL

TOPSPOS

Table name

TOPS Position Table

Overview

Tables TOPSPOS and TOPSDEV specify the functions and characteristics of all Traffic Operator Position System (TOPS) positions and devices, including all teletypewriter terminals (TTY) and force management cathode ray tube (FMCRT) terminals. These tables contain information describing the location of the trunk circuits associated with the positions and devices.

Table TOPSPOS contains information relating to TOPS positions that require two trunk circuits for each position. These include in-charge positions, assistance positions, and regular operator positions.

Table TOPSDEV is used to capture information for TOPS devices that require only one trunk circuit. These include all TTYs and the FMCRT.

Functional description

Table TOPSPOS lists the TOPS positions that require two trunk circuits (one for data, one for voice) and identifies the trunk circuit locations. The traffic office to which the position belongs is also listed.

For analog trunk circuits, assignments are made to the same trunk card. Because nonconsecutive assignments cause the switch to allocate data store based on the largest selected circuit, assignments must be consecutive (for example, a circuit one, circuit two assignment allocates one quarter of the data store memory of a circuit one, circuit eight assignment). Voice is always the lower numbered circuit (voice = n, data = n + 1).

An eight-wire trunk module (TM8) used exclusively for TOPS positions can be fully utilized by assigning voice = even and data = odd.

For digital trunk circuits on digital trunk controllers (DTC), assignments must be consecutive with voice assigned to the lower numbered circuit (voice = n, data = n + 1). For best usage of circuits, voice = odd, data = even is recommended.

For digital trunk circuits on digital carrier modules (DCM), voice and data circuits must be assigned four circuits apart (voice = n, data = n + 4). For most efficient usage of circuits, voice assignments must be in the range of 1 to 4, 9

TOPSPOS (continued)

to 12, or 17 to 20. Data circuit assignments must be in the range 5 to 8, 13 to 16, or 21 to 24.

Note: For TOPS extended multi-purpose (MPX) positions, all virtual position controllers (VPCs) must be assigned TPCPOSNO = 0 in table TOPSPOS. Each VPC must also have a position number that is a multiple of four (for example, 0, 4, or 8) assigned using utility DEFPOS in the MPX.

The two type 1 MPX positions with directory assistance (DA) search links for each token ring must be assigned to different VPCs in order to provide better system reliability. They must not be assigned to the group of four positions associated with the same VPC in table TOPSPOS.

Datafill sequence and implications

The following tables must be datafilled before table TOPSPOS.

- TCPINV
- CLLI
- DCMINV
- LTCPSINV
- PADDATA
- TMINV
- TQSVPROF
- IPCOMID (IP based position only)
- IPSVCS (IP based position only)
- TRKOPTS (IP based position only)

Table size

0 to 1023 tuples

The size of table TOPSPOS is specified in field TRKGRSIZ of table CLLI for the two fixed common language location identification (CLLI) codes, TOPSPOS and TOPSPOSDATA. For each of the two fixed CLLI codes, the value in field TRKGRSIZ of table CLLI must be identical.

Warning: The maximum size of table TOPSPOS is 1023 tuples. If table CLLI field TRKGRSIZ is set higher than 1023 for either CLLI (TOPSPOS or TOPSPOSDATA), then attempts to add tuples to table TOPSPOS are not allowed and an error message is displayed (as of LET004). Since tuples cannot be changed, all tuples must be deleted and re-added as described below. For

TOPSPOS (continued)

releases prior to LET004, this causes an outage due to the cold restart requirement as given below.

Following are the procedures for increasing and deallocating memory:

Increase prior to TOP04: A restart is required.

1. Delete all tuples in table TOPSPOS.

2. Increase the value of field TRKGRSIZ in table CLLI for both TOPSPOS and TOPSPOSDATA CLLIs.

3. Perform a cold/reload restart.

4. Re-add the tuples to table TOPSPOS.

Increase for TOP04 and up: The restart requirement for increasing size is eliminated in TOPS04:

1. Increase the value of TRKGRSIZ in table CLLI for both TOPSPOS and TOPSPOSDATA CLLIs.

2. Add the new tuples in Table TOPSPOS. No restart is required.

Deallocate: Deallocation of memory is not changed, all tuples must still be deleted:

1. Delete all tuples in table TOPSPOS

2. Change the value of field TRKGRSIZ in table CLLI for both TOPSPOS and TOPSPOSDATA CLLIs to value 0.

3. Change the value of field TRKGRSIZ in table CLLI for both TOPSPOS and TOPSPOSDATA CLLIs to the new desired size.

4. Add or re-add desired tuples to table TOPSPOS. No restart is required.

TOPSPOS (continued)

Datafill

The following table lists datafill for table TOPSPOS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
POSNO		numeric (0 to 9999)	Position number. Enter the position number assigned to the TOPS position. There is no requirement to datafill position numbers in any specific order.
			Entry values outside this range are not valid.
VLPATH		see subfield	Voice link path. This field consists of subfield VLTYPE and refinements.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	VLTYPE	TDM or PKTV	Voice link type. The values are defined as follows:
			• TDM - Pre-IP voice and data connectivity that uses traditional time division multiplexed trunking facilities to transmit non-packetized voice and data. This value also applies to a system that routes IP traffic over a SONET backbone, for example, and thus may be using an underlying TDM technology even with IP. Datafill subfields PMTYPE, VOICE_PADGRP, and CARDCODE.
			• PKTV - Packetized IP voice. Enter this value for an IP position and datafill subfield VLCLLI.
	PMTYPE	DCM, DTC, LTC, TMS or TM8	Peripheral module type. This field applies only if VLTYPE = TDM. If the trunk is assigned to a digital carrier module (DCM), enter DCM and datafill refinements DCMNO, DCMCKTNO, and DCMCKTTS.
			If the trunk is assigned to a digital trunk controller (DTC), enter DTC and datafill refinements DTCNO, DTCCKTNO, and DTCCKTTS.
			If the trunk is assigned to a line trunk controller (LTC), enter LTC and datafill refinements LTCNO, LTCCKTNO, and LTCCKTTS.
			If the trunk is assigned to a TOPS message switch (TMS) module, enter TMS and datafill refinements TMSNO, TMSCKTNO, and TMSCKTTS.
			If the trunk is assigned to a trunk module, enter TM8 and datafill refinements TMNO and TMCKTNO.
			Entry values other than those listed are not valid.

TOPSPOS (continued)

PMTYPE = DCM (and VLTYPE = TDM)

If the value in subfield PMTYPE is DCM, datafill fields DCMNO, DCMCKTNO, and DCMCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	DCMNO	numeric (0 to 511)	Digital carrier module number. Enter the DCM number assigned to the trunk.
	DCMCKTNO	numeric (0 to 4)	Digital carrier module circuit number. Enter the DCM voice circuit card number assigned to the trunk.
	DCMCKTTS	numeric (1 to 24)	Digital carrier module circuit time slot. Enter the DCM circuit card North American first level multiplex digital signaling (DS-1) time slot number assigned to the trunk. Use circuits 1 to 4, 9 to 12, and 17 to 20 for voice.

PMTYPE = DTC (and VLTYPE = TDM)

If the value in subfield PMTYPE is DTC, datafill fields DTCNO, DTCCKTNO, and DTCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	DTCNO	numeric (0 to 511)	Digital trunk controller number. Enter the DTC number assigned to the trunk.
	DTCCKTNO	numeric (0 to 19)	Digital trunk controller circuit number. Enter the DTC voice circuit card number the trunk number is assigned.
	DTCCKTTS	numeric (1 to 24)	Digital trunk controller circuit time slot. Enter the DTC circuit card DS-1 signaling time slot number assigned to the trunk. The voice circuit is the lower numbered circuit (odd for voice; even for data).

PMTYPE = LTC (and VLTYPE = TDM)

If the value in subfield PMTYPE is LTC, datafill fields LTCNO, LTCCKTNO, and LTCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	LTCNO	numeric (0 to 511)	Line trunk controller number. Enter the LTC number assigned to the trunk.
	LTCCKTNO	numeric (0 to 19)	Line trunk controller circuit number. Enter the LTC voice circuit card number assigned to the trunk.
	LTCCKTTS	numeric (1 to 24)	Peripheral module circuit time slot. Enter the LTC circuit card DS-1 signaling time slot number assigned to the trunk.

PMTYPE = TMS (and VLTYPE = TDM)

If the value in subfield PMTYPE is TMS, datafill fields TMSNO, TMSCKTNO, and TMSCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TMSNO	numeric (0 to 255)	TMS number. Enter number of the TMS on which the voice circuit resides.
	TMSCKTNO	numeric (0 to 19)	TMS circuit number. Enter the peripheral side (P-side) number of the voice circuit.
			On TMS, voice circuits can only be assigned to circuit numbers 0 to 5. The higher TMS circuit numbers are reserved for D-channel handler (DCH) and inter-DCH links.
			Entry values outside this range are not valid.
	TMSCKTTS	numeric (1 to 31)	TMS circuit time slot. For the North American first level multiplex digital signaling (DS-1) carrier type, enter a time slot number within the range 1 to 24.
			For the pulse code modulation (PCM30) carrier type, enter a time slot number within the range 1 to 15 or 17 to 31.

TOPSPOS (continued)

PMTYPE = TM8 (and VLTYPE = TDM)

If the value in subfield PMTYPE is TM8, datafill fields TMNO and TMCKTNO as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TMNO	numeric (0 to 2047)	Trunk module number. Enter the number assigned to the trunk module on which the trunk is mounted.
	TMCKTNO	numeric (0 to 29)	Trunk module circuit number. Enter the trunk module circuit number assigned to the trunk, with voice being assigned the lower number. For best usage of circuits, use even numbered voice circuits.

All tuples

For tuples with VLTYPE = TDM, datafill fields VOICE_PADGRP, CARDCODE, DATAPATH, and POSAREA. For tuples with VLTYPE = PKTV, datafill fields VLCLLI, DATAPATH, and POSAREA.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	VOICE_ PADGRP	alphanumeric (1 to 5 characters)	Voice circuit pad group. This field only applies if VLTYPE = TDM. Enter the name of the pad group assigned to this device. The name of the pad group must be datafilled in table PADDATA.
	CARDCODE	DS1SIG or 2X72AA	Card code. This field only applies if VLTYPE = TDM. Enter the card code for the TOPS position circuit as follows:
			• If the value in field PMTYPE is DCM, enter DS1SIG (digital).
			• If the value in field PMTYPE is DTC, enter DS1SIG (digital).
			• If the value in field PMTYPE is DTCI, enter DS1SIG (digital).
			• If the value in field PMTYPE is LTC, enter DS1SIG (digital).
			• If the value in field PMTYPE is TMS, enter DS1SIG (digital).
			• If the value in field PMTYPE is TM8, enter 2X72AA (analog).
	VLCLLI	name from TRKOPTS	Voice link CLLI. This field only applies if VLTYPE = PKTV. Enter a voice link CLLI for the TOPS IP position. The CLLI must be defined in table TRKOPTS and defined in that table as DYNAMIC using the POS application.

