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DMS-100 Family

Common Channel Signaling 7

Maintenance Guide Volume 2 of 2

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Maintenance Guide Volume 2 of 2

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List of terms **Vol. 2, A-1**

1 CCS7 network menu commands

Description of menu commands

The commands used at a MAP position belong in one of two categories. These categories are menu and non-menu. For the description of non-menu commands, see the "CCS7 network non-menu commands" chapter in this document.

Menu commands are associated with a MAP display that contains a numbered list (or menu) of commands and parameters available from the level or sublevel that you access. Commands that you also execute from the accessed level, but that do not form part of the MAP display, are known as hidden commands. This document uses "menu" or "menu level" to refer to a level from which you enter a menu command.

Note 1: Menus may not always appear on the MAP display. For example, you can suppress the menu display with the following command:

>MAPCI NODISP

Note 2: To display hidden commands available from the accessed menu level, perform the following steps:

1. To display a list of directories, enter

>LISTST

and press the Enter key.

2. To display a list of all commands available from the accessed menu level (including the hidden commands), enter

>PRINT dir

and press the Enter key.

where

dir

is the name of the top directory from the list displayed in step 1

Non-menu commands are not associated with a MAP display. Non-menu command is entered at the command's directory or directory level.

Note 3: To display a list of non-menu commands available from the accessed directory, enter the following command:

>PRINT dir

and press the Enter key.

where

dir is the name of the accessed directory

Command conventions used

The following sections describe the commands conventions used in this manual.

"Command example" table

In the "Command example" table, the command word and any expansion elements are represented in uppercase, boldface, except where the lowercase is required by case sensitivity. All variable names are replaced with an example value and are described below the command syntax.

"Command parameters and variables" table

The "Command parameter and variables" table consists of two sections. The first section is the command expansion. The command expansion represents the following characteristics:

- parameters
- variables
- hierarchy (the order in which the user must enter the elements)
- syntax (requirements of command strings)
- defaults

The second section describes all the parameters and variables.

The following subsections describe the presentation of different elements of the command syntax. In the examples that follow the descriptions, the elements are highlighted in gray.

Presentation of command words

The command words appear in uppercase, boldface. The command appears in lowercase where lowercase is required by case sensitivity.

The command appears to the left of all other elements (parameters and variables) in the command expansion.

BSY	LINK	ps_link	<u>NOFORCE</u>	
	PM		FORCE	<u>WAIT</u>
	UNIT	unit_no		NOWAIT

Presentation of parameters

Parameters appear in uppercase. Parameters appear in lowercase where the lowercase is required by case sensitivity.

BSY	LINK	ps_link	<u>NOFORCE</u>	
	PM		FORCE	<u>WAIT</u>
	UNIT	unit_no		NOWAIT

Presentation of variables

Variable names appear in lowercase. Do not enter the variable as shown. Always replace the variable with a value, range, number, or an item from a list. Variable entries are not represented in the expansion of the command, but are described for each variable in the Description section below the expansion.

BSY	LINK	ps_link	<u>NOFORCE</u>	
	PM		FORCE	<u>WAIT</u>
	UNIT	unit_no		NOWAIT

Presentation of hierarchy

The order in which you must enter command elements is represented by their order of appearance from left to right. The following example illustrates the order of the elements.

	1	2	3	4	5
BSY	LINK	ps_link	<u>NOFORCE</u>		
	PM		FORCE	<u>WAIT</u>	
	UNIT	unit_no		NOWAIT	

Several elements can appear in the same column. When this condition occurs, select one element from that column. An exception to this rule occurs when one of the elements is a default.

BSY	LINK	ps_link	<u>NOFORCE</u>	
	PM		FORCE	<u>WAIT</u>
	UNIT	unit_no		NOWAIT

select one

Presentation of long command expansions

Some commands have many parameters and variables with very long hierarchies. These commands require continuation the expansion row. When this situation occurs, the horizontal lines of parameters and variables are numbered. Numbered lines help the user to follow the command syntax from one row to the next.

COMMAND	PARAMETER	variable	PARAMETER	variable	(1)
		PARAMETER	variable	PARAMETER	(2)
COMMAND (continued)	(1)	PARAMETER	variable	PARAMETER	(1)
	(2)	variable	PARAMETER	variable	(2)
COMMAND (continued)	(2)	PARAMETER	variable		(end)

Indication of defaults

An underlined parameter indicates a default. If no parameter listed in a column is entered, the system uses the default parameter. In the following example, parameters NOFORCE and WAIT indicate default actions that the system takes, unless parameters FORCE and NOWAIT are entered.

The default elements are described in the Description section that follows the command expansion.

BSY	LINK	ps_link	<u>NOFORCE</u>	
	PM		FORCE	<u>WAIT</u>
	UNIT	unit_no		NOWAIT

Relationships between groups of elements

When an element follows another element horizontally and you select the first element, you also must enter the second element.

BSY	LINK	ps_link	<u>NOFORCE</u>	
	PM		FORCE	<u>WAIT</u>
	UNIT	unit_no		NOWAIT

Description of parameters and variables

The "Parameters and variables" table lists in alphabetical order all parameters and variables that apply to the command. The table also includes the description of each element, including replacement values and ranges for variables.

Conventions comparison

The command conventions used in this document are different than the conventions used in MAP help screens and MAP responses. Table 1 compares these two conventions.

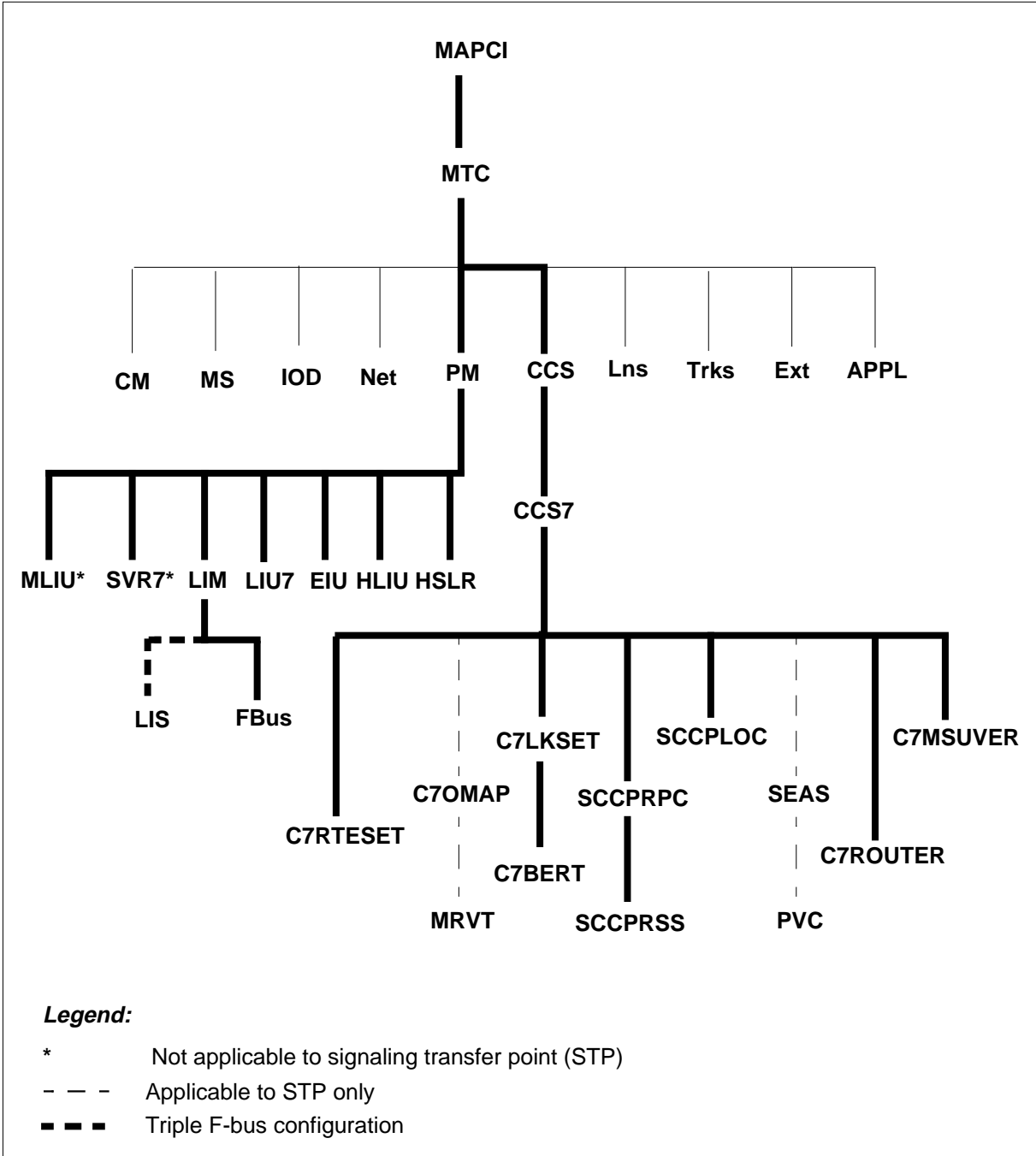
Table 1 Comparison of the command conventions

Element	Commands manual	MAP screen
Command words	Uppercase (or case sensitive specific), boldface: >BSY	Uppercase or initial uppercase: BSY, Bsy
Parameters	Uppercase (or case sensitive specific) LINK	Uppercase: LINK
Variable names	Lowercase: ps_link	Lowercase, in angled brackets: <ps_link> Note: Angle brackets also indicate that the variable is required.
Hierarchy	Horizontal order, left to right: >L PDTC pm_numbers circuit	Vertical order, top to bottom: {L <PDTC> {PDTC} <pm_numbers> {0 to 255} [<circuit> {0 to 16}]
Defaults	Underlined: <u>WAIT</u>	There is no exact method established, but optional elements (they do not have to be entered, implying defaults), are represented by square brackets: [<circuit> {0 to 16}]
Selectable elements	A vertical list: LINK PM UNIT	Curly brackets, separated by vertical bars: {link | pm | unit}
Variable replacement values	Defined in the Description section of the "Parameters and variables" table	Curly brackets: {0 to 16}

CCS7 MAP levels

Figure 1 shows the MAP levels that are associated with a CCS7 network.

Figure 1 CCS7 MAP levels



Menu descriptions

Table 2 provides a brief description of every menu documented in this manual. The following chapters describe the commands available at each menu level.

Table 2 Menu descriptions (Sheet 1 of 2)

Menu	Description
CCS	Use to monitor and maintain the Common Channel Signaling (CCS) system and access the CCS subsystem displays.
CCS7	Use to test and maintain Common Channel Signaling 7 (CCS7) trunks.
C7BERT	Use to evaluate the performance of a CCS7 signaling link before putting it into service or during fault isolation activities. A C7BERT test repeatedly transmits a 2047-bit pseudo-random pattern and subsequently checks the pattern to verify that no bit errors have occurred.
C7LKSET	Use to query and change the status of the links in a selected linkset.
C7MSUVER	Use to build message signaling units (MSUs), subject them to the screening rules of the CCS7 link interface unit (LIU7), and display the results of screening rules that were encountered.
C7OMAP	Use to access the MRVT level. C7OMAP and MRVT levels are applicable only to signaling transfer point (STP).
C7RteSet	Use to display information about or change the state of a routeset.
C7ROUTER	Use to perform maintenance functions on the LIU7 external routers.
EIU	Use to perform maintenance activities on the Ethernet interface unit (EIU).
FBus	Use to access the frame transport bus (F-bus) maintenance system when the link interface module (LIM) is housed in a link peripheral processor (LPP) with single F-bus configuration.
HLIU	Use to perform maintenance activities on the Common Channel Signaling 7 (CCS7) high-speed link interface unit (HLIU).
HSLR	Use to perform maintenance activities on the CCS7 high-speed link router (HSLR).

Table 2 Menu descriptions (Sheet 2 of 2)

Menu	Description
LIM	Use to perform maintenance functions on a link interface module (LIM).
LIS	Use to access the F-bus maintenance system when the link interface module (LIM) is housed in an enhanced link peripheral processor (ELPP) with triple F-bus configuration.
LIU7	Use to perform maintenance activities on the Common Channel Signaling 7 (CCS7) link interface unit (LIU7).
MLIU	Use to perform maintenance activities on the Common Channel Signaling 7 (CCS7) multiple link interface unit (MLIU).
MRVT	Use to initiate message transfer part (MTP) routing verification test. MRVT level is applicable only to signaling transfer point (STP).
PM	Use to access the peripheral module (PM) maintenance system.
PVC	Use to query and change the status of the logical communication links between a signaling transfer point (STP) and the Signaling, Engineering, and Administration System (SEAS). This level is applicable only to STP nodes.
SCCPLoc	Use to query or change the state of one or more signaling connection control part (SCCP) local subsystems.
SCCPRPC	Use to query or change the state of a SCCP remote point code.
SCCPRSS	Use to query or change the state of one or more SCCP remote subsystems.
SEAS	Use to query, test, and change the operating state of the Signaling, Engineering, and Administration System (SEAS). This level also has access to the permanent virtual circuits (PVC) level of maintenance. This level is applicable only to STP nodes.
SVR7	Use to access the manual CCS7 server (SVR7) maintenance system. SVR7 is not available for the STP offices.

2 CCS level commands

CCS menu

The CCS level of the MAP display shows information about, and provides test access to the common channel signaling (CCS) system and subsystems.

Use the CCS level of the MAP display to monitor and maintain the CCS system and access the CCS subsystem displays.

The following figure shows the CCS menu and status display.

Figure 2-1 CCS MAP level menu

```

      CM      MS      IOD      Net      PM      CCS      Trks      Ext      APPL
      .       .       .       .       .       .       .       .       .

CCS              CCS7
0 Quit          .
2              CCS:
3 CCS7
4
5
6
7
8
9
10
11
12
13
14 QueryAlm
15
16
17
18

```

Accessing the CCS level

To access the CCS level, enter the following command from the CI (command interpreter) MAP level:

```
>MAPCI;MTC;CCS
```

and press the Enter key.

CCS level commands

This chapter describes commands available at the CCS level of the MAP display. The commands are arranged in alphabetical order. The following CCS commands are described in this chapter:

- CCS7
- QUERYALM
- QUIT

CCS7

Command

CCS7

Sublevel

MAPCI;MTC;CCS

Function

Use the *CCS7* command to access the CCS7 MAP level and display the commands for monitoring and maintaining the Common Channel Signaling 7 (CCS7) system.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the CCS7 command
<p>>CCS7</p> <p><i>MAP response:</i></p> <p>The CCS menu is replaced by the CCS7 menu.</p> <p>ExplanationThe CCS7 level of the MAP has been accessed.</p>

MAP responses

The following table describes the MAP responses.

CCS7 (end)

Command responses

Response for the CCS7 command	
MAP output	Meaning and action
The CCS menu is replaced by the CCS7 menu.	
	Meaning: The system displays the CCS7 level header and commands menu.
	Action: None

QUERYALM

Command

QUERYALM

Sublevel

MAPCI;MTC;CCS

Function

Use the QUERYALM command to display the alarm order for a given CCS system.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYALM command parameters and variables	
Command	Parameters and variables
QUERYALM	ccs_system
Item	Description
ccs_system	<p>This variable specifies the CCS system. The system values are</p> <ul style="list-style-type: none"> • CCS7 • DPNSS • SCP

QUERYALM (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the QUERYALM command	
>QUERYALM CCS7	
<i>where</i>	
CCS7 is the CCS system	
<i>MAP response:</i>	
<pre> CRITICAL ----- RTESET LSS PC RSS Default SVR RTESET Default MAJOR ----- LKSET RTESET LSS Default SVR LKSET RTESET Default MINOR ----- PC LKSET RTESET LM Default </pre>	
Explanation: The MAP displays the alarm headers and the corresponding alarm order within the CCS7 level.	

QUERYALM (end)**MAP responses**

The following table describes the MAP responses.

Command responses

Response for the QUERYALM command	
MAP output	Meaning and action
<pre> CRITICAL ----- RTESET LSS PC RSS Default MAJOR ----- LKSET RTESET LSS Default MINOR ----- PC LKSET RTESET LM Default </pre>	<p>Meaning: The MAP displays the alarm headers and the corresponding alarm order within the CCS7 level.</p> <p>Action: None</p>
<pre> The specified CCS system is not bound in. </pre>	<p>Meaning: An invalid CCS system has been entered.</p> <p>Action: Enter the command again, using a valid CCS system.</p>

QUIT

Command

QUIT

Sublevel

MAPCI;MTC;CCS

Function

Use the QUIT command to exit from the CCS menu level and return to the previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incrname are menu level names, such as LNS, MTC, or MAPCI.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0 to 6. However, the system cannot accept a level number higher than the number of the current level.

QUIT (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p><i>MAP response:</i></p> <p>The display changes to the display of a higher level menu.</p> <p>Explanation: The CCS level has changed to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
<pre>CI:</pre>	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
<pre>QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1</pre>	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.</p> <p>Action: Enter the command again using an appropriate level number.</p> <p>The system replaces the CCS level menu with a menu that is two or more levels higher.</p> <p>Meaning: You entered the quit command with an <i>n</i> variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
<pre>The system replaces the display of the CCS level with the display of the next higher MAP level.</pre>	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

3 CCS7 level commands

CCS7 menu

Use the CCS7 level of the MAP to test and maintain Common Channel Signaling 7 (CCS7) trunks.

The following figure shows the CCS7 menu and status display.

Figure 3-1 CCS7 MAP level menu

```

          CM      MS      IOD      Net      PM      CCS      Trks      Ext      APPL
          .       .       .       .       .       2RSC      .       .       .
          *C*

CCS7          CCS7
0 Quit
2 DisAlm
3 C7RteSet
4 C7LkSet
5 SCCPRPC
6 SCCPLoc
7 SEAS
8 C7Router
9 C7OMAP
10
11
12
13
14
15
16 C7MSUVER
17
18

```

Accessing the CCS7 level

To access the CCS7 level, enter the following command from the CI MAP level:

>MAPCI;MTC;CCS;CCS7

and press the Enter key.

CCS7 commands

This chapter describes commands available at the CCS7 level of the MAP display. The commands are arranged in alphabetical order. The following CCS7 commands are described in this chapter:

- C7LKSET
- C7MSUVER
- C7OMAP (see Note)
- C7RTESET
- C7ROUTER
- DISALM
- QUIT
- SCCPLOC
- SCCPRPC

Note: The C7OMAP level is only applicable to STP.

C7LKSET

Command

C7LKSET

Sublevel

MAPCI;MTC;CCS;CCS7

Function

Use the C7LKSET command to access the C7LKSET level. Posted linksets are displayed under the C7LKSET status headers.

Usage notes

When office parameter USP_ACTIVE_IN_NETWORK is set to Y, you cannot post any linksets. Attempts to use any menu commands generates the following message:

The USP is now used to administer the SS7 data.

 SS7 routes, linksets and links now only exist on the USP.
 Go to the GUI on the USP to access this data.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the C7LKSET command
<pre>>C7LKSET MAP response: LINKSET TRAF SYNC LINK LK STAT STAT RESOURCESTATPHYSICAL ACCESS STAT ACTION Explanation: The C7LKSET level status headers appear on the MAP display.</pre>

MAP responses

Not applicable

C7MSUVER

Command

C7MSUVER

Sublevel

MAPCI;MTC;CCS;CCS7

Function

Use the C7MSUVER command to access the C7MSUVER level.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the C7MSUVER command
<pre>>C7MSUVER MAP response: Message: SIO: Network Ind= Priority= Service= DPC: OPC:</pre> <p>Explanation: The C7MSUVER level is displayed.</p>

C7MSUVER (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the C7MSUVER command	
MAP output	Meaning and action
The menu changes to the C7MSUVER level menu, and the following headers are added to the display:	
Message:	
SIO: Network Ind= Priority= Service=	
DPC:	
	Meaning: The C7MSUVER level is displayed.
	Action: None

C7OMAP

Command

C7OMAP

Directory

MAPCI;MTC;CCS;CCS7

Function

Use the C7OMAP command to access the C7OMAP (operations, maintenance, and administration part) MAP level.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the C7OMAP command
<p>>C7OMAP</p> <p><i>MAP response:</i></p> <p>C7OMAP :</p> <p>Explanation: The system displays the C7OMAP level.</p>

Responses

The following table describes the MAP responses.

Command responses

Responses for the C7OMAP command	
MAP output	Meaning and action
CANNOT SETUP C7OMAP DIRECTORY	<p>Meaning: Level C7OMAP could not be accessed.</p> <p>Action: Access level CCS7 and repeat command C7OMAP.</p>

C7RTESET

Command

C7RTESET

Sublevel

MAPCI;MTC;CCS;CCS7

Function

Use the C7RTESET command to access the C7RTESET level.

Usage notes

When office parameter USP_ACTIVE_IN_NETWORK is set to Y, you can post a routeset, but attempts to use any maintenance commands generates the following message:

The USP is now used to administer the SS7 data.

 SS7 routes, linksets and links now only exist on the USP.
 Go to the GUI on the USP to access this data.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the C7RTESET command						
>C7RTESET						
<i>MAP response:</i>						
C7Routeset				Linkset	Transfer	
Rte	State	Mode	Cost	Linkset	State	Status
Explanation: The C7RTESET level is displayed.						