TOPSPOS (continued)

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
DATAPATH		see subfields	Data path. This field, which consists of subfield DATATYPE and refinements, is used to indicate the path for data transmission to the TOPS terminal.
	DATATYPE	DMODEM, TMS, or IP	Data type. Enter one of the following: • DMODEM: If a digital modem is used to transport data to the terminal, enter DMODEM and datafill refinements POSTYPE, PROTOCOL, DATA_CIRCUIT, DATA_PADGRP, and XMISSION. • TMS: If the terminal is subtending a TOPS message switch (TMS), enter TMS and datafill refinement fields POSTYPE, PROTOCOL, TPCNO, and TPCPSNO. • IP: For a position that is IP based, enter IP and datafill subfields IPCOMID and URESOK..

TOPSPOS (continued)

DATATYPE = DMODEM

If the value in subfield DATATYPE is DMODEM datafill fields POSTYPE, PROTOCOL, DATA_CIRCUIT, DATA_PADGRP, and XMISSION as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	POSTYPE	MP or BP	Position type. Datafill this field, which defines the type of position at the specified position number, as follows:
			• Enter BP for a dedicated directory assistance/intercept terminal (The Dedicated DA Subtending TMS feature must be present in the office).
			• Enter MP for a TOPS multi-purpose position (MP) terminal.
	PROTOCOL	ASCII or OPP	Protocol. This field defines the format of the data messages sent between the DMS switch and the TOPS terminal. Datafill this field as follows:
			• Enter ASCII for the ASCII based protocol.
			• Enter OPP for the open position protocol (if feature package NTX0049, Open Position Protocol, is present in the load).
	DATA_ CIRCUIT	see subfield	Data circuit members. This field consists of subfield PMTYPE and refinements.
	PMTYPE	DCM, DTC, LTC or TM8	Peripheral module type. If the trunk is assigned to a digital carrier module (DCM), enter DCM and datafill refinements DCMNO, DCMCKTNO, and DCMCKTTS.
			If the trunk is assigned to a digital trunk controller (DTC), enter DTC and datafill refinements DTCNO, DTCCKTNO, and DTCCKTTS.
			If the trunk is assigned to a line trunk controller (LTC), enter LTC and datafill refinements LTCNO, LTCCKTNO, and LTCCKTTS.
			If the trunk is assigned to a trunk module, enter TM8 and datafill refinements TMNO and TMCKTNO.
			Entry values other than those listed are not valid.

TOPSPOS (continued)

PMTYPE = DCM (and DATATYPE = DMODEM)

If the value in subfield PMTYPE is DCM, datafill fields DCMNO, DCMCKTNO, and DCMCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	DCMNO	numeric (0 to 511)	Digital carrier module number. Enter the DCM number assigned to the trunk.
	DCMCKTNO	numeric (0 to 4)	Digital carrier module circuit number. Enter the DCM data circuit card number assigned to the trunk.
	DCMCKTTS	numeric (1 to 24)	Digital carrier module circuit time slot. Enter the DCM circuit card DS-1 signaling time slot number assigned to the trunk. For most efficient use of circuits, use circuits 5 to 8, 13 to 16, or 21 to 24 for data.

PMTYPE = DTC (and DATATYPE = DMODEM)

If the value in subfield PMTYPE is DTC, datafill fields DTCNO, DTCCKTNO, and DTCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	DTCNO	numeric (0 to 511)	Digital trunk controller number. Enter the DTC number assigned to the trunk.
	DTCCKTNO	numeric (0 to 19)	Digital trunk controller circuit number. Enter the DTC data circuit card number the trunk number is assigned. Use only odd circuit numbers for data.
	DTCCKTTS	numeric (1 to 24)	Digital trunk controller circuit time slot. Enter the DTC circuit card DS-1 signaling time slot number assigned to the trunk. Assignments must be consecutive, with data assigned the upper numbered circuit.

PMTYPE = LTC (and DATATYPE = DMODEM)

If the value in subfield PMTYPE is LTC, datafill fields LTCNO, LTCCKTNO, and LTCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	LTCNO	numeric (0 to 511)	Line trunk controller number. Enter the LTC number assigned to the trunk.
	LTCCKTNO	numeric (0 to 19)	Line trunk controller circuit number. Enter the LTC data circuit card number assigned to the trunk.
	LTCCKTTS	numeric (1 to 24)	Peripheral module circuit time slot. Enter the LTC circuit card DS-1 signaling time slot number assigned to the trunk.

PMTYPE = TM8 (and DATATYPE = DMODEM)

If the value in subfield PMTYPE is TM8, datafill fields TMNO and TMCKTNO as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TMNO	numeric (0 to 2047)	Trunk module number. Enter the number assigned to the trunk module on which the trunk is mounted.
	TMCKTNO	numeric (1 to 29)	Trunk module circuit number. Enter the trunk module circuit number assigned to the trunk. Assignments must be consecutive, with data circuits being the upper numbered circuit.

TOPSPOS (continued)

All PMTYPE values (and DATATYPE = DMODEM)

For all values of subfield PMTYPE, datafill fields DATA_PADGRP and XMISSION as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	DATA_ PADGRP	alphanumeric (1 to 5 characters)	Data circuit pad group. Enter the name of the pad group assigned to this device. The name of the pad group must be datafilled in table PADDATA.
	XMISSION	BELL108, BELL202, BELL212H, or BELL212L	Transmission type. This field defines the baud rate used for data communication over the digital modem. Datafill this field as follows:
			• Enter BELL108 to provide reception and/or transmission (rx/tx) at 300 bits per second (BPS).
			• Enter BELL202 to provide rx/tx at 300/1200 BPS.
			• Values BELL212L and BELL212H are reserved for future use.

DATATYPE = TMS

If the value in subfield DATATYPE is TMS, datafill fields POSTYPE, PROTOCOL, TPCNO, and TPCPOSNO as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	POSTYPE	MP or BP	Position type. This field defines the type of position at this position number. Datafill this field as described below:
			• Enter BP for a dedicated directory assistance/intercept terminal (the Dedicated DA Subtending TMS feature must be present in the office).
			• Enter MP for a multi-purpose terminal (TOPS MP).
			Note: The two type 1 MPX positions, with DA search links, per token ring must be assigned to different VPCs for reliability. They must not be assigned the same group of four positions associated with the same VPC for this table.
	PROTOCOL	ASCII or OPP	Protocol. This field defines the format of the data messages sent between the DMS switch and the TOPS terminal. Datafill this field as follows:
			• Enter ASCII for the ASCII based protocol.
			• Enter OPP for the open position protocol (if feature package NTX0049, Open Position Protocol, is present in the load).
	TPCNO	numeric (0 to 254)	TOPS position controller number. Enter the number of the TOPS position controller (TPC).
			Entry values outside this range are not valid.
			When functionality TOPS Increased Multiplexing (EWSS0005) is present and datafilling an MP (whether an operator position or a device) on a TPC, the MP and TPC must be connected to the same TMS. Otherwise, the entry is blocked and an error message is given.

TOPSPOS (continued)

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TPCPOSNO	numeric (0 to 95)	High speed line interface card number. Enter the number of the high speed line interface (HSLI) card to which the TOPS MP position is connected.
			If the value in field PROTOCOL is OPP, the maximum value allowed for this field is dependent upon the maximum cluster size, which is defined in field CLUSTRSZ in table TPCINV. Although the valid range of this field is 0 to 95, current engineering restrictions limit entries for this field to a maximum value of 20.
			If the value in field PROTOCOL is not OPP, entry values must be within the range 0 to 3.
			The two VPC data links for each group of four MPX positions must be assigned TPC position numbers 0 or 1 in field TPCPOSNO. The primary data link is assigned TPCPOSNO 0 and the secondary data link is assigned TPCPOSNO 1.
			In the MPX, utility DEFPOS assigns a position number that uniquely defines each position within the token ring. Primary VCP positions must be assigned a position number that is a multiple of four, such as 0, 4 or 8. Secondary VPC links are assigned the next sequential position number, such as 1, 5 or 9.
	TPCPOSNO (continued)		For MPX positions with duplicated data links, each group of four that has two data links must have these two data links assigned as TPCPOSNO 0 and TPCPOSNO 1. In TOPS translations, refer to TOPS MPX Guide in the OSI section for further details.
			When functionality TOPS Increased Multiplexing (EWSS0005) is present, the range for field TPCPOSNO is changed from 0-3 to 0-19. This means that for a TPC subtending a TMS, up to 20 operator positions can be datafilled. When doing a listing of the range at the MAP, it shows 0-95; however, only numbers in the range 0-19 are allowed. Without this functionality, the range is 0-3.

DATATYPE = IP

If the value in subfield DATATYPE is IP, datafill fields IPCOMID and URESOK as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	IPCOMID	0 to 1023	IP data link communications identifier. This field is an index into table IPCOMID.
	URESOK	N or Y	Unconnected Restricted Idle state is okay. This field indicates whether it is okay for the position to remain in the URES maintenance state indefinitely (rather than transitioning to SYSB) if an in-service request is not received from the position within 15 seconds. Enter Y to remain in the URES state or N to change to the SYSB state.

All tuples

For all tuples, datafill field POSAREA as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
POSAREA		see subfield	Position area. This field consists of subfield POS and refinements.
	POS	ASST, IC or OPR	Position type. This field specifies the TOPS position type. Datafill this field as follows: • IC: To specify an in-charge position, enter IC and datafill refinements TEAM and SVCSET. One position of this type is required for each team. • ASST: To specify an assistance position, enter ASST and datafill refinements TEAM and SVCSET. The ASST position type is similar to the IC position type, but has no query capabilities. There can be more than one ASST position in each team. • OPR: To specify a regular operator position, enter OPR and datafill refinements TEAM and SERVPROF.