MAP responses

Not applicable.

C7ROUTER

Command

C7ROUTER

Sublevel

MAPCI;MTC;CCS;CCS7

Function

Use the C7ROUTER command to access the C7ROUTER MAP level.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the C7ROUTER command				
>C7ROUTER				
<i>MAP response:</i>				
External Routing		OffL		
		1111111	1112222	2222333
	12345678	90123456	78901234	56789012
Router	-----	-----	-----	-----
Rtr	State	Resource	PM	State
C7ROUTER:				
Explanation: The C7ROUTER level is displayed.				

C7ROUTER (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the C7ROUTER command	
MAP output	Meaning and action
Undefined command <COMMAND>.	<p>Meaning: You entered the command incorrectly.</p> <p>Action: Enter the command again.</p>

DISALM

Command

DISALM

Sublevel

MAPCI;MTC;CCS;CCS7

Function

Use the DISALM command to display the alarm status for the different Common Channel Signaling 7 (CCS7) functions.

Usage notes

The DISALM command has the following limitations and qualifications:

- The alarm status of single or multiple functions can be displayed.
- The following list provides the CCS7 functions with alarm status in order of severity:
 - routesets
 - point codes
 - subsystems
 - linksets
 - SEAS
 - auto-imaging
- When the ALL parameter is used with the DISALM command, each heading appears on the display. If there are no alarms for the function, no status information is shown, and the next heading appears immediately below the heading.

DISALM (continued)

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

DISALM command parameters and variables	
Command	Parameters and variables
DISALM	<u>ALL</u> LKC RSC LSSC PCC RSSC LKM RSM LSSM PC LK RS LM SSSB SSTR SSMB
Item	Description
<u>ALL</u>	This parameter displays all routesets and linksets that are causing an alarm and the type of alarm in a descending order of severity. This parameter is the system default.
LK	This parameter displays the linksets that are causing a minor alarm.
LKC	This parameter displays the linksets that are causing a critical alarm.
LKM	This parameter displays the linksets that are causing a major alarm.
LM	This parameter displays the links that are causing a minor alarm.
LSSC	This parameter displays the local signaling connection control part (SCCP) subsystems that are causing a critical alarm.

DISALM (continued)

Parameters and variables (Sheet 2 of 2)

DISALM command parameters and variables	
Command	Parameters and variables
LSSM	This parameter displays the local SCCP subsystems that are causing a major alarm.
PC	This parameter displays the SCCP point codes that are causing a minor alarm.
PCC	This parameter displays the SCCP point codes that are causing a critical alarm.
RS	This parameter displays the routesets that are causing a minor alarm.
RSC	This parameter displays the routesets that are causing a critical alarm.
RSM	This parameter displays the routesets that are causing a major alarm.
RSSC	This parameter displays the remote SCCP subsystems that are causing a critical alarm.
SSMB	This parameter displays the signaling engineering and administration systems (SEAS) that are unavailable and are causing a minor alarm because they are manually busy.
SSSB	This parameter displays the SEAS that are unavailable and are causing a minor alarm because they are system busy.
SSTR	This parameter displays the SEAS that are unavailable and are causing a minor alarm because they have in-service trouble.

Usage examples

The following table provides an example of the command.

Command example (Sheet 1 of 2)

Example of the DISALM command		
>DISALM ALL		
<i>MAP response:</i>		
C7Routeset	Alm	Stat
MGTSRTESET	RSC	SysB
C7Linkset	Alm	Stat
MGTSLKSET	LKM	SysB

DISALM (continued)

Command example (Sheet 2 of 2)

Example of the DISALM command			
C7Link		Alm	Stat
Point Code		Alm	Stat
MGTSRTESET		PCC	SysB
No PC alarms			
No SSC alarms			
Subsystem		Alm	Stat
MGTSRTESET	ACCS	SSC	SysB
No SSM alarms			
No IMG, IMGC alarms			
Explanation: The MAP displays the status of all alarms for the CCS7 functions.			

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 4)

Responses for the DISALM command		
MAP output	Meaning and action	
C7Link	Alm	Stat
MGTSLINK	LM	SysB
	<p>Meaning: The system displays all links with a link alarm status code. In this example, MGTSLINK is the link identifier, LM is the alarm status code, and SysB is the link state.</p> <p>Action: None</p>	
C7Linkset	Alm	Stat
MGTSLKSET	LKM	SysB

DISALM (continued)

Command responses (Sheet 2 of 4)

Responses for the DISALM command		
MAP output	Meaning and action	
	<p>Meaning: The system displays all linksets with a linkset alarm status code. In this example, MGTSLKSET is the linkset common language location identifier (CLLI), LKM is the alarm status code, and SysB is the linkset state.</p> <p>Action: None</p>	
C7Routeset	Alm	Stat
MGTSRTESET	RSC	SysB
	<p>Meaning: The system displays all routesets with a routeset alarm status code. In this example, MGTSRTESET is the routeset CLLI, RSC is the alarm status code, and SysB is the routeset state.</p> <p>Action: None</p>	
C7Routeset	Alm	Stat
<routeset_clli>	<alm>	<stat>
C7Linkset	Alm	Stat
<linkset_clli>	<alm>	<stat>
C7Link	Alm	Stat
<link_name>	<alm>	<stat>
Point Code	Alm	Stat
<pointcode_clli>	<alm>	<stat>
NO alm ALARMS		
Subsystem	Alm	Stat
<subsystem_name>	<alm>	<stat>
NO alm ALARMS		
NO alm ALARMS		
NO SEAS ALARMS		

DISALM (continued)

Command responses (Sheet 3 of 4)

Responses for the DISALM command							
MAP output	Meaning and action						
	<p>Meaning: The system displays all linksets and routesets causing alarms and names all alarm types that are not in effect. For each alarm, the system supplies the identification of the site of the alarm, the alarm type replaces , and the status of the function experiencing the alarm replaces . Note that the status of SEAS alarms is given if the SEAS is resident in the software.</p> <p>Action: None</p> <p>LKC alarm status is not applicable for CCS7.</p>						
	<p>Meaning: The proper alarm status was not entered with the command.</p> <p>Action: Enter the proper alarm status with the command in CCS7 level.</p>						
Point Code MGTSRTESET	<table> <tr> <td>Alm</td> <td>Stat</td> </tr> <tr> <td>PCC</td> <td>SysB</td> </tr> </table> <p>Meaning: The system displays all point codes with a point code alarm status code. In this example, MGTSRTESET is the routeset CLLI, PCC is the alarm status code, and SysB is the routeset state.</p> <p>Action: None</p>	Alm	Stat	PCC	SysB		
Alm	Stat						
PCC	SysB						
Subsystem MGTSRTESET NETRAG	<table> <tr> <td>Alm</td> <td>Stat</td> </tr> <tr> <td>ACCS</td> <td>SysB</td> </tr> <tr> <td>SSC</td> <td>SysB</td> </tr> </table> <p>Meaning: The system displays all subsystems with an alarm status (code SSC). In this example, MGTSRTESET is an alphanumeric code defining the point code CLLI, ACCS and NETRAG are the subsystems, and SysB is the subsystem state. A subsystem without a point code CLLI is a local subsystem.</p> <p>Action: None</p>	Alm	Stat	ACCS	SysB	SSC	SysB
Alm	Stat						
ACCS	SysB						
SSC	SysB						
No IMG, IMGC alarm	<p>Meaning: Alarms IMG and IMGC are not present on the switch. This response will appear if parameters IMG, IMGC, or ALL are specified in the command, and no IMG or IMGC alarms exist on the switch.</p> <p>Action: None</p>						
No , alarm							

DISALM (end)

Command responses (Sheet 4 of 4)

Responses for the DISALM command	
MAP output	Meaning and action
	<p>Meaning: The alarm specified is not present on the switch. This response will appear if one of parameters IMG_C and IMG_M are specified, and the specified alarm does not exist on the switch.</p> <p>Action: None</p>
Auto Imaging alarm:	<p>Meaning: An auto-imaging alarm exists on the switch.</p> <p>Action: Manually dump the LIU7, multiple link interface unit (MLIU), or HLIU using command DUMP_MANUAL at the C7DUMPCI MAP level.</p>

QUIT**Command**

QUIT

Sublevel

MAPCI;MTC;CCS;CCS7

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0 to 6. However, the system cannot accept a level number higher than the number of the current level.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p><i>MAP response:</i></p> <p>The display changes to the display of a higher level menu.</p> <p>Explanation: The CCS7 level has changed to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
<pre>CI:</pre>	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
<pre>QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1</pre>	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.</p> <p>Action: Reenter the command using an appropriate level number.</p>
<p>The system replaces the CCS7 level menu with a menu that is two or more levels higher.</p>	<p>Meaning: You entered the quit command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
<p>The system replaces the display of the CCS7 level with the display of the next higher MAP level.</p>	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

SCCPLOC

Command

SCCPLOC

Sublevel

MAPCI;MTC;CCS;CCS7

Function

Use the SCCPLOC command to display the local point code MAP level. Local point codes that are posted are displayed.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the SCCPLOC command	
>SCCPLOC	
<i>MAP response:</i>	
C7 SCCP LOCAL	111111 11112222 22222233
SUBSYSTEM STATE	01234567 89012345 67890123 45678901
Explanation: The SCCPLOC level is displayed.	

SCCPLOC (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the SCCPLOC command	
MAP output	Meaning and action
The menu changes to the SCCPLOC menu, and the following headers are added to the display:	
<pre>C7 SCCP LOCAL 111111 11112222 22222233 SUBSYSTEM STATE 01234567 89012345 67890123 45678901</pre>	
Meaning: The SCCPLOC level is displayed.	
Action: None	

SCCPRPC

Command

SCCPRPC

Sublevel

MAPCI;MTC;CCS;CCS7

Function

Use the SCCPRPC command to access the SCCP remote point code (RPC) MAP level. Remote point codes that are still posted are displayed.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the SCCPRPC command
<pre>>SCCPRPC MAP response: C7 SCCP REMOTE PC Point Code State Number of SS Explanation: The RPC headings appear on the display.</pre>

SCCPRPC (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the SCCPRPC command				
MAP output	Meaning and action			
The menu changes to the SCCPRPC level menu, and the following headings are added to the display:				
C7	SCCP Point	REMOTE Code	PC State	Number of SS
Meaning: The SCCPRPC level is displayed.				
Action: None				

4 C7BERT level commands

C7BERT menu

Use the C7BERT level of the MAP to evaluate the performance of a CCS7 signaling link before putting it into service or during fault isolation activities. A CCS7 bit error rate test (C7BERT) repeatedly transmits a 2047-bit pseudorandom pattern and subsequently checks the pattern to verify that no bit errors have occurred.

The following figure shows the C7BERT menu and status display.

Figure 4-1 C7BERT MAP level menu

```

      CM      MS      IOD      Net      PM      CCS      Trks      Ext      APPL
      .       .       .       .       .       .       .       .       .

C7BERT          CCS7
0 Quit
2              Linkset
3              Traf Sync
4 Start_      LK Stat Stat Resource Stat Physical Access Stat Action
5 Stop_
6 Query_
7 Report_
8 SetStop_    C7BERT:
9 InjErr
10
11 LFSLoop_
12
13 PMLoop_
14 CARLoop
15
16
17
18

```

Accessing the C7BERT level

To access the C7BERT level, enter the following command from the CI MAP level:

>MAPCI;MTC;CCS;CCS7;C7LKSET;C7BERT

and press the Enter key.

C7BERT commands

This chapter describes commands available at the C7BERT level of the MAP display. The commands are arranged in alphabetical order. The following C7BERT commands are described in this chapter:

- CARLOOP
- INJERR
- LFSLOOP
- PMLOOP
- QUERY
- QUIT
- REPORT
- SETSTOP
- START
- STOP

CARLOOP

Command

CARLOOP

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET;C7BERT

Function

Use the CARLOOP command to activate a DS-1 remote line or payload loopback at the far-end paddle board.

Usage notes

Do not use CARLOOP loopback test for high-speed links (HSL) connected to an asynchronous transfer mode (ATM) switch. CARLOOP test for HSLs is only valid over a direct connection.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

CARLOOP command parameters and variables	
Command	Parameters and variables
CARLOOP	action link_number loopback_type
Item	Description
action	This variable starts, stops, or queries the status of the loopback. The values are START, STOP, or STATUS
link_number	This variable specifies the link for the loopback. The range is 0 to 15
loopback_type	This variable specifies type of loopback. R specifies a remote line loopback. P specifies a payload loopback.

CARLOOP (continued)

Usage examples

The following table provides examples of the command.

Command example

Example of the CARLOOP command
<pre>>CARLOOP START 0 R</pre> <p>where</p> <p>START is the action</p> <p>0 is the link_number</p> <p>R is the remote line loopback_type</p> <p><i>MAP response:</i></p> <pre>Link 0: DS-1 ESF Loop ON complete Carrier Line Loopback at far end Paddle Board</pre> <p>Explanation This is a typical response to the CARLOOP command.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the CARLOOP command	
MAP output	Meaning and action
<pre>Link 0: DS-1 ESF Loop ON complete Carrier Line Loopback at far end Paddle Board</pre>	<p>Meaning: Remote line loopback is active</p> <p>Action: None</p>
<pre>Link 0: DS-1 ESF Loop ON complete Carrier Payload Loopback at far end Paddle Board</pre>	<p>Meaning: Remote payload loopback is active</p> <p>Action: None</p>
<pre>Link 0: DS-1 ESF Loop OFF complete</pre>	

CARLOOP (end)**Command responses (Sheet 2 of 2)**

Responses for the CARLOOP command	
MAP output	Meaning and action
	<p>Meaning: Loopack has been stopped</p> <p>Action: None</p>
Link 0: Failed.....Unable to establish loopback at far-end.	<p>Meaning: The loopback did not activate at the far-end paddle board.</p> <p>Action: Enable the loopback at the far-end using the LOOPBACK command. Repeat the CARLOOP command.</p>
Link 0: Failed.....Unable to release loopback at far-end.	<p>Meaning: The remote loopback did not deactivate at the far-end paddle board.</p> <p>Action: Enable the loopback at the far-end using the LOOPBACK command. Repeat the CARLOOP command.</p>

INJERR

Command

INJERR

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET;C7BERT

Function

Use the INJERR command to insert a single bit error on the specified link under test.

Usage notes

The following restrictions and limitations apply to the INJERR command:

- The link selected must have a BERT session in progress.
- You should note the current number of received bit errors before invoking this command.
- The START command will not allow the operating company personnel to start BERT unless the associated link is manually busy or deactivated.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

INJERR command parameters and variables	
Command	Parameters and variables
INJERR	link_number
Item	Description
link number	This variable indicates the link on which to insert the error. Its valid entires are 0 to 15

INJERR (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the INJERR command
<pre>>INJERR 0</pre> <p>where</p> <p>0 is the link number on which you want to insert the error</p> <p><i>MAP response:</i></p> <pre>Size of the Posted Set = 1 injerr 0 Link 0: INJECT ERROR completed</pre> <p>Explanation The command was successful; the error was injected on link 0.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the INJERR command	
MAP output	Meaning and action
Undefined command <COMMAND>	<p>Meaning: The command was entered incorrectly.</p> <p>Action: Enter the command again.</p>

LFSLOOP

Command

LFSLOOP

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET;C7BERT

Function

Use the LFSLOOP command to invoke or remove latching or nonlatching loopback on the specified network element.

Usage notes

The LFSLOOP command has the following limits and restrictions:

- The system does not provide this command unless the Link Fault Sectionalization feature (SOC feature TEL00007) is on the node.
- This command will not proceed if the CCS7 bit error rate test (C7BERT) currently runs on the specified link.
- The NONLATCH option is only valid for the office channel unit dataport (OCUDP), data service unit (DSU), and channel service unit (CSU).
- The LFSLOOP command will not allow operating company personnel to invoke a loopback request on an activated link.

LFSLOOP (continued)**Command parameters and variables**

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

LFSLOOP command parameters and variables	
Command	Parameters and variables
LFSLOOP	START link_no CSU LATCH occurrence DS0DP NOLATCH DSU OCUDP SPARE1 SPARE2 SPARE3 SPARE4 STOP link_no STATUS link_no
Item	Description
CSU	This parameter selects a CSU as the element type the loopback request will start on.
DS0DP	This parameter selects a DS0DP as the element type the loopback request will start on.
DSU	This parameter selects a DSU as the element type the loopback request will start on.
LATCH	This parameter indicates the loopback must be latched.
link_no	This variable indicates the link on which to invoke the loopback request.
NOLATCH	This parameter indicates the loopback must not latch.
occurrence	This variable indicates the occurrence of a given network element type, where more than one in tandem occurs. The range of the variable is 1 to 16.
OCUDP	This parameter selects a OCUDP as the element type the loopback request will start on.
SPARE1	This parameter selects spare 1 as the element type the loopback request will start on.

LFSLOOP (continued)

Parameters and variables (Sheet 2 of 2)

LFSLOOP command parameters and variables	
Command	Parameters and variables
SPARE2	This parameter selects spare 2 as the element type the loopback request will start on.
SPARE3	This parameter selects spare 3 as the element type the loopback request will start on.
SPARE4	This parameter selects spare 4 as the element type the loopback request will start on.
START	This parameter causes a loopback to start on the specified link, element type, loopback type, or occurrence.
STATUS	This parameter indicates if a loopback is currently active for the specified link.
STOP	This parameter stops a loopback applied to the specified link.

Usage examples

The following table provides examples of the LFSLOOP command.

Command example (Sheet 1 of 2)

Example of the LFSLOOP command
<pre>>LFSLOOP START 0 CSU NONLATCH 1</pre> <p><i>where</i></p> <p>0 is the link_no</p> <p>1 is the occurrence</p>

LFSLOOP (continued)**Command example (Sheet 2 of 2)**

Example of the LFSLOOP command
<p><i>MAP response:</i></p> <pre>LFSLOOP 0 CSU nonlatch 1 Link 0: LFS ON complete Looped back at element 1.</pre> <p>Explanation: The specified network element is in loopback.</p> <p>>LFSLOOP START 0 DS0DP LATCH 8</p> <p><i>where</i></p> <p>0 is the link_no</p> <p>8 is the occurrence</p> <p><i>MAP response:</i></p> <pre>lfsloop start 0 ds0dp latch 8 Link 0: LFS ON complete Looped back at element 8.</pre>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 4)

Responses for the LFSLOOP command	
MAP output	Meaning and action
Failed - Link state invalid for lfsloop.	Link must be ManB and DAct. Meaning: Do not attempt a link fault sectionalization loopback on a link that is not manual busy and deactivated. Action: Manually busy and deactivate force the link, if the link requires the loopback.
Failed - LIU in wrong state for maintenance.	Must be in InSv or ISTb. Meaning: The selected CCS7 link interface unit (LIU7) is not in service. Action: Make sure that the LIU7 is back in service before invoking the loopback.
Failed - LIU is in a LIS or FLIS configuration.	