TOPSPOS (continued)

POS = ASST or IC

If the value in subfield POS is ASST or IC, datafill fields TEAM and SVCSET as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TEAM	numeric (0 to 30)	Team. Enter the number of the team that the position belongs.
			Entry values outside this range are not valid.
	SVCSET	TASERV, DASERV, INTCSERV, or ALL	Call services set. Enter one of the following values to specify the services that can be provided by the operator position:
			• Enter TASERV to specify that this operator can handle toll and assist call types.
			• Enter DASERV to specify that the operator can handle directory assistance call types.
			• Enter INTCSERV to specify that the operator can handle intercept call types.
			• Enter ALL to specify that the operator can handle all call types.
			Entry values other than those listed are not valid.
			Note: The DASERV option can be used only if a position is a TOPS MP position and the DA software is present. Options DASERV and INTCSERV must not be datafilled simultaneously if both services are provided by separate vendors as datafilled in table SERVICES.

POS = OPR

If the value in field POS is OPR, datafill fields TEAM and SERVPROF as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TEAM	numeric (0 to 30)	Team. Enter the team for the position. Values outside of the range are invalid.
	SERVPROF	numeric (0 to 254)	Service profile number. Enter the service profile number for the position. The corresponding service profile is datafilled in table TQSVPROF. For TOPS MP positions with ASCII protocol, the service profile corresponding to the profile number cannot contain a service with a corresponding service number in table TQMSSERV greater than 15.
			Entry values other than those listed are not valid.

Datafill example

The following example shows sample datafill for table TOPSPOS.

TOPSPOS (continued)

MAP display example for table TOPSPOS

```
POSNO                            VLPATH
                                   DATAPATH
                                        POSAREA
_____

170      TDM   TM8  0 24    NPDGRP    2X72AA
         DMODEM SP ASCII TM8 8 19   NPDGRP BELL108
                              OPR 6 QMSCAM CORECAM 80

505      TDM   TMS  0 3 5   NPDGRP    DS1SIG
                            TMS MP OPP 116 2
                                        OPR 6 50

540      TDM   TMS  0 0 3   NPDGRP    DS1SIG
                            TMS MP ASCII 0 0
                            OPR 6 QMSCAM CORECAM 80

2000                        PKTV   POSCLLI1
                                    IP 4 N
                            OPR 6 QMSCAM CORECAM 50
```

Error messages

The following error messages apply to table TOPSPOS.

Error messages for table TOPSPOS

Error message	Explanation and action
THE POSITION NUMBER MUST BE IN THE RANGE (0-19).	When functionality TOPS Increased Multiplexing (EWSS0005) is present and an attempt is made to datafill an operator position number in field TPCPOSNO greater than 19.
THE POSITION NUMBER MUST BE IN THE RANGE (0-3).	When TOPS Increased Multiplexing (EWSS0005) is not present, and an attempt is made to datafill an operator position number in field TPCPOSNO greater than 3.
The MP and the TPC must be on the same TMS.	When TOPS Increased Multiplexing (EWSS0005) is present and an attempt is made to datafill an MP (whether an operator position or a device) on a TPC that is not connected to the TMS that the MP is connected.

Error messages for table TOPSPOS

Error message	Explanation and action
POSITION WITH IP DATATYPE MUST USE PKTV VLTYPE.	An attempt to add a tuple with a TDM voice link type and an IP data type will produce the following error message. The tuple addition is disallowed.
WARNING: PLACEHOLDER CLLI USED. THIS POSITION CANNOT SUPPORT DELAY CALLS OR NON-OC MONITORING.	This warning appears when a placeholder CLLI is datafilled. Placeholder CLLIs are CLLIs that have no table TRKGRP datafill. A placeholder CLLI is employed in a host when no voice links to positions are needed, since OC-IP Host Voice Bypass is in use. The tuple addition is allowed.
WARNING: NO TRUNK MEMBERS EXIST FOR THIS TRUNK GROUP. DATAFILL TABLE IPINV TO DEFINE TRUNK MEMBERS.	This warning appears when a voice link CLLI is datafilled and the CLLI has table TRKGRP datafill, but no actual members exist because no IPGW in table IPINV is datafilled with the CLLI name. The tuple addition is allowed.
TRUNK MUST BE ASSIGNED DYNAMIC POS OPTION IN TABLE TRKOPTS	This error message appears when attempting to add a CLLI which has table TRKGRP datafill but is not defined as a POS dynamic trunk in table TRKOPTS. The tuple addition is not allowed.

Supplementary information

This section contains additional information related to table TOPSPOS.

Adding, Deleting, and Modifying Positions

Each TOPS position requires a tuple in table TOPSPOS. To add an in-charge, assistance, or regular operator position, follow the procedure shown in the following example. If the tuple is entered using the no-prompt version of the ADD command, fields SVCSET and XFRSET must be terminated with a $. If the tuple is entered on a field-by-field basis, fields SVCSET and XFRSET can be terminated by either a $ or a carriage return.

To delete a position, delete the tuple that describes that position, as shown in the following example.

TOPSPOS (continued)

Do not use the CHANGE command to modify information about a position. The following steps must be performed to change information in table TOPSPOS:

- From the trunk test positions (TTP) level of the maintenance and administration position (MAP) command interpreter (CI), place the positions to be changed in the installation busy (INB) mode.

- Edit table TOPSPOS.

- Delete the tuples to be changed in table TOPSPOS.

- Re-add the changed tuples to table TOPSPOS.

- Quit from the table editor.

- From the TTP level of the MAP CI, busy (command BSY) and return to service (command RTS) each position deleted and re-added in table TOPSPOS.

Other comments

The following example shows the commands used at the MAP to change any information about general operator positions 100 and 101.

CI:

- MAPCI;MTC;TRKS;TTP

- POST G TOPSPOS 100

- BSY;BSY INB;HOLD

- POST G TOPSPOS 101

- BSY;BSY INB;HOLD

- TABLE TOPSPOS

- POS 100; DEL

- POS 101; DEL

- ADD 100 DCM 0 1 1 NPDGP DS1SIG OPR 1 TASERV $ GEN XFR1 XFR2 $ +

- NT4X71 DCM 0 1 2 NPDGP BELL108

- ADD 101 TM8 1 20 NPDGP 2X72AC IC 1 TASERV $ +

- NT4X71 TM8 1 21 NPDGP BELL108

- QUIT

- POST G TOPSPOS 100;BSY;RTS;HOLD

- POST G TOPSPOS 101;BSY;RTS;HOLD
- QUIT ALL

Table history

TOPS15

Field VLPATH is added with value PKTV for new configuration IP positions. Field DATATYPE has new value IP. OC-IP error messages are added. These changes are made by features 59006658 and 59022293 in functionality OPP Over IP, OSB00101.

TOPS13

Under field POSTYPE, value SP is removed for DATATYPE = DMODEM and TMS. This change is made by feature 59012553 in functionality Code Removal of TOPS IV, OSB00001.

TOPS12

Under the POSAREA, when POS = OPR, subfields ACDAREA, ACD, SVCSET, XFRSET, and CAMLOC are deleted. This change is made by feature 59006865 in functionality MD Code Removal and ReEngineering, OSB00001.

TOPS06

Added warning to `Table size' section about exceeding maximum limit.

TOPS04

Restart requirement removed for size increase per feature AN1456 in functionality TOPS Robustness, OSB00001.

TOPS03

Added feature AF3003 in TOPS Increased Multiplexing (EWSS0005) comments to fields TPCNO and TPCPOSNO and error messages: Range of TPCPOSNO is limited to 0-19, and MP and TPC must be on same TMS.

BCS35

Added OPP value to PROTOCOL field. Field TMSCKTTS changed. Field PMTYPE description and refinement information changed to remove incorrect indication that DTCI is a valid entry.

TOPSTOPT

Table name

Traffic Operator Position System Trunk Options Table

Functional description

Table TOPSTOPT is used to specify different options for Traffic Operator Position System (TOPS) trunks. The Automatic Call Distribution (ACD) field is used to specify the processing used on a trunk group basis. An entry of QMSCAM in field ACD is not permitted in BCS32. The ACD used is TOPSACD for trunks not datafilled in this table for BCS32.

Standard dump and restore applies after BCS32. This table can be left empty. If the table is empty, TOPSACD is used internally.

Fields SPIDPRC and TRKSPID interact as follows.

Control of SPID processing by fields SPIDPRC and TRKSPID

Field SPIDPRC	Field TRKSPID	Effect on calling AO SPID assignment
N	N	SPID processing is not performed, so no value is assigned to the calling AO SPID. This condition applies even if an attempt is made to assign one. An AO SPID assignment attempt can be made from an OLNS query, table DNSCRN, and so forth.
N	Y nnnn	SPID processing is not performed, so no value is assigned to the calling AO SPID. A default SPID value `nnnn' can be entered, but does not effect SPID assignment.
Y	N	SPID processing occurs, but the calling AO SPID has no value at this point. SPID assignment may occur later (for example, from an OLNS query, table DNSCRN, and so forth).
Y	Y nnnn	SPID processing occurs, and a default SPID value `nnnn' is assigned to calling AO SPID. This initial SPID value may be overridden later (for example, from an OLNS query, and so forth).

TOPSTOPT (continued)

The table below shows how field DISPSPID and the indicated parameter combinations determine the SPID display.

Field and parameter interactions for SPID display

Table TOPSTOPT field DISPSPID value	Table TOPSPARM parameter OPP_ALWAYS_SEND_SPID_INFO value	CSPID display sent to position?
N	N	no
Y	N	yes
N	Y	yes
Y	Y	yes

Datafill sequence and implications

The following tables must be datafilled before table TOPSTOPT.

- CLLI

- TRKGRP

- SPID

- WSALEOPT

- TRKOPTS (if field MAXCONNS is set to a non-zero value)

If the common language location identifier (CLLI) in table TOPSTOPT is an Integrated Business Networks (IBN) trunk, the CLLI is interlocked to the corresponding CLLI in table TRKGRP(IBN). An IBN trunk CLLI must be datafilled in table TRKGRP(IBN) prior to being datafilled in table TOPSTOPT.

Table size

0 to 8191 tuples

Actual table size is based on the entry TRKGRP in table DATASIZE.

Datafill

The following table lists datafill for table TOPSTOPT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	Group key. GRPKEY consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter a valid incoming or two-way trunk CLLI used for TOPS traffic. This entry must be datafilled in table CLLI and table TRKGRP.
			If the CLLI is an IBN trunk, it must be datafilled in table TRKGRP(IBN) before being datafilled in table TOPSTOPT.
ORGAREA		see subfield	Originating area. This field consists of subfield ORGCRIT_SEL.
	ORGCRIT_ SEL	Y or N	Originating criterion selector. If calls are to be CT4Q refined by the originating criteria (table CTQORIG and associated tables), enter Y and datafill refinement ORGCRIT. Otherwise, if there is no criterion, enter N and do not datafill ORGCRIT.
	ORGCRIT	name from TQORGNAM	.Originating criteria. This field is valid only if field ORGCRIT_SEL = Y. Enter a call originating location name from table TQORGNAM. This field segregates traffic on a trunk group basis according to the calling number and is used in table CT4QORIG.
DISPCLG		Y or N	Display calling number. Enter Y if the calling number is displayed at the TOPS terminal for use by the TOPS operator.
			The default value is N, calling number is not displayed.