LFSLOOP (continued)

Command responses (Sheet 2 of 4)

Responses for the LFSLOOP command	
MAP output	Meaning and action
	<p>Meaning: Link fault sectionalization is not supported for LIU7s on link interface shelves (LIS) or fiberized LISs (FLIS).</p> <p>Action: There is no action required.</p>
Failed - PMLLOOP (Local|Remote|Enable) is active.	<p>Meaning: A loopback has already been applied by the operating company personnel from the PM level of the MAP.</p> <p>Action: Manually release the loopback on the PM level of the MAP. Use the PMLLOOP OFF command to release a local loopback.</p>
Failed - Software problem - Check for logs.	<p>Recommend LIU restart.</p> <p>Meaning: The internal damage to STP software occurred because the command DEACT link_no FORCE was not used to deactivate the link before attempting LFS or BERT.</p> <p>Action: Attempt to recover the link by busying the LIU7, performing a PMRESET, and returning the LIU7 to service.</p>
Link nn: C7BERT Results: Run time: 33 Sec. Tx Frames: 1234 Rx Frames: 123 RX Bit Errors: 0232 BER: 1E-5	<p>Meaning: This response is the periodic MAP display for C7BERT results. Some fields are not shown here, including system reports when C7BERT stops or queries. BER shows the bit error rate of the link. Specifying the screen option for the report command when C7BERT starts or stops will generate the BER.</p> <p>Action: Use the periodic screen display to judge the quality of the link when you do not perform a query or stop.</p>
Link nn: Element mm has gone into loopback.	<p>Meaning: The command was successful. The specified network element is in loopback.</p> <p>Action: None</p>
lfsloop start nn csu nonlatch 1 Link nn: LFS ON complete Looped back at element 1.	<p>Meaning: The attempt to start a non-latching loopback was successful.</p> <p>Action: Run the C7BERT to verify datapath integrity.</p>

LFSLOOP (continued)**Command responses (Sheet 3 of 4)**

Responses for the LFSLOOP command	
MAP output	Meaning and action
<pre>lfsloop start nn csu nonlatch 1 Link nn: Has not gone into loopback Link nn: LFS OFF complete</pre>	<p>Meaning: The command was not successful in a non-latching mode because the NT9X78DB card did not receive any confirmation data. There may be a problem with the specified network element.</p> <p>Action: Attempt to start latching loopback on the element or use a physical loop (for example, patch cord) to loop back the datapath at the element. Run C7BERT to verify the datapath accuracy.</p>
<pre>lfsloop start nn csu nonlatch 1 Link nn: LFS ON complete Looped back at element 1. WARNING: Physical Loop may exist as confirmation byte not received</pre>	<p>Meaning: The NT9X78DB card did not receive the confirmation byte. The card received the channel loopback codes it sent out. There are two possible explanations: a physical loop exists in the datapath or the network element did not return the expected confirmation byte.</p> <p>Action: Run the C7BERT to verify that the loopback exists. Errors during the test may mean that there is no loop on the datapath. No errors (or a small number of errors) during the test means that a loop exists.</p>
<pre>lfsloop start nn csu nonlatch 1 Link nn: LFS ON complete LFS non-latching sequence initiated at element 1 Run C7bert to verify loopback at element x.</pre>	<p>Meaning: The NT9X78DA card received the channel loopback codes it sent out on the link. There are two possible explanations: a physical loop exists in the datapath or the network element did not return the expected confirmation byte.</p> <p>Action: Run the C7BERT to verify that the loopback exists. Errors during the test may mean that there is no loop on the datapath. No errors (or a small number of errors) during the test means that a loop exists.</p>
<pre>lfsloop stop nn Link nn: Has not gone out of loopback.</pre>	

LFSLOOP (end)

Command responses (Sheet 4 of 4)

Responses for the LFSLOOP command	
MAP output	Meaning and action
	<p>Meaning: The attempt to clear a loopback in latching mode failed. There are two possible explanations of this response:</p> <ol style="list-style-type: none"> 1. The attempt to clear the loopback was successful, but the NT9X78DB card continued to receive transition-in-progress (TIP) codes after 2 s of attempting to clear the loopback. 2. The attempt failed, which means that the remote loopback element failed to release the loopback. <p>Action: Run C7BERT to check if the attempt to clear loopback was successful. If the test reports errors, the loopback does not exist. If the test does not report errors, a loop remains in the datapath. The loopback must be manually removed at the remote end.</p>
Link nn: Has not gone into loopback.	<p>Element mm has not responded.</p> <p>Meaning: Do not attempt a link fault sectionalization on a network element that cannot communicate with the CCS7 link that generated the control codes.</p> <p>Action: Invoke external correcting action to determine the cause of communication loss. When the transmission path breaks completely or has a very high error rate, loss of communication occurs. The problem can be localized to one segment between two network elements if the next-network element completes link fault sectionalization correctly.</p>
Link nn: LFS is active <mm>	<p>Element Type: <Type> Occurrence: Latch Type: <latch/nonlatch></p> <p>Meaning: This response indicates the state of an applied loopback, in response to the LFSLOOP STATUS command.</p> <p>Action: There is no action required.</p>
PM not equipped with 9X78DA or 9X78DB.	<p>Meaning: Do not attempt link fault sectionalization, through the LFSLOOP command, on a link that is not equipped with an NT9X78DA or NT9X78DB.</p> <p>Action: If you require link fault sectionalization on this link, install an NT9X78DA or the NT9X78DB on the link. The only other option is to use an external Test Tool to generate the loopback code sequence.</p>

PMLOOP**Command**

PMLOOP

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET;C7BERT

Function

Use the PMLOOP command to add or remove the loopback on the NT9X78 card. This is the same command as available at the PM local loopback level.

Usage notes

The PMLOOP command has the following limitations and restrictions:

- This command will be rejected if bit error rate test (BERT) is running, if any other kind of loopback is active, or if the Link Fault Sectionalization (LFS) feature is active.
- The PMLOOP command will not allow the operating company personnel to invoke a loopback request on an active link.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

PMLOOP command parameters and variables	
Command	Parameters and variables
PMLOOP	LOCON link_no LOCOFF RMTON RMTOFF Description
LOCON	This parameter turns on local loopback for the specified link.
LOCOFF	This parameter turns off local loopback on for the specified link
RMTON	This parameter turns on local loopback for the specified link.

PMLOOP (continued)

Parameters and variables (Sheet 2 of 2)

PMLOOP command parameters and variables	
Command	Parameters and variables
RMOFF	This parameter turns off remote loopback for the specified link.
link_no	This variable specifies the link on which loopback action is to take place. Its valid entries are 0 to 15.

Usage example

The following table provides an example of the command.

Command example

Example of the PMLOOP command
<pre>>PMLOOP RMTON 0</pre> <p><i>where</i></p> <p>0 is the link_no</p> <p><i>MAP response:</i></p> <pre>Size of the Posted Set = 1 pmloop rmtton 0 Link 0: Loopback Remote on completed.</pre> <p>Explanation: Remote loopback on link number 0 is turned on.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 3)

Responses for the PMLOOP command	
MAP output	Meaning and action
Failed - Link state invalid for lfsloop. Link must be ManB and DAct.	<p>Meaning: A link fault sectionalization loopback has been attempted on a link which is currently non in manual busy state and deactivated.</p> <p>Action: Manually busy and deactivate the link, if the link requires the loopback.</p>
Failed - LIU in wrong state for maintenance. Must be in InSv or ISTb.	

PMLOOP (continued)**Command responses (Sheet 2 of 3)**

Responses for the PMLOOP command	
MAP output	Meaning and action
	<p>Meaning: The selected LIU is not in service.</p> <p>Action: Ensure that the LIU is brought back in service before invoking the loopback.</p>
Failed - LIU is in a LIS or FLIS configuration.	<p>Meaning: Link fault sectionalization is not supported for LIS or FLIS based LIUs.</p> <p>Action: None</p>
Failed - PMLOOP (Local|Remote|Enable) is active.	<p>Meaning: A loopback has already been applied by the craftsperson from the PM level of the MAP before attempting a LFS loopback.</p> <p>Action: The craftsperson must manually release the loopback on the PM level of the MAP. If the loopback is of type local, then this can be released using the pmloop off command.</p>
Failed - Software problem - Check for logs.	<p>Recommend LIU restart.</p> <p>Meaning: Something internal to the STP software has become corrupted. There are also two scenarios which could cause this.</p> <ol style="list-style-type: none"> 1. In deactivating the link prior to attempting LFS or BERT, the command DeAct force was not used. 2. A SWACT (ONP) was executed in BCS35 (35-35 or 35-36) with BERT or LFS running on the link. <p>Action: Attempt to recover by busing the LIU, performing a PMRESET, and RST the LIU.</p>
Link nn: C7BERT Results: Run time: 33 Sec. Tx Frames: 1234 Rx Frames: 123RX Bit Errors: 0232 BER: 1E-5	<p>Meaning: This is the format of the periodic-repetition C7BERT result, sent to the MAP. Some of the existing fields, which are reported when C7BERT is stopped or queried, are not included here. A new measurement is BER, which is the bit error rate of the link. This is the result of specifying the screen option for the report command when C7BERT is started or stopped.</p> <p>Action: Use the periodic screen display to judge the quality of the link without having to perform a query or stop.</p>
Link nn: Element mm has gone into loopback.	

PMLOOP (end)

Command responses (Sheet 3 of 3)

Responses for the PMLOOP command	
MAP output	Meaning and action
	<p>Meaning: A successful loopback has been applied to the specified Network Element.</p> <p>Action: If the loopback type was non-latching, this response is sent out regardless of whether the particular network element actually went into loopback. The craftsperson should now invoke a BERT test on the specified link to verify correct loopback action or physically check the hardware (LED). It should be noted that some network elements perform bit shifting on the looped back data. The BERT test will fail in this instance.</p>
Link nn: Has not gone into loopback.	Element mm has not responded.
	<p>Meaning: Link fault sectionalization has been attempted on a Network Element which cannot communicate with the CCS7 link which generated the control codes.</p> <p>Action: The craftsperson must invoke external corrective action to determine the cause of the loss of communication. Generally this is the case when the transmission path is completely broken or has a very high error-rate. If the next-closest Network Element has successfully completed link fault sectionalization, then the location of the problem will have been localized to one segment between two Network Elements.</p>
Link nn: LFS is active <MM>	Element Type: <Type> Latch Type: <latch/nonlatch> Occurrence:
	<p>Meaning: Indicates the state of an applied loopback, in response to the loopback status command.</p> <p>Action: None</p>
PM not equipped with 9X78DA.	
	<p>Meaning: Link fault sectionalization, via the lfsloop command, has been attempted on a link which is not equipped with an NT9X78DA. The same reply will also result for the inj_error command.</p> <p>Action: If you require link fault sectionalization on this link, then an NT9X78DA must be installed on that link. The only other option is to use an external Test Tool to generate the loopback code sequence.</p>

QUERY**Command**

QUERY

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET;C7BERT

Function

Use the QUERY command to check on the progress of a currently running C7BERT.

Usage notes

The QUERY command has the following restrictions and limitations:

- The QUERY command cannot be executed on a C7BERT if an automatic query has already been requested.
- Before issuing the QUERY command, a test must be active on the specified link or links.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

Query command parameters and variables	
Command	Parameters and variables
QUERY	<u>ALL</u> PR link
Parameters and variables	Description
<u>ALL</u>	This parameter specifies that all links in the posted linkset running a C7BERT test are to be queried.
link	This variable specifies the link number to be queried. The range is 0 to 15.
PR	This parameter sends the query results (CCS190 log) to a printer. The results are also displayed on the MAP screen.

QUERY (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERY command	
<pre>>QUERY ALL</pre>	
<p><i>MAP response:</i></p>	
LINK nn:	C7BERT Query
Run Time:	18
Err Free Secs:	18
Tx Frames:	27698
Rx Sync Errs:	0
Rx Bad Frames:	0
Rx Frames:	27691
Rx Bit Errors:	0
Rx Bits:	4215744
<p>Explanation: All links in the linkset with C7BERT active are displayed.</p>	

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 3)

Responses for the QUERY command	
MAP output	Meaning and action
<pre>LINK nn: C7BERT Query Run Time : 18 Err Free Secs: 18 Tx Frames: 27698 Rx Sync Errs: 0 Rx Bad Frames: 0 Rx Frames: 27691 Rx Bit Errors: 0 Rx Bits : 4215744</pre>	<p>Meaning: The C7BERT test has been successfully queried on the specified link. A snapshot of the statistics of the test appear on the screen, including the test status and the start and stop times. If parameter pr was specified, a log report of the statistics is printed.</p> <p>Action: The C7BERT test remains active. The test statistics are sent to the log system if parameter pr was specified.</p>

QUERY (continued)**Command responses (Sheet 2 of 3)**

Responses for the QUERY command	
MAP output	Meaning and action
LINK <nn>: FAILED, AUTOMATIC QUERY REPORTING IS ACTIVE	<p>Meaning: Automatic query has already been requested.</p> <p>Action: Use the report command to cancel the automatic query.</p>
LINK <nn>: FAILED, C7BERT IS NOT ACTIVE ON THIS LINK	<p>Meaning: There is no C7BERT test running.</p> <p>Action: Use the start command to start a C7BERT test.</p>
LINK <nn>: FAILED, LINK STATE INVALID FOR THIS REQUEST	<p>Meaning: The link is not in the ManB BERT state.</p> <p>Action: Access the C7LKSET level to put the link in the ManB state or start a C7BERT test.</p>
LINK <nn>: FAILED, LIU IN WRONG STATE FOR MAINTENANCE	<p>Meaning: The LIU is not in the in-service state.</p> <p>Note: This response applies only to LIU-based links, that is, STPs.</p> <p>Action: Return the LIU to service from the PM level of the MAP.</p>
LINK <nn>: FAILED, LIU MAINTENANCE IN PROGRESS	<p>Meaning: Another maintenance activity is already in progress.</p> <p>Note: This response applies only to LIU-based links, that is, STPs.</p> <p>Action: Reenter the command later. If the problem persists, abort the maintenance and force the LIU into the required state.</p>
LINK <nn>: FAILED, NO REPLY FROM LIU MAINTENANCE	<p>Meaning: A request to LIU maintenance did not receive a reply because of software problems.</p> <p>Action: Ensure that the LIU is in service.</p>
LINK <nn>: FAILED, OTHER C7BERT COMMAND IN PROGRESS	<p>Meaning: A C7BERT command is already in progress.</p> <p>Action: Reenter the command later.</p>

QUERY (end)

Command responses (Sheet 3 of 3)

Responses for the QUERY command	
MAP output	Meaning and action
LINK <nn>: FAILED, REQUEST ABORTED BY AUTONOMOUS LIU RESTART	<p>Meaning: There has likely been a hardware failure.</p> <p>Note: This response applies only to LIU-based links, that is, STPs.</p> <p>Action: Wait until the hardware recovers or manually try to recover it.</p>
LINK <nn>: FAILED, REQUEST ABORTED BY LIU CI	<p>Meaning: Another command has been entered from a different MAP.</p> <p>Note: This response applies only to LIU-based links, that is, STPs.</p> <p>Action: Reenter the command later. If the problem persists, abort the maintenance and force the LIU into the required state.</p>
LINK <nn>: FAILED, REQUEST ABORTED BY LIU OPERATIONAL FAULT	<p>Meaning: There has likely been a hardware failure.</p> <p>Note: This response applies only to LIU-based links, that is, STPs.</p> <p>Action: Wait until the hardware recovers or manually try to recover it.</p>
LINK <nn>: FAILED, SOFTWARE PROBLEM - CHECK FOR LOGS	<p>Meaning: An unexpected or unknown error occurred.</p> <p>Action: Contact the next level of support.</p>
LINK <nn>: FAILED, UNABLE TO SEND REQUEST TO ST	<p>Meaning: There is no communication between the collector card and the MSB because of a hardware or software fault.</p> <p>Action: Verify that the appropriate hardware is in service. If the hardware is in service, it is a software problem. Contact the next level of support.</p>

QUIT**Command**

QUIT

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET;C7BERT

Function

Use the QUIT command to exit from the current menu level, and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0 to 6. However, the system cannot accept a level number higher than the number of the current level.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p><i>MAP response:</i></p> <p>The display changes to the display of a higher level menu</p> <p>Explanation: The C7BERT level has changed to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the Quit command	
MAP output	Meaning and action
CI :	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.</p> <p>Action: Reenter the command using an appropriate level number.</p>
The system replaces the C7BERT level menu with a menu that is two or more levels higher.	<p>Meaning: You entered the quit command with an <i>n</i> variable value of 2 or more or an <i>incname</i> variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
The system replaces the display of the C7BERT level with the display of the next higher MAP level.	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

REPORT

Command

REPORT

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET;C7BERT

Function

Use the REPORT command to request a periodic automatic query of a C7BERT that is being conducted on a link. The statistics are routed to the log system. The results can be sent to a terminal, or the log system can be requested to send the results to a printer.

Usage notes

The REPORT command has the following restrictions and limitations:

- A test must be active on the specified link or links.
- When entering this command with the ON parameter, queries continue until either the command is entered again with the OFF parameter, or the test is stopped.
- If the one hour reference interval is not evenly divisible by the specified interval, the resultant interval is rounded to the lowest whole number.
- With the report command active, the QUERY command is not accepted.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variable (Sheet 1 of 2)

REPORT command parameters and variables	
Command	Parameters and variables
REPORT	link_no OFF ON interval STATUS
Item	Description
interval	This variable specifies the number of times each hour that a C7BERT statistics log is generated. The range is 0 to 12.
link_no	This variable specifies the number of the link number to be queried. The range is 0 to 15.

REPORT (continued)

Parameters and variable (Sheet 2 of 2)

REPORT command parameters and variables	
Command	Parameters and variables
OFF	This parameter turns the periodic reporting off
ON	This parameter turns the periodic reporting on. When the on parameter is specified, the system displays a prompt for a value for the parameter interval.
STATUS	This parameter displays the current reporting interval, if there is one.

Usage examples

The following table provides an example of the command.

Command example

Example of the REPORT command
<pre>>REPORT 0 ON 5</pre> <p><i>where</i></p> <pre>0 is the link_no 5 is the interval</pre> <p><i>MAP response:</i></p> <p>None if there are no problems</p> <p>Explanation: A log is produced from link 0 every 12 min or five times each hour.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the REPORT command	
MAP output	Meaning and action
LINK <nn>: FAILED C7BERT IS NOT ACTIVE ON THIS LINK	<p>Meaning: There is no C7BERT test running.</p> <p>Action: Enter the start command to begin a C7BERT test.</p>
LINK <nn> : FAILED REPORT INTERVAL ALREADY SET	

REPORT (end)

Command responses (Sheet 2 of 2)

Responses for the REPORT command	
MAP output	Meaning and action
	<p>Meaning: There is already a report interval set.</p> <p>Action: None</p>
LINK <nn> : FAILED UNABLE TO START REPORT INTERVAL TIMER	<p>Meaning: There is a software problem with the timer system.</p> <p>Action: Reenter the report command. If the problem persists, check the logs and contact the next level of support.</p>

SETSTOP

Command

SETSTOP

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET;C7BERT

Function

Use the SETSTOP command to set an automatic stop time for a C7BERT.

Usage notes

The SETSTOP command has the following limitations and restrictions:

- The SETSTOP command can be used to set a setstop time for up to one week from the current time.
- The STOP command can override the SETSTOP command by stopping the test immediately.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

SETSTOP command parameters and variables					
Command	Parameters and variables				
SETSTOP	link_no	SET	day	hour	min
		CLEAR			
		STATUS			
Item	Description				
CLEAR	This parameter clears a previous setstop time.				
day	This variable sets the day of the setstop time. The range is mon, tue, wed, thu, fri, sat, sun.				
link_no	This variable specifies the link number on which a C7BERT stop time is to be set. The range is 0-15.				
min	This variable sets the minute of the setstop time. The range is 0 to 59.				
hour	This variable sets the hour of the setstop time. The range is 0 to 23.				

SETSTOP (continued)**Parameters and variables (Sheet 2 of 2)**

SETSTOP command parameters and variables	
Command	Parameters and variables
SET	This parameter defines a setstop time.
STATUS	This parameter displays the current setstop time, if there is one.

Usage examples

The following table provides an example of the command.

Command example

Example of the SETSTOP command
<pre>>SETSTOP 0 SET MON 15 35</pre> <p><i>where</i></p> <pre>0 is the link_no mon is the value for the variable day 15 is the value for the variable hour 35 is the value for the variable min</pre> <p><i>MAP response:</i></p> <pre>Link 0: Stop time set at: 1997/10/10 15:35:00.00 MON</pre> <p>Explanation: The setstop has been set.</p>

MAP responses

The following table describes the MAP responses.

Command response (Sheet 1 of 2)

Responses for the SETSTOP command	
MAP output	Meaning and action
LINK <nn>: FAILED, C7BERT IS NOT ACTIVE ON THIS LINK	<p>Meaning: There is no C7BERT test running.</p> <p>Action: Enter the start command to begin the C7BERT test.</p>
LINK <nn>: FAILED, OTHER C7BERT COMMAND IN PROGRESS	

SETSTOP (end)

Command response (Sheet 2 of 2)

Responses for the SETSTOP command	
MAP output	Meaning and action
	<p>Meaning: A C7BERT command is already in progress.</p> <p>Action: Reenter the command later.</p> <p>LINK <nn>: FAILED, STOP TIME ALREADY SET AT: dd;hh;mm</p>
	<p>Meaning: A stop time is already set.</p> <p>Action: To clear the existing stop time, reenter the command using the clear parameter.</p> <p>LINK <nn>: FAILED, UNABLE TO SET WAKEUP MESSAGE</p>
	<p>Meaning: There is a software problem in the wakeup facility.</p> <p>Action: Reenter the command. If the problem persists, check the logs and contact the next level of support.</p> <p>LINK <nn>: STOP TIME CLEARED</p>
	<p>Meaning: The selected stop time has been cleared.</p> <p>Action: The stop time has been cleared on the specified link. The test will continue undisturbed; it now must be stopped manually using the stop command.</p> <p>LINK <nn>: STOP TIME SET = <dd>:<hh>:<mm></p>
	<p>Meaning: The selected stop time has been set, where</p> <ul style="list-style-type: none"><dd> is the day of the week (mon, tue, wed, thu, fri, sat, sun)<hh> is the hour of the day (00, 01, 02, ..., 22, 23)<mm> is the minute of the day (00, 01, ..., 58, 59) <p>Action: The selected stop time has been set. The test on the link for which the stop time has been set automatically terminates at the designated time; the test statistics are logged as a CCS190 information log.</p>

START

Command

START

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET;C7BERT

Function

Use the START command to start a C7BERT on a posted linkset.

Usage notes

The START command has the following restrictions and limitations:

- Before starting C7BERT, arrange for the physical connection, POST the link, ensure the link is manually busy, in-service, and the synchronization state is deactivated.
- Once the C7BERT is started on a link, the link cannot be brought into service to carry traffic until the test is topped, either manually or through the SETSTOP command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

START command parameters and variables	
Command	Parameters and variables
START	ALL link
Item	Description
ALL	This parameter selects all links in the posted linkset.
link	This variable specifies the link number on which a C7BERT test is to be run. The range is 0 to 15.