TOPSTOPT (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ADASERV		NONE, ADAS, or ADASPLUS	Automated directory assistance service availability. ADAS service allowed for calls on trunk. The values are defined as follows: • NONE - Do not to use any ADAS system. • ADAS - Use the ADAS system in functionality ADAS, OSDA0004. • ADASPLUS - Use the ADAS system in functionality DA Automation I/F, OSDA0006. The default value is NONE.
ADASANS		NA, IMMEDIATE, or DELAYED	ADAS answer supervision. Controls when answer supervision is returned to the originating trunk. Entries are: • NA - Not applicable. Use when ADASERV is set to anything other than ADAS (i.e. NONE or ADASPLUS). When ADASERV=ADAS, ADASANS cannot be NA. • IMMEDIATE - Answer supervision is provided when the incoming trunk is initially connected to ADAS. • DELAYED - Answer supervision is not provided until the call arrives at the operator position. DELAYED can only be used for Intertoll or TOPS ONI trunks.
ANITOCLI		see subfield	Automatic Number Identification to Calling Line Identification. This field consists of subfield ANI2CLI.
	ANI2CLI	Y or N	Automatic Number Identification to Calling Line Identification. Enables conversion of ANI on an incoming trunk to CLI for an outgoing ISUP trunk. If set to N, ANI is not forwarded as CLI. If set to Y, ANI may be forwarded as CLI, depending on tables ISUPTRK and TOPSPARM. When set to Y, datafill subfield BLKCLI. CLI is forwarded if field ANITOCLI is set to Y in tables ISUPTRK and TOPSTOPT, and parameter FORWARD_ANI_AS_CLI is set to Y in table TOPSPARM.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	BLKCLI	Y or N	Block Calling Line Identifier. This subfield is present only if field ANITOCLI = Y. Set BLKCLI = Y to mark all calls incoming on the given trunk as `presentation restricted'; that is, mark the caller's ID (number) as blocked. Set to N to allow presentation of the CLI. When set to N, table TDBCLASS, field BLKCLI is searched before forwarding the CLI with presentation allowed.
OLNSQRY		NONE or ALL	Originating Line Number Screening Query. This field indicates which calls can launch a query on a given incoming trunk. The following are descriptions of the values: • NONE - No OLNS queries are made for incoming calls. • ALL - OLNS queries are made on all calls prior to arrival at the operator position except for intercept and inwards calls. For these two call types, OLNS queries are not made since the subscriber calling number is not signalled to the DMS switch. For the ALL case, if the call is ONI or ANI fail, the query is launched automatically when the calling number is entered by the operator at position. No more than one OLNS query is made for a call unless the calling number is changed as can be done for operator number identification (ONI) or ANI fail calls.
DCIBIDX		0 to 511	Disallowed card issuer blocking index. This field is an index into table DCICSET for blocking calling cards on a trunk group basis. The default value is 0, which means that the disallowed card issuer blocking functionality is not offered on this trunk group. This feld is used the two conditions as follow are true: • The DCIB SOC (ABS00014) is ON • This trunk is not eligible for OLNS; that is, field OLNSQRY = NONE.

TOPSTOPT (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
LNPCLGAM		Y or N	Local number portability calling number AMA. This field specifies whether to append a module 720 to the AMA record for calls that originate on the trunk group. The value Y indicates that the LRN of the calling number should be included in the AMA record. The default is N, indicating LNP information for AMA is not required. If a trunk is not datafilled in TOPSTOPT, then LNP information for AMA is not required.
			A value of N does not always prevent an LNP module for the calling number from being appended to the AMA record. For example, a module 720 is appended if a query is made for the purpose of routing to that calling number.
			Likewise, a value of Y does not always cause an LNP module for the calling number to be appended to the AMA record. For example, even when this value is Y, no module 720 is appended if an LRN is not datafilled against the incoming trunk group (table TRKGRP) and the parameter LNP_QUERY_FOR_AMA_ONLY does not include the value CLG (table TOPSPARM).
			This field is only available in North American TOPS switch loads and is specific to TOPS LNP. It is only referenced when TOPS LNP is active.
XLASCHEM		see subfield	Translations scheme. This field consists of subfield NEWXLA.
	NEWXLA	Y or N	New TOPS translations. This field enables this trunk group (field GRPKEY) for use by the new TOPS translations process. Enter Y (enable) or N (disable). For value Y, datafill refinement XLAGRP. The default is N.
	XLAGRP	name from table XLAGRP	Translations group. Datafill this field if field NEWXLA = Y. Enter a translations group name defined in table XLAGRP that contains this trunk group (field GRPKEY).

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
SPIDPRC		Y or N	Service provider identifier processing. This field enables SPID processing for this incoming trunk group. Enter Y (enable) or N (disable). For value N, the earlier method of translations applies for this trunk group. The default is Y. The value of this field does not stop entering a value in field TRKSPID. However, if SPIDPRC= N, the TRKSPID field is not used.
			Note, this field affects all SPID processing in the whole unbundling functionality group (UNBN0001).
			Note, the "Functional description" section describes the interaction of fields SPIDPRC and TRKSPID.
TRKSPID		Y or N	Trunk Service Provider Identifier. This field indicates whether a default SPID has been assigned for the given trunk group. If this field is set to N, there is no trunk-associated default SPID. If this field is set to Y, then datafill refinement SPID
			Note, the "Functional description" section describes the interaction of fields SPIDPRC and TRKSPID.
	SPID	4 characters	Trunk Service Provider Identifier. Datafill this field if TRKSPID = Y with the default SPID to be associated with this trunk group.
BILLSCRN		see subfield	Billing screening. This field consists of subfield BILLSCRN.
	BILLSCRN	Y or N	Billing screening. This field indicates whether screening methods apply to the trunk group. Wholesale screening is considered only if DN screening finds no restrictions for non-directory assistance call completion (non-DACC) calls. The values are as follows:
			• Y - Enable screening and enter datafill in subfields WSIDX, SCRNIDX, DACCSCRM, and ANIDSCR.
			• N - Disable screening. This value is the default.

TOPSTOPT (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	WSIDX	0-99	Wholesale index. This subfield is an index into table WSALEOPT.
	SCRNIDX	0-100	Screening index. This subfield is an index into table RESTBIL (TA call) or DARSTBIL (DA call). This subfield is used for trunk based screening when table WSALEOPT field INTRA or INTER contains TRK. Value 100 is nil.
	DACCSCR	Y or N	Directory Assistance Call Completion screening. This subfield indicates whether wholesale screening should apply to Directory Assistance Call Completion (DACC) calls. The values are Y yes) and N (no).
	ANIIDSCR	Y or N	Automatic number identification screening. This subfield determines whether calls should be screened based on the ANI ID. This screening is only considered if DN screening finds no restrictions for non-DACC calls and table WSALEOPT screening is attempted but there are no entries in applicable field INTER or INTRA. The values are as follows: • Y - Enable screening. The signaling type is determined from table TRKGRP field SIGTYPE to access applicable table BELLCAT, OSSCAT, or OPENANI field SCRNIDX (all tables). The applicable table provides an index into applicable table RESTBIL (TA call) or DARSTBIL (DA call). • N - Disable screening.

TOPSTOPT (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ANIFSPL		Y or N	ANI ID failure special. This subfield determines on a trunk group basis whether an ANI failure call should be displayed as ANI success to the operator. An ANI failure occurs if the call is marked as special and no calling number is found in table SPLDNID or DNSCRN. The values are as follows:
			• Y - An ANI failure is allowed to proceed through the system, no restrictions are marked against the call, and the call is displayed as ANI success. This value is valid only if table TOPSPARM parameter OVERRIDE_ANIFSPL_HANDLING = N, since this parameter has precedence over field ANIFSPL.
			• N - An ANI failure is displayed as ANI failure as prior to this feature. This value is the default.
			This behavior applies to calls marked as special by the ANI ID tables (OSSCAT, BELLCAT, and OPENANI) that arrive on STATCLAS = DNLOOKUP or RESTBIL trunk groups.
			When a call arrives with an ANI ID marked as special, the screening tables are used to identify the calling service (for example, coin, restricted, and so forth). When there is no data in these tables for a call marked as special and the datafill indicates not to mark this call as ANI failure, the calling service is marked as station.

TOPSTOPT (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
MAXCONNS		0 to 2016	Maximum connections. This field indicates the maximum number of voice over IP (VoIP) connections that can be initiated on a trunk group reserved for TOPS VoIP calls. Each VoIP connection corresponds to a trunk member.
			Although the MAP display indicates the range maximum is 32767, the effective maximum is 2016, since a TOPS dynamic trunk group may have at most 2016 members. Entering a value greater than 2016 has no effect; the maximum number of connections for that trunk group remains at 2016.
			MAXCONNS applies to all TOPS dynamic trunk types: remote OC-IP voice links, host OC-IP voice links, and IP position voice links. For all other trunk types (non-dynamic), set this field to 0. MAXCONNS has no effect on trunk groups that are not datafilled as OC or POS dynamic trunks in table TRKOPTS.
			In table TRKOPTS, indicate the trunk group is reserved for OC or POS dynamic trunks before setting field MAXCONNS in table TOPSTOPT.
DISPSPID		Y or N	Display SPID. This field determines on a trunk group basis if the SPID display information from table SPIDDB (field SCRNDISP) should be sent to the OPP-compatible position on carrier calls. Enter Y to send the display or N to not send the display.
			This same functionality is available on an office-wide basis in table TOPSPARM parameter OPP_ALWAYS_SEND_SPID_INFO. Refer to the table at the beginning of this module for the interaction of this parameter and field DISPSPID.

Datafill example

The following example shows sample datafill for table TOPSTOPT.

TOPSTOPT (continued)

MAP display example for table TOPSTOPT

```
    GRPKEY          ORGAREA      DISPCLG      ADASERV        ADASANS
ANITOCLI OLNSQRY  DCIBIDX   LNPCLGAM   XLASCHEM   SPIDPRC  TRKSPID
   BILLSCRN   ANIFSPL   MAXCONNS   DISPSPID
_____
ISUP2WITALT          Y T1ORIG           Y          NONE            NA
      N     NONE          0          N          N          Y          N
         N          N      100          Y
```

Error messages

The following error messages apply to table TOPSTOPT.