START (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the START command
<pre>>START 0</pre> <p><i>where</i></p> <p>0 is the link number</p> <p><i>MAP response:</i></p> <p>Link 0: C7BERT started</p> <p>Explanation: The C7BERT is started on link 0.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 4)

Responses for the START command	
MAP output	Meaning and action
LINK <nn>: FAILED, C7BERT IS ALREADY ACTIVE ON THIS LINK	<p>Meaning: A C7BERT test is already in progress on this link.</p> <p>Action: None</p>
LINK <nn>: FAILED, INVALID MTA	<p>Meaning: There is a software problem.</p> <p>Action: Contact the next level of support.</p>
LINK <nn>: FAILED, LINK STATE IS INVALID FOR C7BERT	<p>Meaning: The link is not in the ManB and DAct state.</p> <p>Action: Access the C7LKSET level to put the link in the appropriate state.</p>
LINK <nn>: FAILED, LIU IN WRONG STATE FOR MAINTENANCE	<p>Meaning: The LIU is not in the in-service state.</p> <p>Action: Place LIU in the Manual busy state from the PM level of the MAP.</p>

START (continued)**Command responses (Sheet 2 of 4)**

Responses for the START command	
MAP output	Meaning and action
LINK <nn>: FAILED, LIU MAINTENANCE IN PROGRESS	<p>Meaning: Another maintenance activity is already in progress.</p> <p>Action: Reenter the command later. If the problem persists, abort the maintenance and force the LIU into the required state.</p>
LINK <nn>: FAILED, NO COMMUNICATION WITH STDLP	<p>Meaning: The processor on the ST card failed.</p> <p>Action: Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, call the next level of support.</p>
LINK <nn>: FAILED, NO REPLY FROM LIU MAINTENANCE	<p>Meaning: There is a software problem.</p> <p>Action: Contact the next level of support.</p>
LINK <nn>: FAILED, OTHER C7BERT COMMAND IN PROGRESS	<p>Meaning: A C7BERT command is already in progress.</p> <p>Action: Reenter the command later.</p>
LINK <nn>: FAILED, POOLED RESOURCES CANNOT BE USED	<p>Meaning: The C7LINK table has been datafilled incorrectly.</p> <p>Action: Datafill the C7LINK for basic link.</p>
LINK <nn>: FAILED, REQUEST ABORTED BY AUTONOMOUS LIU RESTART	<p>Meaning: There has likely been a hardware failure.</p> <p>Action: Wait until the hardware recovers, or manually try to recover it.</p>
LINK <nn>: FAILED, REQUEST ABORTED BY LIU CI	<p>Meaning: Another command has been entered from a different MAP.</p> <p>Action: Reenter the command later. If the problem persists, abort the maintenance and force the LIU into the required state.</p>
LINK <nn>: FAILED, REQUEST ABORTED BY LIU OPERATIONAL FAULT	

START (continued)

Command responses (Sheet 3 of 4)

Responses for the START command	
MAP output	Meaning and action
	<p>Meaning: There has likely been a hardware failure.</p> <p>Action: Wait until the hardware recovers, or manually try to recover it.</p>
LINK <nn>: FAILED, SOFTWARE PROBLEM	<p>Meaning: There is a software problem.</p> <p>Action: Contact the next level of support.</p>
LINK <nn>: FAILED, STC INVALID PEC - SLOT NOT EQUIPPED WITH 6X66AC	<p>Meaning: A NT6X66AC ST is not equipped in the card slot.</p> <p>Action: Check to see if the NT6X66AC version of the ST card is in the slot. If it is, contact the next level of support.</p>
LINK <nn>: FAILED, STDLP FAILED TO RESET	<p>Meaning: The processor on the ST card failed.</p> <p>Action: Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, call the next level of support.</p>
LINK <nn>: FAILED, UNABLE TO ALLOCATE LIU	<p>Meaning: The LIU is in the wrong state or is already in use.</p> <p>Action: Change the state of the LIU, or reenter the command later.</p>
LINK <nn>: FAILED, UNABLE TO COMMUNICATE WITH MSB	<p>Meaning: The processor on the MSB card failed.</p> <p>Action: Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, contact the next level of support.</p>
LINK <nn>: FAILED, UNABLE TO CONNECT ST TO TRANSMISSION LINK	<p>Meaning: There is a hardware or software problem.</p> <p>Action: Verify that the network is in service. If it is, there is a software problem. Contact the next level of support.</p>
LINK <nn>: FAILED, UNABLE TO SEIZE ST	

START (end)**Command responses (Sheet 4 of 4)**

Responses for the START command	
MAP output	Meaning and action
	<p>Meaning: The ST is not available for use. The trunk is in the wrong state or is in use by someone else.</p> <p>Action: Verify that the trunk is idle and in the right state.</p> <p>LINK <nn>: FAILED, UNABLE TO SEIZE TRUNK</p>
	<p>Meaning: The transmission link is not available for use. The trunk is in the wrong state or is in use by someone else.</p> <p>Action: Verify that the trunk is idle and in the right state.</p> <p>LINK <nn>: FAILED, UNABLE TO SEND REQUEST TO ST</p>
	<p>Meaning: The processor on the ST card failed.</p> <p>Action: Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, call the next level of support.</p> <p>LINK <nn>: FAILED, UPDATE ROUTING FAILED</p>
	<p>Meaning: There is a software problem.</p> <p>Action: Contact the next level of support.</p>

STOP

Command

STOP

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET;C7BERT

Function

Use the STOP command to manually stop a C7BERT running the link specified from the posted linkset. The summary test statistics are displayed at the MAP screen and sent to the log system.

Usage notes

For STOP command to be valid, ensure the link is in the following states:

- link traffic state manually busy
- resource states in-service
- synchronization state deactivated

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

STOP command parameters and variables	
Command	Parameters and variables
STOP	ALL link
Item	Description
ALL	This parameter selects all links running C7BERT tests in the posted linkset.
link	This variable specifies the number of the link on which the C7BERT test is to be stopped. The range is 0 to 15.

STOP (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the STOP command	
>STOP ALL	
<i>MAP response:</i>	
Link <nn>: C7BERT stopped	
Run Time	: 18
Err Free Secs	: 18
Tx Frames	: 26798
Rx Sync Errs	: 0
Rx Bad Frames	: 0
Rx Frames	: 27691
Rx Bit Errors	: 0
Rx Bits	: 4215744
Explanation: The C7BERT is stopped on all links in the linkset with C7BERT active and display and log the summary statistics from the test.	

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 3)

Responses for the STOP command	
MAP output	Meaning and action
Link <nn>: C7BERT stopped.	
Run Time	: 18
Err Free Secs	: 18
Tx Frames	: 26798
Rx Sync Errs	: 0
Rx Bad Frames	: 0
Rx Frames	: 27691
Rx Bit Errors	: 0
Rx Bits	: 4215744
	Meaning: The C7BERT test has been successfully stopped on the specified link.
	Action: The test is terminated, and statistics are displayed and logged.

STOP (continued)

Command responses (Sheet 2 of 3)

Responses for the STOP command	
MAP output	Meaning and action
LINK <nn>: FAILED, C7BERT IS NOT ACTIVE ON THIS LINK	<p>Meaning: There is no C7BERT test running on the selected link.</p> <p>Action: Enter the start command to begin a C7BERT test.</p>
LINK <nn>: FAILED, INVALID MTA	<p>Meaning: There is a software problem.</p> <p>Action: Contact the next level of support.</p>
LINK <nn>: FAILED, LINK STATE INVALID FOR THIS REQUEST	<p>Meaning: The link is not in the ManB and DAct state.</p> <p>Action: Access the C7LKSET level to put the link in the appropriate state.</p>
LINK <nn>: FAILED, LIU IN WRONG STATE FOR MAINTENANCE	<p>Meaning: The LIU is not in the in-service state.</p> <p>Action: Return the L:IU to service at the PM LIU7n level of the MAP.</p>
LINK <nn>: FAILED, LIU MAINTENANCE IN PROGRESS	<p>Meaning: Another maintenance activity is already in progress.</p> <p>Action: Reenter the command later. If the problem persists, abort the maintenance and force the LIU into the required state.</p>
LINK <nn>: FAILED, NO COMMUNICATION WITH STDLP	<p>Meaning: The processor on the ST card failed.</p> <p>Action: Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, call the next level of support.</p>
LINK <nn>: FAILED, NO REPLY FROM LIU MAINTENANCE	<p>Meaning: There is a software problem.</p> <p>Action: Contact the next level of support.</p>
LINK <nn>: FAILED, REQUEST ABORTED BY AUTONOMOUS LIU RESTART	<p>Meaning: There has likely been a hardware failure.</p> <p>Action: Wait until the hardware recovers, or manually try to recover it.</p>

STOP (end)**Command responses (Sheet 3 of 3)**

Responses for the STOP command	
MAP output	Meaning and action
LINK <nn>: FAILED, REQUEST ABORTED BY LIU CI	<p>Meaning: Another command has been entered from a different MAP.</p> <p>Action: Reenter the command later. If the problem persists, abort the maintenance and force the LIU into the required state.</p>
LINK <nn>: FAILED, REQUEST ABORTED BY LIU OPERATIONAL FAULT	<p>Meaning: There has likely been a hardware failure.</p> <p>Action: Wait until the hardware recovers, or manually try to recover it.</p>
LINK <nn>: FAILED, SOFTWARE PROBLEM - CHECKING FOR LOGS	<p>Meaning: There is a software problem.</p> <p>Action: Contact the next level of support.</p>
LINK <nn>: FAILED, STDLP FAILED TO RESET	<p>Meaning: The processor on the ST card failed.</p> <p>Action: Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, call the next level of support.</p>
LINK <nn>: FAILED, UNABLE TO ALLOCATE LIU	<p>Meaning: The LIU is in the wrong state or is already in use.</p> <p>Action: Change the state of the LIU, or reenter the command later.</p>
LINK <nn>: FAILED, UNABLE TO COMMUNICATE WITH MSB	<p>Meaning: The processor on the MSB card failed.</p> <p>Action: Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, contact the next level of support.</p>
LINK <nn>: FAILED, UNABLE TO SEND REQUEST TO ST	<p>Meaning: The processor on the ST card failed.</p> <p>Action: Run diagnostics on the card. If diagnostics fail, replace the card. If the problem persists, call the next level of support.</p>

5 C7LKSET level commands

C7LKSET menu

Use the C7LKSET level of the MAP display to query and change the status of the links within a selected linkset.

The following figure shows the C7LKSET menu and status display for a signaling transfer point (STP) office.

Figure 5-1 C7LKSET MAP level menu

	CM	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL

C7LKSet			CCS7							
0	Quit									
2	Post_	Linkset								
3		Traf Sync								Link
4	Inh_	LK Stat	Stat	Resource	Stat	Physical	Access		Stat	Action
5	UInh									
6	Tst_									
7	Bsy_									
8	Rts_									
9	Offl_									
10	AbtDly_									
11	NextLS									
12	Next									
13	QueryCar									
14	QueryFlt									
15	QueryUsr									
16	QueryTrf									
17	Act_									
18	DeAct_									

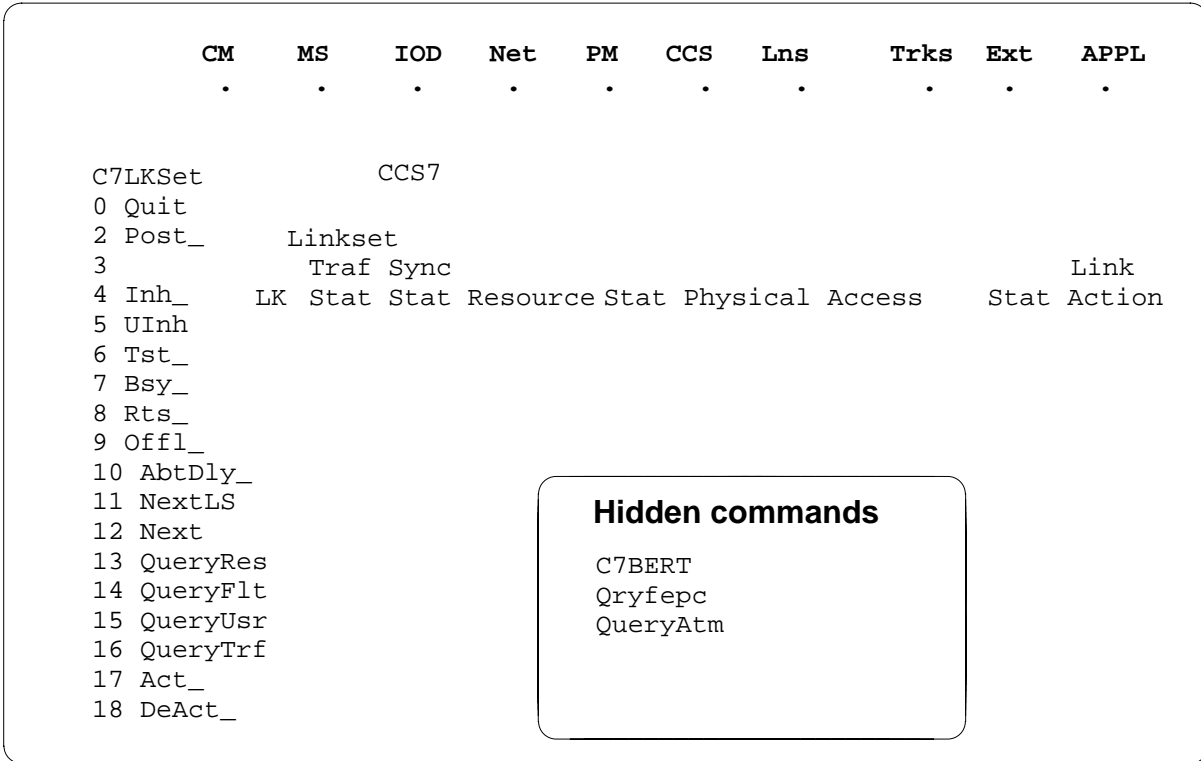
Hidden commands

C7BERT
Qryfepc
QueryAtm

Note: Hidden commands are not visible on the MAP display.

The following figure shows the C7LKSET menu and status display for a service switching point (SSP) office.

Figure 5-2 C7LKSET MAP level menu



Note: Hidden commands are not visible on the MAP display.

Accessing the C7LKSET level

To access the C7LKSET level, enter the following command from the CI MAP level:

>MAPCI;MTC;CCS;CCS7;C7LKSET

and press the Enter key.

C7LKSET commands

This chapter describes commands available at the C7LKSET level of the MAP display. The commands are arranged in alphabetical order. The following C7LKSET commands are described in this chapter:

- ABTDLY
- ACT
- BSY
- C7BERT
- DEACT

- INH
- NEXT
- NEXTLS
- OFFL
- POST
- QRYFEPC
- QUERYATM
- QUERYCAR
- QUERYFLT
- QUERYRES
- QUERYTRF
- QUERYUSR
- QUIT
- RTS
- TST
- UINH

ABTDLY

Command

ABTDLY

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the ABTDLY command to cancel the penalty delay for any delayed link in the linkset. The ABTDLY command allows the link to resynchronize immediately. Any link failing within 5 min (probation period) of synchronization is subject to a 60-s delay (penalty period) before it is allowed to resynchronize. This eliminates the possibility of multiple failures and recoveries in the same minute. The penalty period does apply to manually deactivated links.

Usage notes

Using the ABTDLY command may delay critical link recovery for about 60 s.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

ABTDLY command parameters and variables	
Command	Parameters and variables
ABTDLY	ALL link
Item	Description
ALL	This parameter returns to service all links in the posted linkset.
link	This variable specifies the number of the link to be returned to service. The range is 0 to 15. More than one link can be specified at a time.

ABTDLY (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the ABTDLY command
<pre>>ABTDLY 0</pre> <p><i>where</i></p> <p>0 is the link number</p> <p><i>MAP response:</i></p> <p>PASSED</p> <p>Explanation: The ABTDLY command was executed on link 0, which was in a delayed state.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the ABTDLY command	
MAP output	Meaning and action
LINK <nn> IS NOT DELAYED	<p>Meaning: The ABTDLY command was executed on a link or links that are not in a delayed state.</p> <p>Action: None</p>
PASSED	<p>Meaning: The ABTDLY command was executed on a link or links that are in a delayed state.</p> <p>Action: None</p>

ACT

Command

ACT

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the ACT command to synchronize an individual signaling link iwth the far-end. Issuring the ACT command causes the central control to send a message to the signaling terminal (ST). When the ST receives the message, it attempts to start communication with the far-end.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

ACT command parameters and variables	
Command	Parameters and variables
ACT	ALL <u>WAIT</u> LINK NOWAIT
Item	Description
ALL	This parameter selects all links in a posted linkset to be activated.
link	This variable specifies the selected link to be activated. Only one link or all links in a linkset can be selected. The range is 0 to 15.
NOWAIT	This parameter specifies that the user can continue to enter commands at the MAP terminal after the ACT command has been entered.
<u>WAIT</u>	This default parameter, which is never entered, specifies that the user must wait for the ACT command to be executed before other commands can be entered at the MAP terminal.

ACT (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the ACT command								
>ACT 2								
where								
2 is the link number								
MAP response								
CCIS6		CCS7		CCITT6				
2LK		1LK		*				
Link Set	OCALATOALASKA - ISTb							
	Traf	Sync	STC	Transmission	Link Action	In		
LK	Stat	stat	No	Stat	CLLI ExtrkNM	Stat	Progress	
0	InSv	Sync	2	InSv	OCALATOALAS KA	100	SZD	
1	ManB	Alnd	5	InSv	OCALATOALAS KA	101	SZD	
2	SysB	SysB	0	InSv	OCALATOALAS KA	102	SZD Prvng	
3	InSv	Sync	1	InSv	OCALATOALAS KA		SZD	
Explanation: The synchronization state of link 2 changes to Sync.								

ACT (continued)**MAP responses**

The following table describes the MAP responses.

Note: For all responses, represents the link number, with a range of 0 to 15.

Command responses (Sheet 1 of 12)

Responses for the ACT command	
MAP output	Meaning and action
IN PROGRESS	<p>Meaning: The selected link or series of links is being synchronized. If the link is in the manual busy state, the connection to the resource is made and a synchronization procedure initiated. Once the synchronization procedure is complete, this message disappears and the display shows that the link or series of links is synchronized.</p> <p>Action: None</p>
LINK <nn>: COMMAND ALREADY IN PROGRESS	<p>Meaning: The selected link is already in the process of being activated.</p> <p>Action: Repeat the command later.</p>
LINK <nn>: FAILED, ABNORMAL BSN RECEIVED	<p>Meaning: Two out of three signaling messages had an invalid backward sequence number (BSN). The routeset manager (RSMAN) attempts to resynchronize the link and sets the resource state to system busy.</p> <p>Action: Access PM maintenance to verify the resource (the resource may be faulty).</p>
LINK <nn>: FAILED, ABNORMAL FIB RECEIVED	<p>Meaning: Two out of three signaling messages had invalid forward indicator bits (FIB). The system attempts to resynchronize the link and sets the resource state to system busy.</p> <p>Action: Access PM maintenance to verify the resource (the resource may be faulty).</p>
LINK <nn>: FAILED, CHANGEORDER RECEIVED FROM FAR END	<p>Meaning: The far-end office detected signaling message failures and implemented a changeover procedure. RSMAN is transferring traffic to another link as part of the changeover procedure. When traffic has been transferred, the system sets the resource synchronization state to system busy.</p>

ACT (continued)**Command responses (Sheet 2 of 12)**

Responses for the ACT command	
MAP output	Meaning and action
	<p>Action: Contact the far-end office to determine the reason for the changeover procedure.</p> <p>LINK <nn>: FAILED, CONFIGURATION REJECTED BY ST</p> <p>Meaning: The resource does not recognize the configuration data, that is, the signaling terminal (ST) rejects the data.</p> <p>Action: Reconfigure the link by using the DEACT command to deactivate the link, then enter the ACT command again to activate the link.</p>
	<p>LINK <nn>: FAILED, CORRUPT RECEIVE BUFFER</p> <p>Meaning: The data link processor (DLP) in the resource detects an error in the receive buffer. RSMAN transfers signaling to another link, sets the resource to system busy, and generates an RX UDRFLOW or RX OVRFLOW software error report (SWERR).</p> <p>Action: Access the PM maintenance level to determine the reason for the error.</p>
	<p>LINK <nn>: FAILED, CORRUPT TRANSMIT BUFFER</p> <p>Meaning: The DLP in the resource has detected an error in its transmit buffer. RSMAN transfers signaling to another link, sets the resource to system busy, and generates a COR TX BUF SWERR.</p> <p>Action: Access the PM maintenance level to determine the reason for the error.</p>
	<p>LINK <nn>: FAILED, CORRUPT TRANSMIT BUFFER READ POINTER</p> <p>Meaning: Because of resource failures, the RSMAN cannot use the link for signaling. RSMAN transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR.</p> <p>Action: Access the PM maintenance level to determine the reason for the error.</p>
	<p>LINK <nn>: FAILED, CORRUPT RETRANSMIT BUFFER READ POINTER</p> <p>Meaning: Because of a link failure, the system cannot use the link for signaling. RSM transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR.</p> <p>Action: Access the PM maintenance level to determine the reason for the error.</p>
	<p>LINK <nn>: FAILED, DLP RECEIVE BUFFER OVERRUN</p>

ACT (continued)

Command responses (Sheet 3 of 12)