Error messages for table TOPSTOPT

Error message	Explanation and action
The DCIBIDX index must be datafilled in Table DCICSET prior to use in Table TOPSTOPT.	A DCIBIDX value cannot be datafilled in table TOPSTOPT unitl it has been defined in table DCICSET. If an attempt is made to datafill a DCIBIDX that has not been defined in table DCICSET, the table change is not allowed and this error message is displayed.
Trunk group not marked as a dynamic trunking application in Table TRKOPTS. MAXCONNS must be 0.	This message appears when attempting to increase MAXCONNS to a nonzero value for a trunk group not reserved for TOPS VoIP calls. The tuple addition or change is not allowed.
Warning: MAXCONNS is set to 0. No connections will be allowed on this trunk group.	This warning message appears when attempting to set MAXCONNS to zero for a TOPS dynamic trunk group. The tuple addition or change is allowed.
Warning: MAXCONNS is set higher than the maximum per trunk group. A maximum of 2016 connections will be used by call processing.	This warning message appears when setting MAXCONNS to a value higher than 2016. The tuple addition or change is not allowed.
Warning: TOPS VoIP usage limits are not supported in this load. MAXCONNS will be set to the maximum per trunk group, which is 2016.	This warning message appears when trying to use VoIP usage limits, but the required DMS-100 software is not present in the load. The tuple addition or change is allowed. The MAXCONNS field will be set to 2016, and VoIP Usage Limits will not be used.

TOPSTOPT (end)

Table history
TOPS15

Field MAXCONNS is added by feature 59022293 in functionality OPP Over IP, OSB00101. For a dump and restore from pre-TOPS15 to TOPS15 for a dynamic trunk sets this field to 32767 so that call processing is not affected.

TOPS12

Feature Calling Restrictions for Wholesaling (59006832), UNBN0006, adds the fields BILLSCRN and ANIFSPL.

Field ACDDATA is renamed to ORGAREA and subfields ACD and LOCATION are deleted since they are ACD specific, which is terminated. These changes are made by feature 59006865 in functionality MD Code Removal AND ReEngineering, OSB00001.

TOPS09

Fields XLASCHEM and SPIDPRC are added by feature AF7159 in functionality Translations and routing, UNBN0003.

Field DCIBIDX is now functional. It is added by feature AN1843 in functionality Disallowed Card Issuer Blocking, ABS00014.

TOPS07

Field LNPCLAM is added by feature AF6553 in functionality TOPS LNP, OSEA0008.

Field TRKSPID is added by feature AF6711 in functionality Branding via SPID, ENSV0017.

TOPS06

Field OLNSQRY added by functionality TOPS OLNS Interface, ABS00012.

Field DCIBIDX added, that is currently nonfunctional.

TOPS05

Added field ANITOCLI per functionality GR317/GR394 ISUP to/from TOPS, OSEA0005.

TOPS03

Changed range of field ADASERV from N/Y to NONE, ADAS, and ADASPLUS per feature AN0880 in DA Automation I/F, OSDA0006.

Added field ADASANS per feature AN1027 in ADAS, OSDA0004.

2 Logs

This chapter contains new and changed logs since the last release that affect the TOPS office.

PM777

Explanation

The peripheral module (PM) subsystem generates report PM777 when the software detects a hardware defect. The PM777 indicates the source of the hardware defect.

Format

The log report format for PM777 is as follows:

PM777 mmmdd hh:mm:ss ssdd INFO SUSPECTED H/W FAULT pmid
    unit no.
    PP TIME: hh:mm:sshs
    ERROR STATE: xxxxxxxxxxxxxxxx
    SUSPECTED CARD(S):
    SITE FLR RPOS BAY ID SHF DESCRIPTION SLOT EQPEC
    host fl# row# bay id sh# frame# slot# cardid
    DATA: xx xx xx xx xx xx xx

Examples

Example of log report PM777 follow:

Example 1

```
PM777 MAY21 12:39:25 3200 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 00
   PP TIME: 00:32:33.01
   Error State: audtfail
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST  00  L14  LTE 00 18   LTC: 000     18   6X69
   DATA: 01 18 84  00 01 00 00 55 50  FF FF FF FF FF FF FF
```

Data byte #	Reason
0	number of error logs
1	error reason (qualifier) of diagnostics
2	diagnostic identifier

PM777 (continued)

Data byte #	Reason
3-4	location msw
5-6	location lsw
7	accurate value
8	expected value
9	number of error logs
10	error reason (qualifier) of diagnostics
11	diagnostic identifier
12-13	location msw
14-15	location lsw

Example 2

```
PM777 MAY21 13:29:00 3265 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 00
   PP TIME: 00:11:16.12
   Error State: SPURIOUS L1 INT
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L14  LTE 00 18   LTC: 000      18   6X69
    DATA: 01 18 84  00 01 00 00 55 50  FF FF FF FF FF FF FF
```

Example 3

```
PM777 APR18 14:31:16 2312 INFO SUSPECTED H/W FAULT RTPK
   LTC 1
   UNIT NO: 01
   PP TIME: 00:51:31.16
   Error State: MsgCdFailedReset
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L14  LTE 00 32   LTC: 000      18   6X69
    DATA: OC FF FF FF FF FF FF FF FF FF FF
```

Example 4

```
PM777 APR19 12:29:22 4544 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:11:21.32
   Error State: 6X69hndshkfailed
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  DTE 00 32   LTC: 000      18   6X69
```

Example 5

```
PM777 APR19 12:29:45 4563 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:11:21.55
   Error State: 6X69hndshkfail2
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  DTE 00 32   LTC: 000      18   6X69
```

Example 6

```
PM777 APR19 12:32:16 4112 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:01:11.00
   Error State: 6X69NoOpcdeArea
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  LTE 00 32   LTC: 000      18   6X69
   DATA: 14 02 00 02 01 FF FF FF FF FF FF FF
```

Data byte #	Reason
0	opcode
1	msb of first TIMESLOT
2	lsb of first TIMESLOT
3	number of TIMESLOTS - 1
4	increment between TIMESLOTS

PM777 (continued)

Example 7

```
PM777 APR19 12:32:26 4132 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:01:21.00
   Error State: 6X69NoResToOpcde
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  LTE 00 32   LTC: 000      18   6X69
   DATA: 14 02 00 02 01 FF FF FF FF FF FF FF FF
```

Data byte #	Reason
0	opcode
1	msb of first TIMESLOT
2	lsb of first TIMESLOT
3	number of TIMESLOTS - 1
4	increment between TIMESLOTS

Example 8

```
PM777 APR20 08:45:16 1089 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:13:09.52
   Error State: SpeechBusNoResp
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  LTE 00 32   LTC: 000      18   6X69
   DATA: 12 02 00 04 01 FF FF FF FF FF FF FF FF
```

Data byte #	Reason
0	opcode
1	msb of first TIMESLOT

Data byte #	Reason
2	lsb of first TIMESLOT
3	number of TIMESLOTS - 1
4	increment between TIMESLOTS

Example 9

```
PM777 APR18 12:59:35 1300 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:01:31.16
   Error State: Insame 6X69
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  LTE 00 32   LTC: 000      18   6X69
   DATA: F0 AA 0F 00 00 00 00 00 21 4B EE 00 21 4B F8
```

Data byte #	Reason
0	PP sync desired
1	PP sync desired
2	SP sync desired
3	SP sync actual

Example 10

```
PM777 APR18 14:21:02 1653 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 01
   PP TIME: 00:55:41.30
   Error State: nd_xfr_tmo
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  LTE 00 32   LTC: 000      18   6X69
   DATA: 00 02 03 FF FF FF FF FF FF FF FF FF FF FF FF
```

PM777 (continued)

Data byte #	Reason
0	intermodule communications working (false = 0 / true= 1)
1	ordinal value of link state
2	number of transfer attempts

Example 11

```
PM777 APR19 13:13:21 1414 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 01
   PP TIME: 01:32:18.12
   Error State: XLA_FLD
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  LTE 00 32   LTC: 000      18   6X69
   DATA: 03 FF FF FF FF FF FF FF FF FF FF FF FF
```

Data byte #	Reason
0	number of transfer attempts

Example 12

```
PM777 MAY22 13:39:22 6500 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 01
   PP TIME: 01:41:16.28
   Error State: BadCdNoUnderTest
   Suspected cards: ARE UNDETERMINED
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  LTE 00 32   LTC: 000      18   6X69
   DATA: 05 FF FF FF FF FF FF FF FF FF FF FF FF
```

Data byte #	Reason
0	card under test

Example 13

```
PM777 APR22 09:58:44 0600 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 00
   PP TIME: 00:03:18.18
   Error State: MEMORY PARITY
   Suspected cards: ARE UNDETERMINED
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  LTE 00 32   LTC: 000      18   6X69
   DATA: 00 02 00 00 00 09 B2 54 00 00 2B 60 00 10 00 1E
```

Data byte #	Reason
0	defect type
1	procedure identifier
2-3	last address msw
4-5	last address lsw

Example 14

```
PM777 APR23 09:23:21 1213 INFO SUSPECTED H/W FAULT RTPK
LTC 0
UNIT NO: 01
PP TIME: 02:32:18.12
Error State: card/date wrong
Suspected cards:
Site Flr RPos Bay_id Shf Description  Slot Eqpec
HOST  00  L15  LTE 00 32   LTC: 000      19   6X79
DATA: 00 02 00 00 00 09 B2 54 00 00 2B 60 00 10 00 1E
```

Example 15

```
PM777 MAY21 12:32:54 3241 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 09:42:12.21
Error State: STR INSV FAILED
Suspected cards: ARE UNDETERMINED
DATA: 05 01 02 05 05 FF FF FF FF FF FF FF FF FF
```

PM777 (continued)

Data byte #	Reason
0	length of data that follows this byte
1	report code from special tone receiver (STR)
2	test result or signal set
3	internal node (valid for digit reports only)
4-5	internal terminal (valid for digit reports only)

Example 16

```
PM777 MAY21 12:01:22 1023 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 12:32:11.43
   Error State: STR-RESET FAILED
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  DTE 00 32   DTC: 000      16   6X62
   DATA: 00 02 00 12 11 FF FF FF FF FF FF FF FF FF
```

Data byte #	Reason
0	status 1
1	status 2
2	status 3
3	tp revision firmware level
4	dsp revision firmware level

Example 17

```
PM777 MAY20 09:01:22 2015 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:46:10.19
   Error State: STR DidNotReset
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  DTE 00 32   DTC: 000     16   6X62
   DATA: 02 02 FF FF FF FF FF FF FF FF FF FF FF FF
```