Responses for the ACT command	
MAP output	Meaning and action
	<p>Meaning: The DLP in the resource detects an error in the receive buffer. RSMAN transfers signaling to another link, sets the resource to system busy, and generates either an RX OVERRUN or RX READ ER SWERR.</p> <p>Action: Access the PM maintenance level to determine the reason for the error</p> <p>LINK <nn>: FAILED, DLP OUT OF SERVICE</p>
	<p>Meaning: The resource has been taken out-of-service because the DLP has detected too many errors in the signaling messages. RSMAN has deallocated the resource and started a test. When the resource has been returned to service, link activation is reattempted.</p> <p>Action: To start activation, return the link to service by entering the rts command.</p> <p>LINK <nn>: FAILED, EXCESSIVE DELAY OF ACKNOWLEDGEMENT</p>
	<p>Meaning: The far-end office has failed to acknowledge receipt of a message signal unit (MSU) message within a specified time.</p> <p>Action: Contact the far-end office to determine the cause of the fault.</p> <p>LINK <nn>: FAILED, EXCESSIVE ERROR RATE</p>
	<p>Meaning: The resource is receiving data with errors, or the far-end office is not activating its end of the link within 90 s of the ACT command. The system terminates the command.</p> <p>Action: Reenter the command.</p> <p>LINK <nn>: FAILED, INVALID INTERNAL ST NUMBER</p>
	<p>Meaning: The address register in the resource is corrupt, and call processing cannot seize the resource. RSMAN transfers signaling to another link, sets the resource to system busy, and generates a COR TX BUF SWERR.</p> <p>Action: Determine the resource number, then enter the resource level of PM maintenance to determine the cause of the failure.</p> <p>LINK <nn>: FAILED, INVALID LINK STATE</p>
	<p>Meaning: The link is in the wrong traffic state for activation.</p> <p>Action: Post the linkset and check the state of the link. Rectify any faults and return the link to service. Then, reenter the ACT command.</p>

ACT (continued)**Command responses (Sheet 4 of 12)**

Responses for the ACT command	
MAP output	Meaning and action
<code>LINK <nn>: Failed, link is not in MAN BUSY STATE</code>	<p>Meaning: The link was not in the manual busy state when the ACT command was entered.</p> <p>Action: Enter the bsy command to change the link state to ManB (post the linkset first if necessary). Then, re-enter the ACT command.</p>
<code>LINK <nn>: FAILED, LIU7 DLP FIFO LENGTH ERROR</code>	<p>Meaning: The link failed to synchronize because of an interface problem between the signaling terminal and the link general processor (LGP). The system continues the synchronizing procedure to recover the link. If the procedure cannot end successfully, the link is set to the SysB state.</p> <p>Action: Check log reports for additional information. Check the hardware to ensure correct operation.</p>
<code>LINK <nn>: FAILED, LIU7 DLP RECEIVE FIFO FULL</code>	<p>Meaning: The link failed to synchronize because of an interface problem between the signaling terminal and the LGP. The system continues the synchronizing procedure to recover the link. If the procedure cannot end successfully, the link is set to the SysB state.</p> <p>Action: Check log reports for additional information. Check the hardware to ensure it is operating properly.</p>
<code>LINK <nn>: FAILED, LIU7 INACCESSIBLE</code>	<p>Meaning: During the link synchronization procedure, communications between the computing module (CM) and the LIU were interrupted. The system waits for the LIU to be reconnected, then initiates a recovery procedure.</p> <p>Action: Check the log reports for additional information.</p>
<code>LINK <nn>: FAILED, LIU7 IS IN LOOPBK</code>	<p>Meaning: The link traffic is not in the InSv state, and the link activation procedure has failed because the system could not allocate an LIU. This response also appears if the LIU is in the loopback mode. The system continually tries to complete the activation procedure.</p> <p>Action: Ensure that the link is in the InSv state. If the LIU is in the loopback mode, access the LIU MAP level and remove the LIU from the loopback mode.</p>

ACT (continued)

Command responses (Sheet 5 of 12)

Responses for the ACT command	
MAP output	Meaning and action
LINK <nn>: FAILED, LIU7/ST RECEIVE ENQUEUED FAILED	<p>Meaning: The link failed to synchronize because of an interface problem between the signaling terminal and the LGP. The system continues the synchronizing procedure to recover the link. If the procedure cannot end successfully, the link is set to the SysB state.</p> <p>Action: Check the log reports for additional information. Ensure the hardware is operating properly.</p>
LINK <nn>: FAILED, LIU7/ST RECEIVE PROC UNINITIALIZED	<p>Meaning: The link failed to synchronize because the signaling terminal on the LIU link resource detected software errors. The system continues the synchronizing procedure to recover the link. If the procedure cannot end successfully, the link is set to the SysB state.</p> <p>Action: Check the log reports for additional information. Ensure the hardware is operating properly.</p>
LINK <nn>: FAILED, LIU7/ST TRANSMIT PROC UNINITIALIZED	<p>Meaning: The link failed to synchronize because the signaling terminal on the LIU link resource detected software errors. The system continues the synchronizing procedure to recover the link. If the procedure cannot end successfully, the link is set to the SysB state.</p> <p>Action: Check the log reports for additional information. Ensure the hardware is operating properly.</p>
LINK <nn>: FAILED, LOST FSN	<p>Meaning: The RSMAN could not identify the forward sequence number (FSN) and rejected the message. RSMAN sets the traffic state of the link to system busy, transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource going system busy.</p>
LINK <nn>: FAILED, NO REAL TIME IN LIU7	

ACT (continued)**Command responses (Sheet 6 of 12)**

Responses for the ACT command	
MAP output	Meaning and action
	<p>Meaning: The link fails to synchronize because the application code in the signaling terminal is occupying the computing real time for an unacceptable length of time. The system continues the synchronizing procedure to recover the link. If the procedure cannot end successfully, the link is set to the SysB state.</p> <p>Action: Check the log reports for additional information. Ensure the hardware is operating properly.</p>
LINK <nn>: FAILED, NO RESPONSE FROM MSB7	<p>Meaning: The system is unable to communicate with the MSB7. Since the MSB7 serves all the links in a linkset, there may be a system alarm with this message.</p> <p>Action: Silence the alarm (if necessary), and access the PM maintenance level to determine the reason for the MSB7 fault.</p>
LINK <nn>: FAILED, NO RESPONSE FROM ST	<p>Meaning: RSMAN is unable to seize the resource since it is in the wrong state.</p> <p>Action: Access the PM maintenance level to determine why the resource is in the wrong state.</p>
LINK <nn>: FAILED, PROVING FAILED	<p>Meaning: The link, which has reached the proving phase of an alignment procedure, cannot complete the procedure because of an excessive error rate. RSMAN sets the link state to SysB and attempts to resynchronize the link.</p> <p>Action: None</p>
LINK <nn>: FAILED, REMOTE LEVEL 2 CONGESTION	<p>Meaning: The far-end office has stayed congested too long. RSMAN sends a message to the far-end office requesting them to restrict messages, then sets the resource state to system busy.</p> <p>Action: None</p>
LINK <nn>: FAILED, RETRIEVAL BUFFER ENQUEUE FAILED	<p>Meaning: RSMAN cannot use the link for signaling because the resource failed. RSMAN transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR.</p>

ACT (continued)

Command responses (Sheet 7 of 12)

Responses for the ACT command	
MAP output	Meaning and action
	<p>Action: Access the PM maintenance level to determine the cause of the resource going system busy.</p> <p>LINK <nn>: FAILED, RETRIEVAL TRANSMIT BUFFER PROBLEM</p> <p>Meaning: The DLP in the resource has detected an error in its transmit buffer. RSMAN transfers signaling to another link, sets the resource state to system busy, and generates a COR TX BUF SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource going system busy.</p> <p>LINK <nn>: FAILED, SEQUENCE NUMBER ERROR</p> <p>Meaning: RSMAN cannot use the link for signaling because of resource failures. RSMAN transfers signaling to another link, sets the resource to system busy, and generates a RETR DIED SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource going system busy.</p> <p>LINK <nn>: FAILED, SIE RECEIVED FROM FAR END</p> <p>Meaning: The resource has received an emergency alignment status indicator (SIE) message from the far-end office on a link that is in service. Linkset management sets the link synchronizing state to system busy and attempts to resynchronize the link.</p> <p>Action: None</p> <p>LINK <nn>: FAILED, SIN RECEIVED FROM FAR END</p> <p>Meaning: The resource has received a normal alignment status indication (SIN) message from the far-end office on a link that is in service. Linkset management sets the link synchronizing state to system busy and attempts to resynchronize the link.</p> <p>Action: None</p> <p>LINK <nn>: FAILED, SIO RECEIVED FROM FAR END</p> <p>Meaning: The resource has received an out-of-alignment status indicator (SIO) message, indicating a failure, from the far-end office. Linkset management sets the link synchronizing state to system busy and attempts to resynchronize the link.</p> <p>Action: None</p>

ACT (continued)**Command responses (Sheet 8 of 12)**

Responses for the ACT command	
MAP output	Meaning and action
LINK <nn>: FAILED, SIOS RECEIVED FROM FAR END	<p>Meaning: The resource has received an out-of-service status indication, indicating a failure, from the far-end office. Linkset management sets the link synchronizing state to system busy and attempts to resynchronize the link.</p> <p>Action: Access the PM maintenance level to determine whether the resource is at fault.</p>
LINK <nn>: FAILED, ST AUDIT FAILED IN LIU7	<p>Meaning: Link synchronization failed because of a hardware or software fault. The error was detected during an audit procedure. The system attempts recovery action. Link synchronization continues to initiate until it times out; then, the system sets the link synchronizing state to system busy.</p> <p>Action: Check the log reports for additional information. Ensure the hardware is operating properly.</p>
LINK <nn>: FAILED, ST IS OUT OF SERVICE	<p>Meaning: The resource state has changed to system busy because of a command from the MAP or a fault in the resource. RSMAN attempts to retrieve signaling messages from the resource and prevents further signaling messages from using the link.</p> <p>Action: Determine the number of the faulty resource, and access the resource status level of PM maintenance to determine the cause of failure.</p>
LINK <nn>: FAILED, STOP RECEIVED BY ST	<p>Meaning: RSMAN changed the resource state to system busy because of some irregularity. RSMAN sets the state of the affected link to system busy.</p> <p>Action: None</p>
LINK <nn>: FAILED, TRANSMISSION LINK OUT OF SERVICE	<p>Meaning: The transmission link is in the wrong state for a synchronizing procedure.</p> <p>Action: Access the TRKS MAP level to determine why the transmission link is in the wrong state.</p>
LINK <nn>: FAILED, TRANSMIT/RETRANSMIT BUFFER PROBLEM	

ACT (continued)

Command responses (Sheet 9 of 12)

Responses for the ACT command	
MAP output	Meaning and action
	<p>Meaning: The DLP in the resource detects an error in its transmit buffer. RSMAN transfers signaling to another link, sets the resource to system busy, and generates a COR TX BUF SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource state changing to system busy.</p>
LINK <nn>: FAILED, UNABLE TO ALIGN WITH FAR END	<p>Meaning: The link was activated, but RSMAN did not receive acknowledgements from the far-end office, or the acknowledgments were incorrect. The procedure is terminated, and the link is set to the no-aligned state.</p> <p>Action: None</p>
LINK <nn>: FAILED, UNABLE TO ALLOCATE AN LIU7	<p>Meaning: The link is in a state other than in-service. The activation procedure has failed because the system could not allocate an LIU. The system continues to attempt synchronization until it times out.</p> <p>Action: Return the LIU to the in-service state.</p>
LINK <nn>: FAILED, UNABLE TO GET NETWORK CONNECTION	<p>Meaning: The system cannot get a network connection.</p> <p>Note: This response is not valid for links using an LIU link resource.</p> <p>Action: Use the queryflt command to determine the reason for the connection failure.</p>
LINK <nn>: FAILED, UNABLE TO SEIZE A TRANSMISSION LINK	<p>Meaning: The system cannot seize a transmission link.</p> <p>Note: This response is not valid for links using an LIU link resource.</p> <p>Action: Use the queryflt command to determine the reason for the seize failure.</p>
LINK <nn>: FAILED, UNABLE TO SEIZE AN LIU7	<p>Meaning: The link traffic is not in the in-service state. The activation procedure has failed because an LIU resource could not be seized. The system continues to attempt synchronization until it times out.</p>

ACT (continued)**Command responses (Sheet 10 of 12)**

Responses for the ACT command	
MAP output	Meaning and action
	<p>Action: Return the LIU to the in-service state.</p> <p>LINK <nn>: FAILED, UNABLE TO SEIZE AN ST</p> <p>Meaning: The system cannot seize a signaling terminal.</p> <p>Note: This response is not valid for links using an LIU link resource.</p> <p>Action: Use the QUERYFLT command to determine the reason for the seize failure.</p>
	<p>LINK <nn>: FAILED, WAITING FOR FISU/MSU TIMEOUT</p> <p>Meaning: The link, in an aligned ready state of an alignment procedure, is waiting for a fill-in signal unit (FISU) or a message signal unit (MSU). However, a time-out has occurred. RSMAN sets the link synchronizing state to system busy and attempts to resynchronize the link.</p> <p>Action: None</p>
	<p>LINK <nn>: FAILED, WAITING FOR SIN/SIE TIMEOUT</p> <p>Meaning: The link, while undergoing an alignment procedure, has reached an aligned state and is waiting for a normal alignment status indicator (SIN) or an emergency alignment status indicator (SIE). However, a time-out has occurred. RSMAN sets the link synchronizing state to system busy and attempts to resynchronize the link.</p> <p>Action: None</p>
	<p>LINK <nn>: FAILED, WAITING FOR SIO/SIN TIMEOUT</p> <p>Meaning: The link, while undergoing an alignment procedure, has reached the not-aligned state and is waiting for an out-of-alignment status indicator (SIO) or a normal alignment status indicator (SIN). However, a time-out has occurred. RSMAN sets the link synchronizing state to system busy and attempts to resynchronize the link.</p> <p>Action: None</p>
	<p>LINK <nn>: FAR END PROCESSOR OUTAGE</p> <p>Meaning: The far-end office cannot provide call processing on the link. Alevel 2 function of the far-end office is sending link status signal units which indicate processor outage. On receipt of the processor outage signals, the resource sends fill-in signal units and informs RSMAN that the link cannot be used.</p>

ACT (continued)

Command responses (Sheet 11 of 12)

Responses for the ACT command	
MAP output	Meaning and action
	<p>Action: Contact the far-end office to establish the cause of the failure.</p>
LINK <nn>: LINK SYNCHRONIZATION HAS ALREADY BEEN ACHIEVED	<p>Meaning: The link is in the in-service or idle traffic state.</p> <p>Action: None</p>
LINK <nn>: LINK WILL STAY IN ALIGNED STATE DUE TO MAN BUSY CONDITION	<p>Meaning: The link is in the manual busy state and the ACT command was completed successfully. The link stays in this state until it is returned to service.</p> <p>Action: Enter the rts command to return the link to service.</p>
LINK <nn>: LINK DEACTIVATED BY OTHER MAINTENANCE	<p>Meaning: The link was deactivated at another MAP.</p> <p>Action: Determine why the link was deactivated.</p>
LINK <nn>: MSB NOT IN SERVICE	<p>Meaning: The MSB7 is not in the correct state for the link to be activated.</p> <p>Action: Access the PM MAP level and determine the state of the MSB7.</p>
LINK <nn> nowait: REQUEST SUBMITTED	<p>Meaning: The system allows other maintenance actions before the synchronization is completed.</p> <p>Action: None</p>
LINK <nn>: OTHER MAINTENANCE IN PROGRESS	<p>Meaning: The system is engaged in another command from the same MAP.</p> <p>Action: When the current command is finished, reenter the ACT command.</p>
LINK <nn>: PASSED	<p>Meaning: The selected link has been activated.</p> <p>Action: None</p>

Command responses (Sheet 12 of 12)

Responses for the ACT command	
MAP output	Meaning and action
LINK <nn>: PASSED, ENOUGH LINKS ACTIVE - LINK STAYS IDLE	<p>Meaning: The link has passed the proving periods and is synchronized with the far-end office. RSMAN places the link in the idle state.</p> <p>Action: None</p>
LINK <nn>: PASSED, LINK WILL BE IDLE	<p>Meaning: The ACT command was successfully completed, but RSMAN has enough links in service. The system places the link in the synchronized and idle state.</p> <p>Action: None</p>
LINK <nn>: Request submitted.	<p>Meaning: The system allows other maintenance actions before the synchronization is completed.</p> <p>Action: None</p>
LINK <nn>: SIGNALING LINK TEST FAILED	<p>Meaning: The link has failed a test initiated by the command. RSMAN has sent a test message, but it has not received a signaling link test acknowledgment from the far-end office in the correct time period, or the acknowledgment received had an incorrect test pattern. RSMAN removes the link from service, initiates a changeover procedure, and changes the link state to system busy.</p> <p>Action: Access the PM maintenance level and check the MSB7 and resource for faults.</p>
LINK <nn>: SOFTWARE PROBLEM - SEE LOGS	<p>Meaning: The system has detected a fault that cannot be identified as a hardware problem.</p> <p>Action: Check the log reports to find the sequence of events that led up to the failure.</p>
This link is not equipped.	<p>Meaning: An invalid link number has been entered.</p> <p>Action: Enter the command again, using a valid link number.</p>

BSY

Command

BSY

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the BSY command to transfer a link or links to the manual busy state to do maintenance actions or as a first step to returning a link to service.

Note: Before using the BSY command, use the INH command to direct traffic from the link or links.

Usage notes

The BSY command has the following limitations and restrictions:

- There is no peer-to-peer protocol to inform the far-end that a link has been manually busied; therefore, there is no state changes at the far-end link.
- A manually busied link continues to transmit maintenance and testing messages. The far-end link continues to use the link normally, which includes the sending of all message types.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

BSY command parameters and variables	
Command	Parameters and variables
BSY	<u>ALL</u> link
Item	Description
<u>ALL</u>	This default parameter places all links in the posted linkset into the busy state.
link	This variable specifies the link number. The range is 0 to 15.

BSY (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command								
>BSY 0								
<i>where</i>								
0								
is the link number								
<i>MAP response:</i>								
CCS		CCS		CCITT				
6		7		6				
2LK		*		*				
M								
* Link Set OCALATOALASKA - ISTb								
Traf	Sync	STC	Transmission	Link	Action	In		
LK	Stat	Stat	No	Stat	CLLI	ExtrkNM	Stat	Progress
0	Man B	Alnd	2	InSv	OCALATOALASKA		100	SZD
1	InSv	Sync	5	InSv	OCALATOALASKA		101	SZD
2	InSv	Sync	0	InSv	OCALATOALASKA		102	SZD
3	InSv	Sync	1	InSv	OCALATOALASKA		103	SZD
BSY 0								
Link 0: Passed								
Explanation: The traffic state of link 0 changes to ManB.								

BSY (continued)

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 5)

Responses for the BSY command	
MAP output	Meaning and action
COMMAND ALREADY DONE	<p>Meaning: The linkset is already in the busy state.</p> <p>Action: None</p>
COMMAND FAILED, TIMEOUT EXPIRED - SEE LOGS REFER PROBLEM TO NEXT LEVEL OF SUPPORT	<p>Meaning: The linkset has not been set to the busy state, because there is no other way for traffic to be handled.</p> <p>Action: If absolutely essential, repeat the command using the force parameter. Contact the next level of support.</p>
FAILED, COMMAND ALREADY IN PROGRESS	<p>Meaning: The system is attempting to busy the linkset from another MAP.</p> <p>Action: Repeat the command later.</p>
FAILED, NO LINKSETS POSTED	<p>Meaning: There are no linksets in the posted state on this MAP.</p> <p>Action: Post the required routeset and repeat the command.</p>
LINK DESTINATION IS UNEQUIPPED	<p>Meaning: No routeset uses the specified linkset.</p> <p>Action: Enter the command again, using a valid link number.</p>
LINK <nn>: Traffic is running on that link. Please confirm ("Yes", "Y", "NO", or "N"):	<p>Meaning: Call in progress may be cancelled if the linkset is in the InSv state.</p> <p>Action: If Yes or Y is entered, the response is: LINK : PASSED. If NO or N is entered, there is no response and the command is aborted.</p>

BSY (continued)

Command responses (Sheet 2 of 5)

Responses for the BSY command	
MAP output	Meaning and action
PASSED	<p>Meaning: The linkset is set to the busy state.</p> <p>Action: None</p>
THIS LINK IS NOT EQUIPPED	<p>Meaning: An invalid link number has been entered.</p> <p>Action: Enter the command again, using a valid link number.</p> <p>This action MAY cause a future CCS7 office OUTAGE. All other links in one or more routesets are unstable. One or more routesets could be isolated due to unstable links. Type "START_OUTAGE" to continue, or "N" or "NO" to abort.</p> <p>Meaning: You are trying to busy the last available link in a linkset. All other links in one or more routesets are unstable. The system warns you that this action may cause an office outage. The system asks you to confirm the command. If you enter START_OUTAGE, the system executes the BSY command. If you enter N or NO, the system aborts the command.</p> <p>Action: Enter START_OUTAGE to continue the command. Enter N or NO to abort it.</p> <p>This action WILL cause a CCS7 office OUTAGE. Links are inhibited. CCS7 maintenance will attempt to automatically uninhibit links if BSY is completed. Type "START_OUTAGE" to continue, or "N" or "NO" to abort.</p> <p>Meaning: You are trying to busy the last available link in a routeset that has all other links either inhibited or not in service. The system warns you that this action will cause an office outage. The system asks you to confirm the command. If you enter START_OUTAGE, the system executes the BSY command. If you enter N or NO, the system aborts the command.</p> <p>Action: Enter START_OUTAGE to continue the command. Enter N or NO to abort it.</p>

BSY (continued)

Command responses (Sheet 3 of 5)

Responses for the BSY command	
MAP output	Meaning and action
	<p>This action WILL cause a CCS7 office OUTAGE. Links are inhibited. CCS7 maintenance will attempt to automatically uninhibit links if BSY is completed. All other links in one or more routesets are unstable. Type "START_OUTAGE" to continue, or "N" or "NO" to abort.</p> <p>Meaning: You are trying to busy the last available link in a routeset that has all other links either inhibited or not in service. At least one more routeset exists and all available links are unstable. The system warns you that if you continue the BSY command, it will cause an office outage. The system asks you to confirm the command. If you enter START_OUTAGE, the system executes the BSY command. If you enter N or NO, the system aborts the command.</p> <p>Action: Enter START_OUTAGE to continue the command. Enter N or NO to abort it.</p>
	<p>This action WILL cause a CCS7 office OUTAGE. xx quasi-associated routesets will be isolated. Type "START_OUTAGE" to continue, or "N" or "NO" to abort.</p> <p>Meaning: You are trying to busy the last available link in a routeset. All other links in that routeset are not in service. The system warns you that if you continue the BSY command, it will cause an office outage and a number (xx) of quasi-associated routesets will be isolated. The system asks you to confirm the command. If you enter START_OUTAGE, the system executes the BSY command. If you enter N or NO, the system aborts the command.</p> <p>Action: Enter START_OUTAGE to continue the command. Enter N or NO to abort it.</p>
	<p>This action WILL cause a CCS7 office OUTAGE. One quasi-associated routeset will be isolated. Type "START_OUTAGE" to continue, or "N" or "NO" to abort.</p> <p>Meaning: You are trying to busy the last available link in a routeset. All other links in that routeset are not in service. The system warns you that if you continue the BSY command, it will cause an office outage and the quasi-associated routeset will be isolated. The system asks you to confirm the command. If you enter START_OUTAGE, the system executes the BSY command. If you enter N or NO, the system aborts the command.</p>

BSY (continued)

Command responses (Sheet 4 of 5)

Responses for the BSY command	
MAP output	Meaning and action
	<p>This action WILL cause a CCS7 office OUTAGE. Associated routeset will be isolated: RSxxxxxxx. Type "START_OUTAGE" to continue, or "N" or "NO" to abort.</p> <p>Meaning: You are trying to busy the last available link in a routeset. All other links in that routeset are not in service and there are no other available routesets. The system warns you that if you continue the BSY command, it will cause an office outage and the associated routeset will be isolated. The system asks you to confirm the command. If you enter START_OUTAGE, the system executes the BSY command. If you enter N or NO, the system aborts the command.</p> <p>Action: Enter START_OUTAGE to continue the command. Enter N or NO to abort it.</p>
	<p>This action WILL cause a CCS7 office OUTAGE. Associated routeset will be isolated: RSxxxxxxx. xx quasi-associated routesets will be isolated. Type "START_OUTAGE" to continue, or "N" or "NO" to abort.</p> <p>Meaning: You are trying to busy the last available link in a routeset. All other links in that routeset are not in service and there are no other available routesets. The system warns you that if you continue the BSY command, it will cause an office outage. The associated routeset and a number (xx) of quasi-associated routesets will be isolated. The system asks you to confirm the command. If you enter START_OUTAGE, the system executes the BSY command. If you enter N or NO, the system aborts the command.</p> <p>Action: Enter START_OUTAGE to continue the command. Enter N or NO to abort it.</p>
	<p>This action WILL cause a CCS7 office OUTAGE. Associated routeset will be isolated: RSxxxxxxx. One quasi-associated routeset will be isolated. Type "START_OUTAGE" to continue, or "N" or "NO" to abort.</p> <p>Meaning: You are trying to busy the last available link in a routeset. All other links in that routeset are not in service and there are no other available routesets. The system warns you that if you continue the BSY command, it will cause an office outage. The associated routeset and the quasi-associated routeset will be isolated. The system asks you to confirm the command. If you enter START_OUTAGE, the system executes the BSY command. If you enter N or NO, the system aborts the command.</p> <p>Action: Enter START_OUTAGE to continue the command. Enter N or NO to abort it.</p>

BSY (end)

Command responses (Sheet 5 of 5)

Responses for the BSY command	
MAP output	Meaning and action
	<p>This could cause an office outage. Type "START_OUTAGE" to continue, or "N" or "NO" to abort.</p> <p>Meaning: You are trying to busy the last link in a linkset. The system warns you that this action can cause an office outage. The system asks you to confirm the command. If you enter START_OUTAGE, the system executes the BSY command. If you enter N or NO, the system aborts the command and the last link in a linkset remains in service.</p> <p>Action: Enter START_OUTAGE to continue the command. Enter N or NO to abort it.</p>

C7BERT

Command

C7BERT

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the C7BERT command to access the C7BERT MAP level to measure the quality of a posted linkset. The C7BERT command is not a command in the C7LKSET directory (hidden command).

Usage notes

The C7BERT command is qualified by the following exceptions, restrictions, and limitations:

- Using the C7BERT command is a maintenance action, so any link under test will be unavailable to carry traffic for the duration of the test.
- The link must be manually busy to activate the BERT.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the C7BERT command
<p>>C7BERT</p> <p><i>MAP response:</i> C7BERT:</p> <p>Explanation: You have entered the C7BERT sublevel.</p>

C7BERT (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the C7BERT command	
MAP output	Meaning and action
MODULE NOT LOADED OR NEEDS OTHER CI INCREMENT TO BE BUILT.	<p>Meaning: The ACDPOOLS directory is not loaded or must be accessed through another directory.</p> <p>Action: Access another directory or end this session.</p>
Undefined command "<command>".	<p>Meaning: The command you entered is spelled incorrectly, this directory is accessed using another entry code, or the ACDPOOLS directory is not included in this software load.</p> <p>Action: Reissue this command, access another directory, or end this session.</p>

DEACT**Command**

DEACT

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the DEACT command to deactivate an active link of a posted linkset.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

DEACT command parameters and variables	
Command	Parameters and variables
DEACT	ALL <u>NOFORCE</u> link_number FORCE
Item	Description
ALL	This parameter puts all links in the posted linkset into the deactivated state.
FORCE	This parameter forces the link or links into the deactivated state immediately, even if there is the possibility of losing traffic. Therefore, the force parameter should not be used unless provision for this loss of service is made. The only time this parameter should be used is when difficulties are encountered in trying to deactivate a CCS7 link.
<u>NOFORCE</u>	This default parameter indicates the condition when no parameter is entered. If the force parameter is not entered, the system places the specified link or links into the deactivated state under normal conditions.
link_number	This variable specifies the number of the link you want to deactivate. The range is 0 to 15.

DEACT (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the DEACT command									
>DEACT 2									
<i>where</i>									
2									
is the link number									
<i>MAP response:</i>									
CCIS6		CCIS7		CCITT6					
2LK		1LK		*					
Link Set OCALATOALASKA - ISTb									
Traf	Sync	STC	Transmission	Link	Action	In			
LK	Stat	stat	No	Stat	CLLI	ExtrkNM	Stat	Progress	
0	InSv	Sync	2	InSv	OCALATOALAS	KA	100	SZD	
1	ManB	Alnd	5	InSv	OCALATOALAS	KA	101	SZD	
2	SysB	SysB	0	InSv	OCALATOALAS	KA	102	SZD	
3	InSv	Sync	1	InSv	OCALATOALAS	KA	103	SZD Prvng	
DEACT 2									
Explanation: The synchronization state of link 2 changes to DEACT.									

DEACT (continued)**MAP responses**

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the DEACT command	
MAP output	Meaning and action
LINK <nn>: COMMAND ALREADY DONE	<p>Meaning: The link is already in the deactivated state.</p> <p>Action: None</p>
LINK <nn>: COMMAND ALREADY IN PROGRESS	<p>Meaning: RSMAN is already deactivating the link.</p> <p>Action: None</p>
LINK <nn>: FAILED, TRAFFIC STATE NOT MANB	<p>Meaning: Deactivation has failed. The traffic state of the link being deactivated (using the force parameter) must be ManB.</p> <p>Action: Place the link into the ManB state then enter the command string DEACT FORCE again.</p>
LINK <nn>: NO RESPONSE TO QUERY OF TRAFFIC STATES	<p>Meaning: RSMAN is not able to communicate with the far-end office to establish the state on the link. The command is denied.</p> <p>Action: Place the link in the offline state, then reenter the DEACT command.</p>
LINK <nn>: PASSED	<p>Meaning: The link has been deactivated.</p> <p>Action: None</p>
LINK <nn>: TRAFFIC RUNNING ON LINK (SHOULD INHIBIT LINK FIRST)	<p>Meaning: The link is in-service and is carrying traffic. The link must be inhibited to allow both offices to transfer traffic to another link.</p> <p>Action: Use the inh command to inhibit the link, then reenter the DEACT command.</p>
LINK <nn>: FORCE OPTION CANNOT BE USED WITH MLIU BASED LINK	

DEACT (end)

Command responses (Sheet 2 of 2)

Responses for the DEACT command	
MAP output	Meaning and action
	<p>Meaning: You cannot use parameter FORCE on the multiple link interface unit (MLIU)-based link.</p> <p>Action: Enter the command again without the FORCE option.</p>

INH**Command**

INH

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the INH command to divert (inhibit) traffic from a link or all of the links of a posted linkset. An inhibited link has all traffic directed from it to an alternative link.

Usage notes

The INH command is not allowed on JPN7 linksets although the command is displayed as a valid command. This command is therefore not applicable for companies in Japan.

Ensure that the link is on-line before issuing the command. Offline links cannot carry traffic and, therefore, cannot be inhibited

If there is only one in-service link available for use by a routeset, it cannot be inhibited.

Inhibiting the last link stops traffic and puts the routeset into system busy state.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

INH command parameters and variables	
Command	Parameters and variables
INH	ALL link
Item	Description
ALL	This parameter specifies that all links in the posted linkset be inhibited.
link	This variable specifies the number of the link to be inhibited. The range is 0 to 15.

INH (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the INH command
<pre>>INH 2</pre> <p><i>where</i></p> <p>2 is the link number</p> <p><i>MAP response:</i>LINK 2: PASSED</p> <p>Explanation: The link has been inhibited and the traffic transferred to another link.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 3)

Responses for the INH command	
MAP output	Meaning and action
FAILED, LINKS IN THIS NETWORK CANNOT BE INHIBITED	<p>Meaning: A link from a network that cannot be inhibited was entered.</p> <p>Action: None</p>
FAILED, LINKSET DESTINATION IN OFFLINE OR ManBsy	<p>Meaning: The destination for the linkset that was entered is offline or manual busy.</p> <p>Action: Enter the command again later, or contact the far-end office to determine the cause of the problem.</p>
LINK <nn>: COMMAND ALREADY DONE	<p>Meaning: The link is already in the inhibit state.</p> <p>Action: None</p>
LINK <nn>: FAILED, COMMAND ALREADY IN PROGRESS	<p>Meaning: The system is completing the inhibit command entered at another MAP.</p> <p>Action: None</p>

INH (continued)**Command responses (Sheet 2 of 3)**

Responses for the INH command	
MAP output	Meaning and action
LINK <nn>: FAILED, FAR END OFFICE DENIED REQUEST	<p>Meaning: The far-end office cannot find a link that can be used for the changeover procedure. The far-end office sends a link inhibit denied (LID) message.</p> <p>Action: Contact the far-end office to determine the reason for the refusal.</p>
LINK <nn>: FAILED, FAR END DID NOT REPLY TO REQUEST	<p>Meaning: The far-end office did not reply to the inhibit message within the prescribed time limits.</p> <p>Action: Contact the far-end office to determine the cause of the fault.</p>
LINK <nn>: FAILED, LINK IS OFFLINE	<p>Meaning: An offline link is not carrying traffic and therefore cannot be inhibited.</p> <p>Action: None</p>
LINK <nn>: FAILED, MAINTENANCE COMMAND IN PROGRESS	<p>Meaning: The MAP is already engaged in processing a command. Only one command at a time can be processed at the MAP terminal.</p> <p>Action: After the current command has finished, reenter the inhibit command.</p>
LINK <nn>: FAILED, THIS IS LAST AVAILABLE LINK IN ROUTESET	<p>Meaning: The system has refused the command because there is only one link in the in-service state, and if this link is inhibited the routeset state changes to system busy.</p> <p>Action: Synchronize other links, then inhibit the selected link.</p>
LINK <nn>: FAILED, UNABLE TO COMMUNICATE WITH FAR END OFFICE	<p>Meaning: The system cannot communicate with the far-end office. Either the link is down or the far-end office is down.</p> <p>Action: Contact the far-end office to determine the cause of the fault.</p>
LINK <nn>: PASSED	<p>Meaning: The link has been inhibited and the traffic transferred to another link.</p>

INH (end)

Command responses (Sheet 3 of 3)

Responses for the INH command	
MAP output	Meaning and action
	<p>Action: None</p> <p>LINK <nn>: SYSTEM PROBLEM - CHECK LOGS</p> <p>Meaning: The system cannot complete the inhibit command because of a system fault that cannot be traced to hardware.</p> <p>Action: Check the log reports to find the sequence of events that led up to the failure.</p> <p>LINK <nn>: WRONG INPUT PARAMETER</p> <p>Meaning: The parameter entered with the command is greater than 3 or is a character. The parameter entered is different from what is expected.</p> <p>Action: Verify the entered parameter and reenter the command.</p> <p>This link is not equipped.</p> <p>Meaning: An invalid link number has been entered.</p> <p>Action: Enter the command again, using a valid link number.</p> <p>Wrong number of parameters</p> <p>Meaning: The data entered with the command consists of more than one parameter.</p> <p>Action: Verify the entered parameter, and reenter the command with the correct number of parameters.</p>

NEXT

Command

NEXT

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the NEXT command to display the next four links of the posted linkset. The order in which the links are displayed is the same as the order in system tables.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the NEXT command
<p>>NEXT</p> <p><i>MAP response:</i></p> <p>Explanation: The next four links in the posted linkset appear.</p>

MAP responses

The following table describes the MAP responses.

Response for the NEXT command	
MAP output	Meaning and action
NO MORE LINKS TO BE VIEWED IN THE LINKSET	<p>Meaning: There are no more links in the posted linkset.</p> <p>Action: None</p>

NEXTLS

Command

NEXTLS

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the NEXTLS command to display the next linkset with the same alarm (or linkset) state as the currently posted linkset, if the current posted linkset has been posted by the alarm or (or linkset) state. The NEXTLS command displays the first four links of the linkset starting at link 0.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the NEXTLS command
<pre>>NEXTLS</pre> <p><i>MAP response:</i></p> <p>(next linkset is displayed)</p> <p>Explanation: The next linkset in the posted set is displayed.</p>

NEXTLS (end)

MAP responses

The following table describes the MAP responses.

Command responses

Response for the NEXTLS command	
MAP output	Meaning and action
END OF POSTED SET	<p>Meaning: There are no more linksets in the posted set.</p> <p>Action: None</p>
Nextls not valid with posting by CLLI.	<p>Meaning: There are no linksets to display in the posted set.</p> <p>Action: Enter the command again with more than one valid posted linkset.</p>

OFFL

Command

OFFL

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the OFFL command to transfer a link or links to the offline state. In this state, the links are not available for signaling and do not cause alarms. The link must be in the manual busy state and deactivated prior to entering the OFFL command. When all links in a linkset are offlined, then the linkset state is OFFL.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

OFFL command parameters and variables	
Command	Parameters and variables
OFFL	ALL link
Item	Description
ALL	This parameter puts all links in the posted linkset into the deactivated state.
link	This variable specifies the link number to be made offline. The range is 0 to 15.

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFFL command
<pre>>OFFFL 3</pre> <p><i>where</i></p> <p>3 is the link number</p> <p><i>MAP response:</i>LINK 03: Passed</p> <p>Explanation: Link 3 has been placed in the offline state.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFFL command	
MAP output	Meaning and action
LINK <nn>: FAILED, LINK IS NOT deactivated	<p>Meaning: The link must be in the deact state to be placed in the offline state.</p> <p>Action: Enter the deact command to put the link in the deactivate state, then reenter the OFFFL command.</p>
LINK <nn>: FAILED, LINK IS NOT IN MAN BUSY STATE	<p>Meaning: The link must be in the manual busy state to be placed in the offline state.</p> <p>Action: Enter the bsy command to put the link in the manual busy state, then reenter the OFFFL command.</p>
LINK <nn>: PASSED	<p>Meaning: The link has been placed in the offline state.</p> <p>Action: None</p>

POST (continued)**Parameters and variables (Sheet 2 of 2)**

POST command parameters and variables	
C	This parameter specifies that linksets are posted by common language location identifier (CLLI).
clli	This variable represents the linkset CLLI name.
N	This parameter specifies that signaling system 7 (SS7) link and linkset information is posted by internal SS7 network name.
network_name	This variable specifies the name of the internal SS7 node associated with the posted links and linksets. Valid values exist in field network_name in table C7NETWRK.
S	This parameter specifies that linksets are posted by linkset state.
state	This variable specifies the state of the posted linkset. The values for this variable are: <ul style="list-style-type: none"> • cong (congested) • insv (in service) • istb (in-service trouble) • manb (manual busy) • offl (offline) • sysb (system busy)
link	This optional variable specifies the starting link number in the linkset. A maximum of four linksets can be displayed. The range is 0 to 15.

POST (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the POST command
<pre>>POST N NATLSSP01 S OFFL</pre> <p><i>where</i></p> <p>N specifies that posting is by network name</p> <p>NATLSSP01 is the network name</p> <p>S specifies that posting is by network state</p> <p>OFFL specifies the network state as offline</p> <p><i>MAP response: CCS7 Linkset</i></p> <pre>NETLKSCOMC/OffL Network NATLSSP01 Traf Sync Link LK Stat Stat Resource Stat Physical Access Stat Action 0 OffL DAct LIU7 109 InSv DS0A 1 OffL DAct LIU7 133 InSv DS0A Size of Posted Set = 2 post n natlssp01 s offl</pre> <p>Explanation: The MAP displays the offline links in the linkset NETLKSCOMC on network NATLSSP01.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the POST command	
MAP output	Meaning and action
End of posted set	<p>Meaning: No linksets exist in the posted set.</p> <p>Action: None</p>
Invalid alarm state entered	<p>Meaning: The specified alarm state is invalid. The POST command fails.</p>

POST (end)

Command responses (Sheet 2 of 2)

Responses for the POST command	
MAP output	Meaning and action
	<p>Action: Reenter the POST command specifying a valid alarm state.</p> <p>Invalid linkset state entered</p> <p>Meaning: The specified linkset state is invalid. The POST command fails.</p> <p>Action: Reenter the POST command specifying a valid linkset state.</p>
	<p>This is not a linkset</p> <p>Meaning: The data entered is not recognized as a linkset CLLI. The POST command fails.</p> <p>Action: None</p>
	<p>This is not a valid network name</p> <p>Meaning: The network name variable used with the N parameter is not correct.</p> <p>Action: Reenter the POST command using a correct network name.</p>
	<p>Invalid symbol: C OR A OR S OR N> {C, A, S, N} Enter: C OR A OR S OR N></p> <p>Meaning: The message indicates that the value entered for Selector 1 is not valid.</p> <p>Action: Enter C, A, S or N.</p>
	<p>Invalid symbol: A OR S> {A, S} Enter: A OR S></p> <p>Meaning: The message indicates that the value entered for Selector 2 is not valid.</p> <p>Action: Enter A or S.</p>

QRYFEPC

Command

QRYFEPC

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the QRYFEPC command to display the far-end point code (FEPC) of the posted linkset.

Usage notes

Post a linkset before using command QRYFEPC.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERYFEPC command					
>QRYFEPC					
<i>MAP response:</i>					
Linkset NAME	Network Name	FEPC	DPC LINKSET_1	NETWORK_1	
CCITT7	INTL 3 103 5				
Explanation: The system responds by providing the network and FEPC of the linkset.					

QRYFEPC (end)**MAP responses**

The following table describes the MAP responses.

Command responses

Response for the QRYFEPC command			
MAP output	Meaning and action		
Linkset NAME <ls_name>	Network Name <net_clli>	FEPC <nettype>	DPC <pt_code>
<p>Meaning: The system displays the network and FEPC of a linkset, where</p> <p><ls_name> is the name of the linkset</p> <p><net_clli> is the common language location identifier (CLLI) of the network</p> <p><nettype> is the network type of the FEPC</p> <p><pt_code> is the point code of the linkset</p> <p>Action: None</p>			

QUERYATM

Command

QUERYATM

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the QUERYATM command to query the following attributes of a linkset:

- virtual path identifier
- virtual channel identifier
- peak cell rate
- sustainable cell rate
- burst tolerance
- cell delineation variation tolerance
- quality of service

Usage notes

Use this command for high-speed links only.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYATM command parameters and variables	
Command	Parameters and variables
QUERYATM	link_number ALL_LINKS
Item	Description
link_number	This variable specifies the link to be queried. The range of values is 0 to 15.
ALL_LINKS	This parameter specifies all links in the linkset to be queried.