Data byte #	Reason
0	action code
1	length of message

Example 18

```
PM777 MAY20 10:23:41 1754 INFO SUSPECTED H/W FAULT RTPK
DTC 0
UNIT NO: 01
PP TIME: 00:46:10.19
Error State: INSV FAIL-NO STR
Suspected cards: ARE UNDETERMINED
DATA: 01 00 01 10 00 00 00 00 00 FF FF FF FF FF FF FF
```

Data byte #	Reason
0	UTR card present
1-2	number of UTR cards present
3	STR card present (bool)
3	spare slot at STR installation (0..5)
3	BBF entered (bool)
3	DTRE entered (bool)
3	STR scans speech bus (bool)
3	STR scans for N5 signals (bool)

PM777 (continued)

Data byte #	Reason
5-6	STR LP firmware revision
7-8	STR DSP firmware revision

Example 19

```
PM777 MAY20 09:01:22 2015 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:46:10.19
   Error State: STR NOT RESET
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  DTE 00 32   DTC: 000      16   6X62
    DATA: 01 02 FF FF FF FF FF FF FF FF FF FF FF FF
```

Data byte #	Reason
0	action code
1	length of message

Example 20

```
PM777 MAY20 10:12:34 2225 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:46:10.19
   Error State: STR INSANE
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  DTE 00 32   DTC: 000      16   6X62
```

Example 21

```
PM777 MAY20 10:12:34 2225 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:46:10.19
   Error State: STR INIT FAIL
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  DTE 00 32   DTC: 000     16   6X62
```

Example 22

```
PM777 MAY20 12:33:34 2654 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:02:12.11
   Error State: STR-FAIL SANITY
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  DTE 00 32   DTC: 000     16   6X62
   DATA: 00 02 FF FF FF FF FF FF FF FF FF FF FF FF
```

Data byte #	Reason
0	fail/pass sanity
1	status of STR

Example 23

```
PM777 MAY20 13:01:22 4435 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:00:12.39
   Error State: AUDIT-NO STR CD
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  DTE 00 32   DTC: 000     16   6X62
```

Example 24

PM777 (continued)

```
PM777 MAY20 12:33:43 2654 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:12:22.11
   Error State: STR REMOVED
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  DTE 00 32   DTC: 000      16   6X62
   DATA: 00 00 00 11 00 00 00 00 FF FF FF FF FF FF FF
```

Data byte #	Reason
0	UTR card present
1-2	number of UTR cards present
3	STR card present (bool)
3	spare slot where STR installed (0..5)
3	BBF entered (bool)
3	DTRE entered (bool)
3	STR scans speech bus (bool)
3	STR scans for N5 signals (bool)
5-6	STR LP firmware revision
7-8	STR DSP firmware revision

Example 25

```
PM777 MAY21 13:01:22 4435 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 01
   PP TIME: 00:01:12.39
   Error State: NO STR HARDWARE
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  DTE 00 32   DTC: 000      16   6X62
```

Example 26

```
PM777 MAY22 12:13:35 3452 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 01
   PP TIME: 00:36:31.01
   Error State: Unknown UTR addr
   Suspected cards: ARE UNDETERMINED
```

Example 27

```
PM777 MAY22 15:22:35 3452 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 01
   PP TIME: 09:36:31.01
   Error State: Too Many UTRs
   Suspected cards: ARE UNDETERMINED
```

Example 28

```
PM777 APR19 12:32:26 4132 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 00
   PP TIME: 00:01:21.00
   Error State: UTRO Bad Status
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  LTE 00 18    LTC: 000      16   6X92
   DATA: 02 FF FF FF FF FF FF FF FF FF FF FF FF FF FF
```

Data byte #	Reason
0	status

Example 29

```
PM777 APR19 12:55:43 4954 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 01
   PP TIME: 00:11:42.12
   Error State: UTR1 Bad Status
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  LTE 00 32    LTC: 000      17   6X92
   DATA: 02 FF FF FF FF FF FF FF FF FF FF FF FF FF FF
```

PM777 (continued)

Data byte #	Reason
0	status

Example 30

```
PM777 APR19 13:35:33 4344 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 01
   PP TIME: 00:11:42.12
   Error State: UTR Sanity Error
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L15  LTE 00 32   LTC: 000      17   6X92
   DATA: 01 FF FF FF FF FF FF FF FF FF FF FF FF FF FF
```

Data byte #	Reason
0	status

Example 31

```
PM777 APR19 13:54:22 4555 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 01
   PP TIME: 00:11:42.12
   Error State: UtrCardNotPresent
   Suspected cards: ARE UNDETERMINED
   DATA: 01 FF FF FF FF FF FF FF FF FF FF FF FF FF FF
```

Data byte #	Reason
0	entered UTR spare slot number

Example 32

```
PM777 APR19 14:02:19 4687 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 01
   PP TIME: 00:25:11.29
   Error State: UtrInSpareSlot4
   Suspected cards: ARE UNDETERMINED
   DATA: 16 FF FF FF FF FF FF FF FF FF FF FF FF FF FF
```

Data byte #	Reason
0	card type in spare slot 4

Example 33

```
PM777 MAY22 12:33:35 4452 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 01
   PP TIME: 00:43:31.01
   Error State: Socote1NoSupprtd
   Suspected cards: ARE UNDETERMINED
```

Example 34

```
PM777 MAY22 12:35:25 4352 INFO SUSPECTED H/W FAULT RTPK
   LTC 0
   UNIT NO: 01
   PP TIME: 00:21:31.01
   Error State: MfcSugNotSupprtd
   Suspected cards: ARE UNDETERMINED
```

Example 35

```
PM777 MAY23 10:11:43 2322 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 00
   PP TIME: 00:21:31.01
   Error State: Wrong Pside Card
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L14  DTE 00 18   DTC: 000      05   6X50
   DATA: 00 00 FF FF FF FF FF FF FF FF FF FF FF FF FF FF
```

PM777 (continued)

When the above error message is given for a 7X07 P-side card that is used for the TOPS IP application, datafill may be incomplete. The test for the correct P-side card consists of checking for datafill correlation between tables LTCPSINV and IPINV. Refer to the TOPS IP User Guide, 297-8403-906, and search on PM777.

Data byte #	Reason
0-1	port number (ds1)

Example 36

```
PM777 MAY23 11:00:54 2335 INFO SUSPECTED H/W FAULT RTPK
   DTC 0
   UNIT NO: 00
   PP TIME: 00:11:43.21
   Error State: Wrong Pside Card
   Suspected cards:
   Site Flr RPos Bay_id Shf Description  Slot Eqpec
   HOST 00  L14  DTE 00 18   DTC: 000     05   6X50
   DATA: 00 00 FF FF FF FF FF FF FF FF FF FF FF FF FF FF
```

Data byte #	Reason
0-1	port number (ds0)

Example 37

```
PM777 APR30 11:53:39  6637  INFO
SUSPECTED H/W FAULT
    LTC 2
    UNIT NO : 00
PP Time: 00:04:55.56
Error State : C-SIDE FAULT
Suspected Cards :
Site Flr RPos  Bay_id   Shf Description   Slot     EqPEC
HOST  01  C00   DTE 00   51   LTC : 002     22      6X40
HOST  01  C00   DTE 00   51   LTC : 002     21      6X41
DATA : 00 01 00 00 00 12 07 FE 00 00 AF C2 00 10 00 1E
```

Field descriptions

The following table describes each field in the log report:

Field	Value	Description
INFO SUSPECTED H/W FAULT	Symbolic text	Indicates the PM with the suspected hardware defect.
unit no.	Integers	Indicates the unit number.
PP TIME	Integers	Indicates the time of the defect.
ERROR STATE	Symbolic text	Indicates the error state.
SUSPECTED CARD(S)	Numeric	Indicates the suspect cards.
DATA	Alphanumeric	Indicates more information about the defect.

Action

Follow standard maintenance procedures.

When the "Wrong Pside Card" error message is given for a 7X07 P-side card that is used for the TOPS IP application, refer to the TOPS IP User Guide, 297-8403-906, and search on log PM777.

Associated OM registers

There are no associated OM registers.

TOPS105

Explanation

The Traffic Operator Position System (TOPS) subsystem generates this report for the following reasons:

- Procedure failure - failures reported by this log include call control messaging failures, datafill mismatches, and voice link failures. This log indicates the problem number and the trouble code.

- Operator centralization failure - failures reported by this log include call control messaging failures, datafill mismatches, and voice link failures. This log indicates the reason for the failure and displays the suspect voice or data circuit.

  As of TOPS16, TOPS OC-IP failures are no longer reported in TOPS105, instead they are reported in TOPS133. Also, this change is patched back to TOPS15. Therefore, if the patch is present, TOPS OC-IP failures in TOPS15 are reported in TOPS133 instead of TOPS105.

- Standalone (non-OC) failure - failures reported by this log include call control messaging failures, datafill mismatches, and voice link failures. This log indicates the reason for the failure and displays the suspect voice or data circuit.

Format

The format for log report TOPS105 follows:

```
TOPS105 mmmdd hh:mm:ss ssdd SYSB TOPS TROUBLE
CKT trkid
OCOFC = <destination OC office> OCIPDLNUM = <OCIPDL Num>
PROBLEM NO = nnnn   TRBLCODE = trbltxt
```

Example

An example of log report TOPS105 follows:

```
TOPS105 MAY19 21:51:01 0383 SYSB TOPS TROUBLE
CKT  HOSTBYPASS 1
OCOFC = HOST1 OCIPDLNUM = 3
PROBLEM NO = 0       TRBLCODE = VOICE_BYPASS_CONN_FAIL
```

TOPS105 (continued)

Field descriptions

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

Field	Value	Description
SYSB TOPS TROUBLE	Constant	Indicates trouble is encountered in a procedure.
CKT	Symbolic text	Provides equipment identification for suspect trunk equipment.
OCOFC	name from table OCOFC	The name of the operator centralization office from table OCOFC. This field is set to NA for calls in the standalone environment.
OCIPDLNUM	name from table OCIPDL	Iidentifies the specific OC-IP data link number which encountered trouble. OC-IP data links are datafilled in table OCIPDL. This field is set to NA if not using OC-IP data links.
PROBLEM NO	0-4095	Provides problem number equivalent to return code from procedure.
TRBLCODE	EXT_BLOCK_ UNAVAILABLE	An EXT block could not be allocated in a host office.
	MESSAGING_ PROBLEM	Indicates VIRTUAL CKT is in incorrect state according to the VCCT_STATE_MAP, or the initial address message bit is not in the correct state.
		The OC host and remote are not in sync in their messaging on a call. This can occasionally happen in race situations when the call has been taken down in the host or remote but not in both. If this problem hapens often, there may be a network failure.
	OC_ MISCELLANEOUS	Indicates trouble is other than above.