QUERYATM (continued)

Usage examples

The following table provides examples of the command.

Command example

Example of the QUERYATM command							
>QUERYATM ALL_LINKS							
<i>MAP response:</i>							
LINK	VPI	VCI	PCR	SCR	BT	CDVT	QoS
0 0	5	3622		3622		210 100	3
1 0	5	3622		3622		210 100	3
Explanation Typical response for this query							

QUERYATM (end)**MAP responses**

The following table describes the MAP responses.

Command responses

Responses for the QUERYATM command							
MAP output		Meaning and action					
LINK	VPI	VCI	PCR	SCR	BT	CDVT	QoS
0	0	5	3622	3622	210	100	3
1	0	5	3622	3622	210	100	3
<p>Meaning: This is the normal response for the QUERYATM command. It is a report composed of a one-line header followed by one or more lines containing information pertaining to each queried link in which</p> <p><LINK> is the number of the queried link</p> <p><VPI> is the virtual path identifier</p> <p><VCI> is the virtual channel identifier</p> <p><PCR> is the peak cell rate</p> <p><SCR> is the sustainable cell rate</p> <p><BT> is the burst tolerance</p> <p><CDVT> is the cell delineation variation tolerance</p> <p><QoS> is the quality of service</p> <p>Action: None</p> <p>Query ATM is not supported on DS0/v.35 link</p> <p>Meaning: The queried link is not a high-speed link. Command QUERYATM cannot be used to query this link.</p> <p>Action: None</p>							

QUERYCAR**Command**

QUERYCAR

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the QUERYCAR to query the clock rate, clock source, frame format, zero logic, line length equalization, and carrier state of all links in a DS-1 carrier.

Usage notes

Use this command only for high-speed links on a signaling transfer point (STP) node.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYCAR command parameters and variables	
Command	Parameters and variables
QUERYCAR	link_number ALL_LINKS
Item	Description
link_number	This variable specifies the link to be queried.
ALL_LINKS	This parameter specifies all links in the linkset to be queried.

Usage examples

The following table provides examples of the command.

Command example (Sheet 1 of 2)

Example of the QUERYCAR command						
>QUERYCAR ALL_ LINKS						
<i>MAP response:</i>						
Link	ClkRate	ClkSrc	FF	ZL	LLEQ	State

QUERYCAR (continued)

Command example (Sheet 2 of 2)

Example of the QUERYCAR command						
0	DS1	FBUS	ESF	B8ZS	36-65m	OOS
1	DS1	FBUS	ESF	B8ZS	66-95m	InSv

Explanation The MAP displays the values for the DS-1 carrier parameters.

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the QUERYCAR command						
MAP output	Meaning and action					
Link	ClkRate	ClkSrc	FF	ZL	LLEQ	State
0	DS1	FBUS	ESF	B8ZS	36-65m	OOS
1	DS1	FBUS	ESF	B8ZS	66-95m	InSv
<p>Meaning: This is the normal response of the QUERYCAR command. It is a report composed of a header followed by one or more lines containing information on each queried link, where</p> <p><Link> is the number of the queried link</p> <p><ClkRate> is the clock rate of the link</p> <p><ClkSrc> is the clock source</p> <p><FF> is the frame format</p> <p><ZL> is the zero logic</p> <p><LLEQ> is the line length equalization</p> <p><State> is the state of the carrier</p> <p>Action: None</p>						

QUERYCAR (end)

Command responses (Sheet 2 of 2)

Responses for the QUERYCAR command	
MAP output	Meaning and action
Query DS-1 Carrier is not supported on DS0/v.35 links	<p>Meaning: The queried link is not a high-speed link. Command QUERYCAR cannot be used to query this link.</p> <p>Action: None</p>

QUERYFLT

Command

QUERYFLT

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the QUERYFLT command to list the reasons why the link of a posted linkset is faulty. You can query any link faults in a specified linkset. This display shows states other than those listed by the POST command. The output of this command allows the user to determine why a link or linkset is system busy (SysB), without referring to the logs. Ensure the link is in the SysB or in-service trouble (ISTb) state before using the QUERYFLT command.

For dual link interface units (DLIU), this command displays faults associated with both the high-speed link interface unit (HLIU) and high-speed link router (HSLR).

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYFLT command parameters and variables	
Command	Parameters and variables
QUERYFLT	ALL link_number
Item	Description
ALL	This parameter selects all links in a posted linkset.
link_number	This variable selects the number of the link to be queried. The range is 0 to 15.

QUERYFLT (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the QUERYFLT command								
>QUERYFLT 0								
<i>where</i>								
0								
is the link number								
<i>MAP response:</i>								
CCIS6		CCS7		CCITT6				
2LKM		*		*				
Link	Set	OCALATOALASKA - ISTb			Link	Action	In	
	Traf	Sync	STC	Transmission				
LK	Stat	Stat	No	Stat	CLLI	ExtrkNM	Stat	Progress
0	ManB	Alnd	2	InSv	OCALATOALASKA		100	SZD
1	InSv	Sync	5	InSv	OCALATOALASKA		101	SZD
2	InSv	Sync	0	InSv	OCALATOALASKA		102	SZD
3	InSv	Sync	1	InSv	OCALATOALASKA		103	SZD
QUERYFLT 0								
Link 0: No fault detected at present								
Explanation: Link 0 has no faults.								

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 18)

Responses for the QUERYFLT command	
MAP output	Meaning and action
LINK <nn>: ABNORMAL BSN RECEIVED	<p>Meaning: Two out of three consecutive backward sequence number (BSN) messages are invalid. The system changes the link synchronizing state to SysB and requests a changeover procedure.</p> <p>Action: If the condition persists, access the PM level to check the resource.</p>
LINK <nn>: ABNORMAL FIB RECEIVED	

QUERYFLT (continued)

Command responses (Sheet 2 of 18)

Responses for the QUERYFLT command	
MAP output	Meaning and action
	<p>Meaning: Two out of three consecutive signaling messages had invalid forward indicator bits (FIB). The system changes the link synchronizing state to SysB and requests a changeover procedure.</p> <p>Action: If the condition persists, access the PM level to check the resource.</p>
LINK <nn>: CHANGEORDER RECEIVED FROM FAR END	<p>Meaning: The far-end office has detected signaling message failures and has implemented a changeover procedure. When the system transfers traffic to another link (as part of the changeover procedure), the resource synchronization state is set to SysB.</p> <p>Action: None</p>
LINK <nn>: CONFIG REPLY CFA TIMEOUT	<p>Meaning: The resource is seized, but when the system attempts to configure it, there is no reply (configuration acknowledge [CFA]) from the resource. Routeset management (RSM) changes the resource state to SysB and runs tests. When the resource is returned to service, RSM attempts to activate the link again.</p> <p>Action: Enter the RTS command (post the linkset if necessary) to get RSM to activate the link.</p>
LINK <nn>: CONFIG REPLY CPA TIMEOUT	<p>Meaning: The resource is seized, but when RSM attempts to send it congestion parameters, there is no acknowledgement (configuration parameter acknowledge [CPA]) from the resource. The system changes the resource state to SysB and runs tests. When the resource is returned to service, RSM attempts to activate the link again.</p> <p>Action: Enter the RTS command (post the linkset if necessary) to get RSM to activate the link.</p>
LINK <nn>: CONFIG REPLY LNA TIMEOUT	<p>Meaning: The resource is seized, but it does not reply when the RSM attempts to address it, that is, it receives no link number acknowledgement (LNA). The system changes the resource state to SysB and runs diagnostics. When the resource is returned to service, RSM attempts to activate the link again.</p> <p>Action: Enter the RTS command (post the linkset if necessary) to get RSM to activate the link.</p>
LINK <nn>: CONFIG REPLY LSM PARM TIMEOUT	

QUERYFLT (continued)**Command responses (Sheet 3 of 18)**

Responses for the QUERYFLT command	
MAP output	Meaning and action
	<p>Meaning: The RSM did not send the complete set of messages, configuration, and congestion parameters (linkset management [LSM]) to the MSB7. The system changes the resource state to SysB and runs tests. When the resource is returned to service, RSM attempts to activate the link again.</p> <p>Action: Enter the RTS command (post the linkset if necessary) to get RSM to activate the link.</p>
LINK <nn>: CORRUPT RECEIVE BUFFER	<p>Meaning: The data link processor (DLP) in the resource detects an error in the receive buffer. The system transfers signaling to another link, sets the resource to SysB, and generates either an RX UDRFLOW or RX OVRFLW SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource state change to SysB.</p>
LINK <nn>: CORRUPT RETRANSMIT BUFFER READ POINTER	<p>Meaning: The system cannot use the link for signaling because of a resource failure. The system transfers signaling to another link, sets the resource to SysB, and generates a RETR DIED SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource state change to SysB.</p>
LINK <nn>: CORRUPT TRANSMIT BUFFER	<p>Meaning: The DLP in the resource has detected an error in its transmit buffer. The system transfers signaling to another link, sets the resource to SysB, and generates a COR TX BUF SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource state change to SysB.</p>
LINK <nn>: CORRUPT TRANSMIT BUFFER READ POINTER	<p>Meaning: The system cannot use the link for signaling because of resource failures. The system transfers signaling to another link, sets the resource to SysB, and generates a RETR DIED SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource state change to SysB.</p>
LINK <nn>: DLP OUT OF SERVICE	

QUERYFLT (continued)

Command responses (Sheet 4 of 18)

Responses for the QUERYFLT command	
MAP output	Meaning and action
	<p>Meaning: The resource has been taken out of service because the DLP has detected too many errors in the RTS messages. RSM deallocates the resource and starts a test. When the resource is returned to service, link activation is attempted again.</p> <p>Action: Enter the RTS command (post the linkset if necessary) to get RSM to activate the link.</p>
LINK <nn>: DLP RECEIVE BUFFER OVERRUN	<p>Meaning: The DLP in the resource detects an error in the receive buffer. The system transfers signaling to another link, sets the resource to SysB, and generates either a RX OVERRUN or RX READ ER SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource state change to SysB.</p>
LINK <nn>: EXCESSIVE DELAY OF ACK	<p>Meaning: The far-end office has failed to acknowledge a message signaling unit (MSU) in a specified time. The command was terminated.</p> <p>Action: Contact the far-end office to determine the cause of the fault.</p>
LINK <nn>: EXCESSIVE SU ERROR ON LINK	<p>Meaning: The resource found too many transmission errors in the signaling unit. RSM is trying to reactivate the link.</p> <p>Action: None</p>
LINK <nn>: FAILED TO NAIL UP LINK	<p>Meaning: The link is not nailed up (there is no permanent software connection between the signaling terminal and the transmission facility) because of network module problems.</p> <p>Action: Access the NET maintenance level and investigate the network module problems.</p>
LINK <nn>: FAILED TO NAIL UP ST	<p>Meaning: The link cannot be nailed up because the resource is either SysB, manual busy, or offline.</p> <p>Action: Access the PM maintenance level to investigate the signaling terminal problems.</p>

QUERYFLT (continued)**Command responses (Sheet 5 of 18)**

Responses for the QUERYFLT command	
MAP output	Meaning and action
LINK <nn>: UNABLE TO COMMUNICATE WITH FAR END	<p>Meaning: The link was activated, but it never received an out-of-service status indication (SIO) message from the far-end office in the correct time period. The system terminates the synchronization procedure and sets the link to the not-aligned state.</p> <p>Action: Contact the far-end office to determine the state of the link.</p>
LINK <nn>: UNABLE TO GET NETWORK CONNECTION	<p>Meaning: The network module is either in the SysB or manual busy (ManB) state. The system cannot seize a network connection at the start of an activation procedure.</p> <p>Action: Access the NET maintenance level to determine the cause of the fault.</p>
LINK <nn>: UNABLE TO SEIZE A TRANSMISSION LINK	<p>Meaning: The transmission link is in the wrong state for the ACT command. The RSM cannot seize a transmission link at the start of an activation procedure.</p> <p>Action: Access the TRKS maintenance level to determine the cause of the problem.</p>
LINK <nn>: UNABLE TO SEIZE AN ST	<p>Meaning: The resource is in the wrong state for the ACT command. The RSM cannot seize a resource at the start of an activation procedure.</p> <p>Action: Access the PM maintenance level to determine the cause of the failure.</p>
LINK <nn>: IN PROCESS OF ALIGNING LINK	<p>Meaning: The link is being activated.</p> <p>Action: None</p>
LINK <nn>: INVALID TRAFFIC STATE FOR FAULT QUERY, MUST BE SYSB OR ISTB	

QUERYFLT (continued)

Command responses (Sheet 6 of 18)

Responses for the QUERYFLT command	
MAP output	Meaning and action
	<p>Meaning: The link must be in the SysB or in-service trouble state before issuing the QUERYFLT command.</p> <p>Action: Take one of the following actions as indicated by the situation:</p> <ul style="list-style-type: none"> • If the link is offline, enter the POST command and then return the link to service using the RTS command. • If the link is faulty, repeat the QUERYFLT command (the system sets the state to SysB). • If the link is in the in-service state, there is no fault to query.
LINK <nn>: INVALID SYNC STATE FOR FAULTY QUERY, MUST NOT BE DACT OR IDLE	<p>Meaning: The QUERYFLT command has been entered in an invalid sync state.</p> <p>Action: Activate the link in a valid sync state to query the fault.</p>
LINK <nn>: LINK IS INITIALIZING	<p>Meaning: The link is in the process of being initialized.</p> <p>Action: None</p>
LINK <nn>: LINK IS MAN BUSY	<p>Meaning: The link is not in service and synchronized, because the traffic state is manual busy.</p> <p>Action: Return the link to service using the RTS command.</p>
LINK <nn>: LINK IS MAN BUSY AND COULD NOT NAIL UP LINK	<p>Meaning: The link cannot go in service because the traffic state is manual busy. Also, the link is not nailed up.</p> <p>Action: Enter the RTS command to return the link to service. Investigate the network module problem.</p>
LINK <nn>: LINK TEST FAILED	<p>Meaning: The link has failed a test that was initiated by the TEST or ACT command. The link has not sent a signaling link test acknowledgment to the far-end office in the correct time period, or the acknowledgment was received at the far-end office with an incorrect test pattern. The system removes the link from service, initiates a changeover procedure, and changes the link traffic state to SysB.</p> <p>Action: Access the PM maintenance level and check the resource for faults.</p>

QUERYFLT (continued)**Command responses (Sheet 7 of 18)**

Responses for the QUERYFLT command	
MAP output	Meaning and action
LINK <nn>: LINK TEST TIMEOUT	<p>Meaning: There was no reply to a request for a test from the MSB7. The MSB7 sent a request for a link test to RSM. RSM did not acknowledge the request and a time-out occurred.</p> <p>Action: None</p>
LINK <nn>: LINK TOO LONG INITIALIZING	<p>Meaning: The link has failed to synchronize. RSM has repeated one of the activate procedures too often and a timeout has occurred. RSM deactivates the link and sets the link traffic state to SysB.</p> <p>Action: None</p>
LINK <nn>: LINK UNDERGOING CHANGEBACK	<p>Meaning: A link has been returned to service and the traffic that had been routed to an alternate route is being routed back to the newly available link.</p> <p>Action: None</p>
LINK <nn>: LINK UNDERGOING CHANGEOVER	<p>Meaning: Because a link has failed, the RSM has initiated a changeover procedure to transfer the traffic to other links.</p> <p>Action: None</p>
LINK <nn>: LOCAL PROCESSOR OUTAGE	<p>Meaning: Signaling is not possible on the link, because of a failure or because the link has been inhibited. The resource transmits link status signal units indicating a processor outage and discards the signaling messages it receives. The level 2 function at the far-end office informs its own RSM of the problem and starts to transmit fill-in signal units. When the local processor outage condition ceases, normal transmission is resumed.</p> <p>Action: Check maintenance MAP levels for alarm states and take appropriate action.</p>
LINK <nn>: LIU7 DLP FIFO LENGTH ERROR	

QUERYFLT (continued)

Command responses (Sheet 8 of 18)

Responses for the QUERYFLT command	
MAP output	Meaning and action
	<p>Meaning: The link failed to synchronize as a result of an interface problem between the signaling terminal and the link general processor (LGP). The system attempts to recover the link by continuing the synchronizing procedure. If the procedure cannot end successfully, the link is set to the SysB state.</p> <p>Action: Check the log reports for additional information. Check to ensure that the hardware is operating properly.</p>
LINK <nn>: LIU7 DLP RECEIVE FIFO FULL	<p>Meaning: The link failed to synchronize as a result of an interface problem between the signaling terminal and the LGP. The system attempts to recover the link by continuing the synchronizing procedure. If the procedure cannot end successfully, the link is set to the SysB state.</p> <p>Action: Check the log reports for additional information. Check to ensure that the hardware is operating properly.</p>
LINK <nn>: , MLIU, HLIU, HSLR> FAILED	<p>Meaning: A failure has been detected in the signaling terminal processor or LGP processor, or there has been a loss of integrity in the LIU7, multiple link interface unit (MLIU), HLIU, or HSLR. The system attempts to recover from the error by starting the synchronization procedure.</p> <p>Action: If the system is unable to recover, check the hardware. Also check the log reports for additional information.</p>
LINK <nn>: , MLIU, HLIU, HSLR> IS IN LOOPBK	<p>Meaning: The link resource is in a loopback (loopbk) mode. This response also appears if the system could not allocate an LIU7, MLIU, HLIU, or HSLR for the link. The system attempts to recover the link.</p> <p>Action: If the resource is in the InSv or ISTb state and in loopback mode, remove the LIU7, MLIU, HLIU, or HSLR from the loopback state manually.</p>
LINK <nn>: , MLIU, HLIU, HSLR> NOT ACCESSIBLE	

QUERYFLT (continued)**Command responses (Sheet 9 of 18)**

Responses for the QUERYFLT command	
MAP output	Meaning and action
	<p>Meaning: Communication between the computing module (CM) and the LIU7, MLIU, HLIU, or HSLR stopped. If the link was synchronized when the resource became inaccessible, then the link synchronizing state is displayed as LPO (local processing outage), and the system waits for the LIU7, MLIU, HLIU, or HSLR to recover. When communications are resumed, the system enters the recovery process without operator intervention. If the LIU7, MLIU, HLIU, or HSLR becomes inaccessible during the link synchronizing process, the system continually attempts to complete the process. When communications are resumed, the link synchronizing continues to completion.</p> <p>Action: Manual action may be required to restore communications between the LIU7, MLIU, HLIU, or HSLR and the CM.</p>
LINK <nn>: FAILED, LIU7/ST RECEIVE ENQUEUE FAILED	<p>Meaning: The link failed to synchronize because of an interface problem between the signaling terminal and the LGP. The system attempts to recover the link by continuing the synchronization. If the procedure cannot end successfully, the link is set to the SysB state.</p> <p>Action: Check log reports for additional information. Check hardware for correct operation.</p>
LINK <nn>: LIU7/ST RECEIVE PROC UNINITIALIZED	<p>Meaning: The link failed to synchronize because the signaling terminal on the LIU link resource detected software errors. The system attempts to recover the link by continuing the synchronizing procedure. If the procedure cannot end successfully, the link is set to the SysB state.</p> <p>Action: Check the log reports for additional information. Check the hardware for correct operation.</p>
LINK <nn>: LIU7/ST TRANSMIT PROC UNINITIALIZED	<p>Meaning: The link failed to synchronize because the signaling terminal on the LIU link resource detected software errors. The system attempts to recover the link by continuing the synchronizing procedure. If the procedure cannot end successfully, the link is set to the SysB state.</p> <p>Action: Check the log reports for additional information. Check the hardware for correct operation.</p>
LINK <nn>: LOST FSN	

QUERYFLT (continued)

Command responses (Sheet 10 of 18)

Responses for the QUERYFLT command	
MAP output	Meaning and action
	<p>Meaning: The system could not identify the FSN, and rejected the message. RSM sets the traffic state of the link to SysB, transfers signaling to another link, sets the resource to SysB, and generates a RETR DIED SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource going SysB.</p>
LINK <nn>: NO FAULT DETECTED AT PRESENT	<p>Meaning: There are no faults on the link. This message is shown if an in-service link is queried for faults.</p> <p>Action: None</p>
LINK <nn>: NO REAL TIME IN LIU7	<p>Meaning: The link failed to synchronize because the application code in the signaling terminal was occupying the computing real-time for an unacceptable length of time. The system attempts to recover the link by continuing the synchronizing procedure. If the procedure cannot end successfully, the link is set to the SysB state.</p> <p>Action: Check the log reports for additional information. Check the hardware for correct operation.</p>
LINK <nn>: PERIODIC TEST FAILED	<p>Meaning: The link has failed the periodic link test. RSM has not received a signaling link test acknowledgment from the far-end office within the correct time period, or the acknowledgment was received with an incorrect test pattern. RSM removes the link from service, initiates a changeover procedure, and sets the state of the link to SysB.</p> <p>Action: Access the PM maintenance level and check the resource for faults.</p>
LINK <nn>: PROVING FAILED	<p>Meaning: The link has reached the proving phase of an alignment procedure, but it is unable to finish because of an excessive error rate. RSM sends a message to the far-end office requesting it to restrict messages, sets the resource to the SysB state, then tries to resynchronize the link.</p> <p>Action: None</p>
LINK <nn>: REMOTE CONGESTION TIMEOUT	