Field	Value	Description
	OPR_ACK_WAIT_ TIMEOUT	Indicates a timeout when waiting for response from operator at host.
		The host or remote was expecting a call control message from the other, and timed out waiting for it. Occasional appearance of this log can indicate race conditions, which may be ignored. More frequent appearance suggests probable network problems, which should be corrected.
	PORTPERM_ BLOCK_ UNAVAILABLE	Indicates the remote OC switch failed to get a portperm extension block. Office parameter NUMPERMEXT in table OFCENG must be updated to account for all OC IP call traffic in the remote. Each remote OC IP call needs a portperm extension.
	TABLE_OCGRP_ DATA	Indicates table OCGRP is not in the correct state.
		A call is trying to initiate communication on a data link to an office that is not datafilled in table OCGRP. This could happen in an extremely rare race scenario if a tuple has just been removed from table OCGRP, but more likely it indicates a software error.
	VOICE_BYPASS_ CONN_FAIL	Indicates that the VoIP bypass connection to the operator failed.

TOPS105 (continued)

Field	Value	Description
	VOICE_LINK_CONN_FAIL	Indicates an operator centralization (OC) internet protocol (IP) voice link problem. The problem is a negotiation failure due to lost or delayed voice link messages. IP network management tools should be used to insure the network is operating properly. The failed trunk circuit reported by this log should be inspected at the TTP level of the MAP. Refer to the TOPS IP User's Guide for additional causes and failure handling.
		Indicates a voice setup failure, which could be due to loss of an OC data link message, loss of an ISUP/IGIP message, or an invalid message received on the voice link.
		A single failure may produce two instances of the TOPS105 log to give more diagnostic information.
	VOICE_LINK_NOT_AVAILABLE	Indicates a lost or delayed voice link message due to a trunk selection failure in the host or remote.

Action

Check the state of the data link at the trunk test position (TTP) level of the MAP (maintenance and administration position), then check the data.

Field support can use the value in PROBLEMNO for troubleshooting.

This log can be generated in both a standalone and an OC configuration. If standalone, the value in the OCOFC field is NA. If OC, the value in OCOFC is an office name datafilled in table OCOFC.

For EXT_BLOCK_UNAVAILABLE, consider increasing the TOPS_NUM_OC parameter in table OFCENG.

For MESSAGING_PROBLEM, use IP network management tools and investigate the network to ensure that it is operating properly.

For OPR_ACK_WAIT_TIMEOUT, use IP network management tools and investigate the network to ensure that it is operating properly.

For PORTPERM_BLOCK_UNAVAILABLE, office parameter NUMPERMEXT in table OFCENG must be updated to account for all OC IP

call traffic in the remote. Each remote OC IP call needs a portperm extension. For further information on possible causes of this value, refer to the TOPS IP User's Guide. This parameter can be automatically controlled by table OFCAUT. Consider increasing system memory.

For TABLE_OCGRP_DATA, ignore this log if it is generated immediately after a change in table OCGRP. Otherwise, ocontact technical support.

For VOICE_BYPASS_CONN_FAIL, ensure that the associated Gateway trunk and peripheral are in service, check the associated IPGW logs, and check for network problems.

For VOICE_LINK_CONN_FAIL, IP network management tools should be used to insure that the network is operating properly. The failed trunk circuit reported by this log should be inspected at the TTP level of the MAP. For further information on possible causes of this value, refer to the TOPS IP User's Guide. Also, field support cna use the value in the PROBLEMNO field to diagnose these failures. Also check the associated Gateway (IPGW) log reports.

For VOICE_LINK_NOT_AVAILABLE, ensure that the associated Gateway card, trunk, and peripheral are in service.

A TOPS102 log and, or, a TRK123 log may be generateed along with a TOPS105 log. Typically TOPS105 is seen in one switch, while TOPS102 or TRK123 is generated in the other switch. When this situation occurs, TOPS102 and TRK123 logs indicate that a problem was detected at the distant end and resources are being released at this end.

Associated OM registers

This log is associated with OM group TOPSVC, registers VCFL, MSGLOST, and OPRLOST.

For VOICE_LINK_CONN_FAIL and PORTPERM_BLOCK_UNAVAILABLE,, existing OC OMs which apply to general failures are indirectly related, described in the TOPS IP User's Guide.

Explanation

The TOPS304 log is generated when a TOPS OC-IP data link enters the system busy (SYSB) state. Since this condition may affect traffic, the OCSysB alarm is raised and the severity indicated by asterisks as follows:

- Three asterisks (***) for a critical alarm (no OC-IP data links to a distant office are INSV and at least one data link is SYSB).

- Two asterisks (**) for a major alarm (at least one OC-IP data link to a distant office is SYSB).

The TOPS304 log is also generated to indicate that the OC-IP data link has left the SysB state, which means the problem is successfully resolved. In this case, the asterisks are not displayed and the TROUBLE field shows "Resolved". However, the OCSysB alarm may still be raised due to other SysB links.

Format

The format for log report TOPS304 follows:

```
<Office Id> <Node Name> <Alarm Indicator> TOPS304 <Date> <Time>
<Sequence Numbers> TBL TOPS IP DataLink Fault
Data Link: OCIPDL <DistantOfc> <OCIPDLNum>
Trouble: <Trouble Text>
Reason: < Reason  Text>
Error Code  : <ErrorCode>
```

Example

Examples of log report TOPS304 follow:

```
RTPF CM ** TOPS304 JUN23 18:12:05 5050 TBL TOPS IP DataLink Fault
Data Link: OCIPDL HOST1 3
Trouble: Data Link is System Busy
Reason: Network Failure
Error Code:  1
```

```
RTPF CM ** TOPS304 JUN23 18:12:05 5050 TBL TOPS IP DataLink Fault
Data Link: OCIPDL HOST1 3
Trouble: Resolved
Reason: None
Error Code: 0
```

TOPS304 (continued)

Field descriptions

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

Field	Value	Description
Office ID	n/a	This field provides the name of the switch where the log report is generated.
Node Name	n/a	This field identifies the node that generates the log.
Alarm Indicator	n/a	This field either displays "***" to report a critical alarm, "***" to report a major alarm, or is blank, indicating that an alarm has been cleared.
Date	mmmdd	This field indicates the month and date the log was generated.
Time	hh:mm:ss	This field displays the time in hours (24 hour clock) , minutes, and seconds that the log was generated.
Sequence Numbers	ssdd	This field defines a unique sequence number for each log report generated.
Data Link	OCIPDL	This field identifies the data link as being an OC-IP data link. OC-IP data links are datafilled in table OCIPDL.
<DistantOfc>	32 characters	This field indicates the name of the Distant Office.
<OCIPDLNum>	0 to 7	This field indicates the data link that encountered the trouble and generated a log.
Trouble	Data Link is System Busy or Resolved	This field indicates whether the log is reporting a data link fault, or if it has been corrected.
Reason	No failure	The data link is not in trouble. No action is required.
	CM Child Dead	The maintenance child process for the data link is dead and not scheduled for recovery. The actions are: • Use the RECREATE command. • Delete and re-add datafill for the data linlk (table OCIPDL), BSY, and RTS. • Perform a maintenance SWACT.

TOPS304 (continued)

Field	Value	Description
	CM Resource Failure	The CM encountered problems with internal messaging or sending a message to the XPM. The actions are: Check all logs. • • Wait 30 seconds for automatic recovery. • BSY and RTS the data link.
	Peripheral Failure	The failures and actions are: • The XPM is out of service. Check the maintenance state of ;the XPM at the MAP, and recover the XPM if necessary. • A socket/COMID error occurred in the XPM. Check all logs. • The XPM is not responding. Wait 30 seconds. • Other XPM failure. BSY and RTS the data link.
	Network Failure	ICMP destination unreachable errors have occurred on the data link. The actions are: • Check the maintenance state of the data link at the far-end office. This reason is expected when attempting to bring into service a data link when the socket for the distant data link is not established. • Check the network. • Use the PING command in the XIPVER tool to determine if the far end is reachable. Refer to the TOPS IP User Guide, 297-8403-906, for details of the XIPVER tool.

TOPS304 (end)

Field	Value	Description
	End to End Connectivity Failure	There is loss of connectivity with the far-end data link. The actions are:
		Check the maintenance state of the data link at the far-end office.
		•
		• Use the QOCDL CNTRS command at the MAP.
		• Check the network.
Error Code	0 to 99	This field provides an internal number which is equvalent to the return code received from the XPM.

Action

Refer to the above table.

Associated OM registers

None.

History

TOPS13

This log was created by feature 59013936.

Explanation

This log is a trouble log that is generated for TOPS IP positions due to the following:

- A TOPS IP position goes into or out of the SYSB (system busy) state. When one or more positions go into the SYSB state, a TPSysB alarm is raised. The alarm is cleared when no positions are SYSB. The severity is minor.

- A TOPS IP position is in the CPB (call processing busy) or CPD (call processing deload) state and is FRLSed (Force Released) at the MAP.

- A TOPS IP position loses or regains communication with an External DA (Directory Assistance) Database. When communication is lost, a TPExDB alarm is raised. The severity is the highest level sent from the position to the DMS. The severity can be critical, major, or minor. The alarm is cleared when all positions in CRES, IDL, CPB, or CPD states have restored communication with an external DA database.

- An unsolicited busy message from a TOPS IP position is successfully processed by the CM

- An external database alarm message is received from a TOPS IP position.

The number of asterisks in the first line of the log indicate the severity of the alarm: three (***) if critical, two (**) if major, and none if minor.

Format

The format for log report TOPS305 follows:

```
<Office Id> <Node Name> <Alarm Indicator> TOPS305 <Date> <Time>
<Sequence Numbers> TBL TOPS IP DataLink Fault
Data Link: TOPSPOS <ip position number>
Trouble: <trouble text>
Reason: < reason  text>
Error Code  : <error code>
```

Example

Examples of log report TOPS305 follow:

TOPS305 (continued)

```
RTPF CM ** TOPS305 JUN23 18:12:05 5050 TBL TOPS IP DataLink Fault
Data Link: TOPSPOS 1000
Trouble: Data Link is System Busy
Reason: End-to-end connectivity Failure
Error Code:  EC 0 - Reserved


RTPF CM ** TOPS305 JUN23 18:12:05 5050 TBL TOPS IP DataLink Fault
Data Link: TOPSPOS 1000
Trouble: Data Link is System Busy
Reason:
Error Code: 0
```

Field descriptions

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

Field	Value	Description
Office ID	n/a	This field provides the name of the switch where the log report is generated.
Node Name	n/a	This field identifies the node that generates the log.
Alarm Indicator	n/a	This field either displays "***" to report a critical alarm, "***" to report a major alarm, or is blank, indicating that an alarm has been cleared.
Date	mmmdd	This field indicates the month and date the log was generated.
Time	hh:mm:ss	This field displays the time in hours (24 hour clock) , minutes, and seconds that the log was generated.
Sequence Numbers	ssdd	This field defines a unique sequence number for each log report generated.
Data Link	TOPSPOS	This field identifies the data link as a TOPS position. Positions are datafilled in table TOPSPOS.

Field	Value	Description
Trouble	Data Link is System Busy or Resolved	This field indicates whether the log is reporting a TOPS IP position fault, or if it has been corrected.
Reason	No failure, CM Restart, Peripheral Failure, Network Failure, End-to-End Connectivity Failure, EXDB: DA Alarm Status: <No alarm, Minor, Major, Critical>	This field describes the nature of the fault
Error Code	0 to 99	This field provides an internal number which is equvalent to the return code received from the XPM.

Action

This log may signify that the position has lost power; therefore, verify that the position has power.

TOPS305 (end)

If the position has power, at the MAP enter MAPCI;MTC and check under APPL for an alarm. If there is an alarm (TPSysB or TPExDB), perform the following:

- TPSysB alarm - One or more TOPS IP positions are in the SYSB state. Clear the alarm with the following steps.

  — At the TOPSPOS MAP level (mapci;mtc;appl;topsip;topspos), use the INFO command to determine the reason a position is SYSB, and then use that information to clear the alarm.

  — Depending on the results of the INFO command, the DMS networking hardware should be checked to make sure it is in-service.

  — If all else fails,, the alarm can be manually cleared with the BSY command on the SYSB position. This makes the position ManB.

- TPExDB alarm - A TOPS IP position cannot communicate with an external DA database. Clear the alarm with the following steps.

  — Verified that the database is functional.

  — At the TOPSPOS MAP level, use the LISTALMS command to note positions with problems communicating with external databases.

  — Examine the connections from the positions to the external databases and attempt to resolve any problems with those connections.

  — If all else fails, lower the alarm by BSYing all positions experiencing problems communicating with external databases.

Related OM registers

None

Additional information

Refer to the Alarm Clearing and Performance Monitoring Procedures manual for the TOPSIP TPSysB and TOPSIP TPExDB alarms.

TOPS504

Explanation

The TOPS504 log is generated when a TOPS OC-IP data link changes state.

Format

The format for log report TOPS504 follows:

```
<Office Id> <Node Name> <Alarm Indicator> TOPS504 <Date> <Time>
<Sequence Numbers> INFO TOPS IP DataLink State Change
Data Link: OCIPDL <DistantOfc> <OCIPDLNumber
Reason: <ChangeReason>
From: < FromState>
To: <ToState>
```

Example

Examples of log report TOPS504 follow:

```
RTPF CM ** TOPS504 JUN23 18:12:05 5050 INFO TOPS IP DataLink State
Change
Data Link: OCIPDL HOST1 3
Reason: Manual Command
From: ManB
To: InSv
```

Field descriptions

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

Field	Value	Description
Office ID	n/a	This field provides the name of the switch where the log report is generated.
Node Name	n/a	This field identifies the node that generates the log.
Alarm Indicator	n/a	This field either displays "***" to report a critical alarm, "***" to report a major alarm, or is blank, indicating that an alarm has been cleared.
Date	mmmdd	This field indicates the month and date the log was generated.

TOPS504 (end)

Field	Value	Description
Time	hh:mm:ss	This field display the time in hours (24 hour clock) , minutes, and seconds that the log was generated.
Sequence Numbers	ssdd	This field defines a unique sequence number for each log report generated.
Data Link	OCIPDL	This field identifies the data link as being an OC-IP data link. OC-IP data links are datafilled in table OCIPDL.
<DistantOfc>	10 characters	This field indicates the name of the Distant Office.
<OCIPDLNum>	0 to 7	This field indicates the data link that encountered the trouble and generated a log.
Trouble	Data Link is System Busy or Resolved	This field indicates whether the log is reporting a data link fault, or if it has been corrected.
Reason	Manual Command, System Detected Trouble, System Corrected Trouble, or Datafill Change	This field indicates the event that caused the data link to change state.
From	InSv, OffL, ManB, SysB, or UnEq	This field is the state of the data link before the state change.
To	InSv, OffL, ManB, SysB, or UnEq	This field is the state of the data link after the state change.

Action

None, this log is for information purposes only.

Associated OM registers

None

History

TOPS13

This log was created by feature A59013936.

TOPS505

Explanation

This log is for information only on TOPS IP positions and is generated for the following reasons:

- A position changes state to any of the following: OFFL, MANB, SYSB, URES, or CRES.

- A position is added or removed from table TOPSPOS.

Format

The format for log report TOPS505 follows:

```
TOPS505 <Date> <Time><Sequence Numbers>
INFO TOPS IP DataLink State Change
Data Link: TOPSPOS <Position Number>
Reason: <ChangeReason>
From: < FromState>
To: <ToState>
Error Code: <ErrorCode>
```

Example

Examples of log report TOPS504 follow:

```
TOPS505 JUN23 18:12:05 5050 INFO TOPS IP DataLink State Change
Data Link: TOPSPOS 1000
Reason: Manual Command
From: ManB
To: URes
Error Code: EC 0 Reserved
```

Field descriptions

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

Field	Value	Description
Office ID	n/a	This field provides the name of the switch where the log report is generated.
Node Name	n/a	This field identifies the node that generates the log.
Date	mmmdd	This field indicates the month and date the log was generated.

TOPS505 (end)

Field	Value	Description
Time	hh:mm:ss	This field display the time in hours (24 hour clock) , minutes, and seconds that the log was generated.
Sequence Numbers	ssdd	This field defines a unique sequence number for each log report generated.
Data Link	TOPSPOS	This field identifies the data link as TOPS position. TOPS positions are datafilled in table TOPSPOS.
<Position Number>	0 to 9999	The number assigned to the position in table TOPSPOS.
Reason	Manual Command, System Detected Trouble, System Corrected Trouble, or Datafill Change	This field indicates the event that caused the data link to change state.
From	NEq, OfLl, ManB, URes, CRes, Idl, CPB, CPD, SysB	This field is the state of the data link before the state change.
To	NEq, OfLl, ManB, URes, CRes, CPB, CPD, SysB	This field is the state of the data link after the state change.

Action

None, this log is for information purposes only.

Associated OM registers

None

History

TOPS15

This log was created by feature 59006653.

TOPS614

Explanation

This log is generated when the switch receives a message from an IP address and port that does not match the far-end IP address and port datafilled for the data link. For real-time protection from babbling nodes, the generation of this log is throttled. For each data link that has received a message from a faulty IP address or port, this log is generated approximately once every 30 seconds. The following figure shows an example log report.

Format

The format for log report TOPS614 follows:

```
TOPS504 <Date> <Time><Sequence Numbers> INFO TOPS Msg IP Addr Mis-
match
Source ID =      <pos id | oc data link>
Expected Addr = <ip address>
Msg Addr =       <ip address>
```

Example

An example of log report TOPS614 follows:

```
TOPS 614 DEC03 18:30:02 2112 INFO TOPS Msg IP Addr Mismatch
Source ID =      TOPSPOS 500
Expected Addr = 47 192 5 216
Msg Addr =       47 103 23 95
```

Field descriptions

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

Field	Value	Description
Date	mmmdd	This field indicates the month and date the log was generated.
Time	hh:mm:ss	This field display the time in hours (24 hour clock), minutes, and seconds that the log was generated.
Sequence Numbers	ssdd	This field defines a unique sequence number for each log report generated.

TOPS614 (end)

Field	Value	Description
Source ID	TOPSPOS <position number> or OC office name and data link	The source of the received message.
Expected Addr	4 sets of numbers, each in the range of 0 to 255	The IP address of the position or OC datalink as the switch expects.
Message Addr	4 sets of numbers, each in the range of 0 to 255	The IP address of the source of the message.

Action

If the IP address in the Msg Addr field does not match the IP address in the Expected Addr field, determine whether the correct datafill for the data link is present in the switch. For details, see the TOPS IP User Guide, 297-8403-906, chapter 3: TOPS OC-IP application, section Parallel datafill for OC-IP data links. If the datafill is correct, investigate the source of the faulty IP address. If the IP addresses are the same, then the port numbers do not match. This is likely due to inconsistent datafill.

Associated OM registers

None

History

TOPS15

This log was created by feature 59006658 in functionality OPP Over IP, OSB00101.

3 Office parameters

This chapter contains new and changed office parameters since the last release that affect the TOPS office.

IPGW_PCM_SELECTION

Parameter name

Internet Protocol Gateway Pulse Code Modulation Selection

Functional description

This parameter is used for the TOPS IP 7X07 gateway card for PCM voice encoding, described in the TOPS IP User Guide, 297-8403-906.

By default, the 7X07 IP gateway is automatically configured for C-side link speech encoding characteristics that are consistent with the datafilled value in table OFCENG parameter TYPE_OF_NETWORK. The following table shows the relationship between the datafillable values of TYPE_OF_NETWORK and speech encoding characteristics. Although TOPS-IP does not support the ALAW TYPE_OF_NETWORK, it is shown for completeness.

TYPE_OF NETWORK	Speech Companding	Bit Inversions
INTERNATNL	A-Law	Even Bit Inversions
ALAW	A-Law	No Bit Inversions
NORTH_AMERICAN	Mu-Law	No Bit Inversion

To accomodate offices that may have non-standard ways of configuring the TDM voice path in the DMS, IPGW_PCM_SELECTION allows an override of the automatic IP gateway configuration described above. IPGW_PCM_SELECTION can specify speech companding and bit inversion patterns on the gateway's C-side links that differ from those indicated by the datafilled TYPE_OF_NETWORK. In offices with standard configurations, PGW_PCM_SELECTION should be left at its default value, AUTO.

Provisioning rules

None

Range information

AUTO (default), MANUAL

Activation

Any change in the value of this parameter requires the Gateway card to be reloaded.

IPGW_PCM_SELECTION (end)

Dependencies

None

Consequences

None

Verification

None

Memory requirements

None

Dump and restore rules

No special reformatting is needed.

Parameter history

TOPS15

This parameter was introduced in TOPS15 by feature 59020499.

DMS-100 Family
North American DMS-100
TOPS References Change Guide
DS, Logs, OMs, Office Parameters

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Trademark information

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