QUERYFLT (continued)**Command responses (Sheet 11 of 18)**

Responses for the QUERYFLT command	
MAP output	Meaning and action
	<p>Meaning: The far-end office has stayed congested too long. The system sends a message to the far-end office requesting it to restrict messages, then sets the resource to the SysB state.</p> <p>Action: None</p> <p>LINK <nn>: REMOTE PROCESSOR OUTAGE</p>
	<p>Meaning: The far-end office is unable to provide call processing on the link. Its level 2 function is sending link status signal units indicating processor outage. On receipt of the processor outage signals, the resource sends fill-in signal units and informs the system that the link cannot be used.</p> <p>Action: Contact the far-end office to establish the cause of the failure.</p> <p>LINK <nn>: RETRIEVAL BUFFER ENQUEUE PROBLEM</p>
	<p>Meaning: The system is unable to use the link for signaling because the resource failed. RSM transfers signaling to another link, sets the resource to SysB, and generates a RETR DIED SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource going SysB.</p> <p>LINK <nn>: RETRIEVAL CORRUPT AUDIT BYTE</p>
	<p>Meaning: The system transfers signaling to another link, sets the resource to SysB, and generates a RETR DIED SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource going SysB.</p> <p>LINK <nn>: RETRIEVAL TRANSMIT BUFFER PROBLEM</p>
	<p>Meaning: The data link processor (DLP) in the resource has detected an error in its transmit buffer. The system transfers signaling to another link, sets the resource to SysB, and generates a COR TX BUF SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource going SysB.</p> <p>LINK <nn>: SEQUENCE NUMBER ERROR</p>

QUERYFLT (continued)

Command responses (Sheet 12 of 18)

Responses for the QUERYFLT command	
MAP output	Meaning and action
	<p>Meaning: The system is unable to use the link for signaling because of resource failures. The system transfers signaling to another link, sets the resource to SysB, and generates a RETR DIED SWERR.</p> <p>Action: Access the PM maintenance level to determine the cause of the resource going SysB.</p>
LINK <nn>: SIE RECEIVED	<p>Meaning: The resource has received an emergency alignment status indication (SIE) message from the far-end office on a link that is in service. Linkset management sets the link synchronizing state to SysB and attempts to resynchronize the link.</p> <p>Action: None</p>
LINK <nn>: SIN RECEIVED	<p>Meaning: The resource has received a normal alignment status indication (SIN) message from the far-end office on a link that is in service. Linkset management sets the link synchronizing state to SysB and attempts to resynchronize the link.</p> <p>Action: None</p>
LINK <nn>: SIO RECEIVED	<p>Meaning: The resource has received an out-of-alignment status indication (SIO) message from the far-end office on a link that is in service. The system sets the link synchronizing state to SysB and attempts to resynchronize the link.</p> <p>Action: None</p>
LINK <nn>: SIOS RECEIVED	<p>Meaning: The resource has received an out-of-service status indicator (SIOS) message from the far-end office indicating that link alignment has failed. RSM sets the link synchronizing state to SysB and attempts to resynchronize the link.</p> <p>Action: None</p>
LINK <nn>: ST AUDIT FAILED IN LIU7	

QUERYFLT (continued)**Command responses (Sheet 13 of 18)**

Responses for the QUERYFLT command	
MAP output	Meaning and action
	<p>Meaning: During an audit procedure, a hardware or software fault was detected. The system attempts recovery action. The system continues to initiate link synchronization until it times out, then it sets the link to the SysB state.</p> <p>Action: Check the log reports for additional information. Check the hardware for problems.</p>
LINK <nn>: ST FAILURE ON THE LINK	<p>Meaning: The resource is in the manual busy or the SysB state. The system is unable to seize the resource at the start of an activate procedure, or the resource has failed during the procedure. The system attempts to retrieve signaling messages from the resource and prevents further transmission of signaling messages on the link.</p> <p>Action: Access the PM maintenance level to determine the cause of the fault.</p>
LINK <nn>: STOP RECEIVED	<p>Meaning: The resource has been directed to stop because of some irregularity. RSM has set the resource to the SysB state, which runs tests. When the resource is returned to service, the system attempts to activate the link again.</p> <p>Action: Enter the RTS command (post the linkset if necessary) to activate the link.</p>
LINK <nn>: STOP RECEIVED, ALREADY STOPPED	<p>Meaning: The resource has been told to stop, but it is already in the busy state.</p> <p>Action: None</p>
LINK <nn>: SOFTWARE PROBLEM - CHECK LOGS	<p>Meaning: RSM has detected an error that cannot be associated with the components of the signaling link. RSM is unable to isolate the fault and prompts the user to use other methods.</p> <p>Action: Check all other MAP levels for alarms, and check the log reports for irregularities. Log reports associated with CCS7 are prefixed with C7.</p>
LINK <nn>: TL OUT OF SERVICE	<p>Meaning: The traffic state of the link is SysB because the transmission link (TL) is out-of-service.</p> <p>Action: Access the TRKS maintenance level and investigate the TL problem.</p>

QUERYFLT (continued)

Command responses (Sheet 14 of 18)

Responses for the QUERYFLT command	
MAP output	Meaning and action
LINK <nn>: TRANSMIT/RETRANSMIT BUFFER PROBLEM	<p>Meaning: The DLP in the resource has detected an error in its transmit buffer. The system transfers signaling to another link, sets the resource to SysB, and generates a COR TX BUF SWERR.</p> <p>Action: Enter the PM maintenance level to determine the cause of the resource going SysB.</p>
LINK <nn>: UNABLE TO DETERMINE FAULT	<p>Meaning: The fault on the link is either a transient fault or a multiple fault.</p> <p>Action: Check the maintenance levels on the MAP and correct any faults.</p>
LINK <nn>: UNABLE TO SEIZE AN , MLIU, HLIU, OR HSLR>	<p>Meaning: The link traffic is not in the in-service state. The activation procedure has failed because an LIU7, MLIU, HLIU, or HSLR resource could not be seized. The system continues to attempt synchronization until it is timed out.</p> <p>Action: Return the LIU7, MLIU, HLIU, or HSLR to the in-service state.</p>
LINK <nn>: WAITING FOR FISU/MSU TIMEOUT	<p>Meaning: The link has reached the aligned ready state of an alignment procedure and is waiting for an FISU or an MSU, but a time-out has occurred. Linkset management sets the link synchronizing state to SysB and attempts to resynchronize the link.</p> <p>Action: None</p>
LINK <nn>: WAITING FOR SIN/SIE TIMEOUT	<p>Meaning: The link has reached the aligned state of an alignment procedure and is waiting for a SIN or a SIE, but a time-out has occurred. RSM sets the link synchronizing state to SysB and attempts to resynchronize the link.</p> <p>Action: None</p>
LINK <nn>: WAITING FOR SIO/SIN TIMEOUT	<p>Meaning: The link has reached the not-aligned state of an alignment procedure and is waiting for an SIO or an SIN, but a time-out has occurred. The system sets the link synchronizing state to SysB and attempts to resynchronize the link.</p> <p>Action: None</p>

QUERYFLT (continued)**Command responses (Sheet 15 of 18)**

Responses for the QUERYFLT command	
MAP output	Meaning and action
LINK <nn>: WAITING FOR T2 TIMEOUT	<p>Meaning: A timeout occurred while Layer 2 attempted to align and prove the link.</p> <p>Action: None. If the error occurs frequently, contact the far-end office to confirm that the alignment and proving parameters are compatible.</p>
LINK <nn>: REMOTE PROCESSOR OUTAGE	<p>Meaning: The link was taken out of service because the far-end Layer 2 detected a processor outage in Layer 3.</p> <p>Action: Contact the far-end office for more information.</p>
LINK <nn>: PROVING FAILED	<p>Meaning: Link proving at Layer 2 failed.</p> <p>Action: Access the PM maintenance level to obtain more information. If the error occurs frequently, test the facilities.</p>
LINK <nn>: CARRIER LOSS OF SIGNAL	<p>Meaning: The physical layer carrier signal was lost on the incoming path.</p> <p>Action: Contact the far-end office for more information. Test the facilities.</p>
LINK <nn>: CARRIER LOSS OF FRAME	<p>Meaning: Framing on the physical layer carrier signal was lost on the incoming link.</p> <p>Action: Contact the far-end office for more information. Test the facilities.</p>
LINK <nn>: CARRIER ALARM INDICATION SIGNAL	<p>Meaning: A downstream fault is preventing the reception of a valid signal.</p> <p>Action: Contact the far-end office for more information. Test the facilities.</p>
LINK <nn>: CARRIER REMOTE ALARM INDICATION	<p>Meaning: A remote location cannot receive the outgoing signal.</p> <p>Action: Contact the far-end office for more information. Test the facilities.</p>
LINK <nn>: ATM LAYER LOSS OF CELL DELINEATION (LCD)	

QUERYFLT (continued)

Command responses (Sheet 16 of 18)

Responses for the QUERYFLT command	
MAP output	Meaning and action
	<p>Meaning: LCD indicates that ATM cells cannot be extracted from the incoming signal.</p> <p>Action: Contact the far-end office for more information.</p>
LINK <nn>: SAAL LAYER REMOTE RELEASE - OUT OF SERVICE	<p>Meaning: The link Layer 2 protocol initiated a release at the far end of the link.</p> <p>Action: Contact the far-end office to determine the reason for the release.</p>
LINK <nn>: SAAL LAYER REMOTE RELEASE - PROTOCOL ERROR	<p>Meaning: The link Layer 2 protocol initiated a release at the far-end of the link because of a Layer 2 protocol error.</p> <p>Action: Contact the far-end office for more information.</p>
LINK <nn>: SAAL LAYER LOCAL PROTOCOL ERROR	<p>Meaning: The link Layer 2 protocol initiated a release due to a Layer 2 protocol error.</p> <p>Action: Check CCS logs and CCS7 OMs for more information.</p>
LINK <nn>: SAAL LAYER REMOTE RELEASE - MGMT INITIATED	<p>Meaning: The link Layer 2 protocol initiated a release because of instructions from Layer 3.</p> <p>Action: Contact the far-end office for more details.</p>
LINK <nn>: ST HARDWARE ERROR	<p>Meaning: The ST card detected a service-affecting hardware fault and removed the link from service to avoid service degradation.</p> <p>Action: Access the PM maintenance level to obtain more information.</p>
LINK <nn>: ST SOFTWARE ERROR	<p>Meaning: The ST card has detected a service-affecting software fault and removed the link from service to avoid service degradation.</p> <p>Action: Access the PM maintenance level to obtain more information.</p>
LINK <nn>: UNRESOLVED FAILURE	

QUERYFLT (continued)**Command responses (Sheet 17 of 18)**

Responses for the QUERYFLT command	
MAP output	Meaning and action
	<p>Meaning: The link has been taken out of service to avoid service degradation due to an uncategorized fault.</p> <p>Action: Access the PM maintenance level to obtain more information.</p>
LINK <nn>: SHARED MEMORY RECEIVE QUEUE FULL	<p>Meaning: Layer 2 removed the link from service because Layer 3 is not processing incoming messages.</p> <p>Action: Access the PM maintenance level to obtain more information.</p>
LINK <nn>: REMOTE PROVING FAILURE	<p>Meaning: Link proving at Layer 2 failed at the far end.</p> <p>Action: Contact the far-end office for more information.</p>
LINK <nn>: SSCOP RELEASE	<p>Meaning: Layer 2 removed the link from service because of an SSCOP protocol error.</p> <p>Action: None</p>
LINK <nn>: Link congested at level <1-4>	<p>Meaning: Indicates the link congestion level. The link congestion level is indicated by a variable that ranges from 1 to 4. Level 4 is the highest level of congestion.</p> <p>Action: None</p>
LINK <nn>: SMH congested at level <1-4>	<p>Meaning: Indicates the signaling message handling (SMH) congestion level. The SMH congestion level is indicated by a variable that ranges from 1 to 4. Level 4 is the highest level of congestion.</p> <p>Action: None</p>
LINK <nn>: Link congested at level <1-4> and SMH congested at level <1 to 4>	<p>Meaning: Indicates that both link congestion and SMH congestion are present. Congestion levels are indicated by variables that range from 1 to 4. Level 4 is the highest level of congestion. This message also indicates that the link congestion level is greater than or equal to the SMH congestion level.</p> <p>Action: None</p>

QUERYFLT (end)

Command responses (Sheet 18 of 18)

Responses for the QUERYFLT command	
MAP output	Meaning and action
LINK <nn>:	SMH congested at level <1-4> and link congested at level <1 to 4>
	<p>Meaning: Indicates that both SMH congestion and link congestion are present. Congestion levels are indicated by variables that range from 1 to 4. Level 4 is the highest level of congestion. This message also indicates that the SMH congestion level is greater than the link congestion level.</p> <p>Action: None</p>

QUERYRES

Command

QUERYRES

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the QUERYRES command to query the clock rate, clock source, frame format, zero logic, line length equalization, and carrier state of all links in a DS-1 carrier.

Usage notes

Use this command only for high-speed links on a service switching point (SSP) node and for multiple link interface unit (MLIU)-based links.

Before you execute command QUERYRES, post the linkset for the links that you want to query.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYRES command parameters and variables	
Command	Parameters and variables
QUERYRES	link_number ALL
Item	Description
link_number	This variable specifies the link to be queried.
ALL	This parameter specifies all links in the linkset to be queried.

QUERYRES (continued)

Usage examples

The following table provides examples of the command.

Command example

Example of the QUERYRES command						
>QUERYRES ALL						
<i>MAP response:</i>						
Link	ClkRate	ClkSrc	FF	ZL	LLEQ	State
0	DS1	FBUS_1	ESF	B8ZS	36-65m	OOS
1	DS1	FBUS_0	ESF	B8ZS	66-95m	InSv
Explanation The MAP displays the values for the DS-1 carrier parameters.						

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the QUERYRES command						
MAP output	Meaning and action					
Link	ClkRate	ClkSrc	FF	ZL	LLEQ	State
0	DS1	FBUS_1	ESF	B8ZS	36-65m	OOS
1	DS1	FBUS_0	ESF	B8ZS	66-95m	InSv
<p>Meaning: This is the normal response of the QUERYRES command for high-speed links. It is a report composed of a header followed by one or more lines containing information on each queried link, where</p> <p><Link> is the number of the queried link</p> <p><ClkRate> is the clock rate of the link</p> <p><ClkSrc> is the clock source</p> <p><FF> is the frame format</p> <p><ZL> is the zero logic</p> <p><LLEQ> is the line length equalization</p> <p><State> is the state of the carrier</p> <p>Action: None</p>						

QUERYRES (end)**Command responses (Sheet 2 of 2)**

Responses for the QUERYRES command	
MAP output	Meaning and action
Link <num> occupies Port <num> on MLIU <num>	<p>Meaning: This is the normal response of the QUERYRES command for the multiple link interface unit (MLIU)-based links. The response provides the port number associated with the MLIU.</p> <p>Action: None</p>
QueryRes is not supported for LIU7 based links	<p>Meaning: The queried link is neither a high-speed link or a multiple link interface unit (MLIU)-based link. Command QUERYRES cannot be used to query this link.</p> <p>Action: None</p>

QUERYTRF

Command

QUERYTRF

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the QUERYTRF command to obtain an estimate of the traffic on each CCS7 signaling link. The command produces separate displays for low-speed links (LSL) and high-speed links (HSL).

Usage notes

The QUERYTRF command has the following limitations and restrictions:

- The information in the QUERYTRF report is only an approximation of the link occupancy. The calculations are based on data collected during the time interval specified in the QUERYTRF header line, and may be up to 30 min old. Therefore, the current state of the link may differ considerably from the QUERYTRF report.
- If the configuration of a link is changed, the QUERYTRF command may miscalculate its occupancy, since the QUERYTRF command uses the current link state for some of its calculations. For example, if the link speed is changed, the QUERYTRF command calculates the occupancy of the link based on the new speed, rather than the actual speed of the link at the time the traffic measurements were collected. This may also cause the "Inconsistent OM registers" error message to be displayed.

QUERYTRF (continued)

- The MTP level 2 headers are considered part of the message signal unit (MSU) in the calculations used by this command.
- The average MSU length may have a nonzero value for low occupancy links as in the following examples:

Example for an LSL:

```
Link Speed Byte/sec Erlang MSU len %RTx Msg/sec
0 7000 0 0.00 17 0 0
```

Example for an HSL:

```
Link CellRate Cell/sec CPU Occ MSU len %RTx Msg/sec
0 3622 691 51% 25 0 671
```

For a synchronized link, there will be some MTP test messages that have an effect on the number of bytes used in the calculation of the average.

These test messages do not occur frequently enough during the OM transfer period to affect the bytes/sec calculations or the link occupancy.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYTRF command parameters and variables	
Command	Parameters and variables
QUERYTRF	ALL link_number
Item	Description
ALL	This parameter returns traffic information for all links in the linkset
link_number	This variable specifies the number of the link to be queried. The range is 0 to 15.

QUERYTRF (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERYTRF command							
>QUERYTRF ALL							
<i>MAP response:</i>							
QueryTrf: Link Occupancy for 12:30:00 - 12:35:00							
Link	Speed	Byte/sec	Erlang	MSU len	%RTx	Msg/sec	
2	7000	0	0.00	0	0	0	
Link	CellRate	Cell/sec	CPU Occ	MSU len	%RTX	Msg/sec	
1	3622	691	51%	25	0	671	
Explanation The response is the traffic level report for all links. Note that link 1 is the high-speed link. The information reported for link 1 relates to DS-1 performance.							

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 4)

Responses for the QUERYTRF command							
MAP output	Meaning and action						
QueryTrf: Link Occupancy for <start> - <end>							
Link	Speed	Byte/sec	Erlang	MSU len	%RTx	Msg/sec	
<link>	<speed>	<byte/sec>	<erlang>	<msu len>	<%rtx>	<msg/sec>	

QUERYTRF (continued)

Command responses (Sheet 2 of 4)

Responses for the QUERYTRF command															
<p>Meaning: This is the normal response of the QUERYTRF command for low-speed links. It is a report composed of a two-line header followed by one or more lines containing information on each queried link, where</p> <p><start> is the starting time of the period for which traffic estimates are calculated</p> <p><end> is the ending time of the period for which traffic estimates are calculated</p> <p><link> is the link number. The range is 0 to 15</p> <p><speed> is the maximum speed of the link in bytes/sec</p> <p><bytes/sec> is the average traffic rate in bytes/sec</p> <p><erlang> is the link occupancy estimate in Erlang</p> <p><msulen> is the MSU length in bytes</p> <p><%rtx> is the percentage of link traffic that was retransmitted</p> <p><msg/sec> is the number of messages received in 1 s</p> <p>Action: None</p>	<p>QueryTrf: Link Occupancy for <start> - <end></p> <table border="1"> <thead> <tr> <th>Link</th> <th>CellRate</th> <th>Cell/Sec</th> <th>CPU Occ</th> <th>MSU len</th> <th>%RTX</th> <th>Msg/sec</th> </tr> </thead> <tbody> <tr> <td><link></td> <td><cell rate></td> <td><cell/sec></td> <td><cpu occ></td> <td><msu len></td> <td><%rtx></td> <td><msg/sec></td> </tr> </tbody> </table> <p>Meaning: This is the normal response of the QUERYTRF command for high-speed links. It is a report composed of a two-line header followed by one or more lines containing information on each queried link, where</p> <p><start> is the starting time of the period for which traffic estimates are calculated</p> <p><end> is the ending time of the period for which traffic estimates are calculated</p> <p><link> is the high-speed link number</p> <p><cellrate> is the maximum speed of the link in cells/sec</p> <p><cell/sec> is the average traffic rate in cells/sec</p> <p><cpuocc> is the percentage of CPU in use</p> <p><msulen> is the MSU length in bytes</p> <p><%rtx> is the percentage of link traffic that was retransmitted</p> <p><msg/sec> is the number of messages received in 1 s</p> <p>Action: None</p> <p>WARNING: OM TRANSFER OCCURRED; PLEASE RUN AGAIN</p>	Link	CellRate	Cell/Sec	CPU Occ	MSU len	%RTX	Msg/sec	<link>	<cell rate>	<cell/sec>	<cpu occ>	<msu len>	<%rtx>	<msg/sec>
Link	CellRate	Cell/Sec	CPU Occ	MSU len	%RTX	Msg/sec									
<link>	<cell rate>	<cell/sec>	<cpu occ>	<msu len>	<%rtx>	<msg/sec>									

QUERYTRF (continued)

Command responses (Sheet 3 of 4)

Responses for the QUERYTRF command

Meaning: This warning message, which follows the QUERYTRF report, is generated if an OM transfer took place while the QUERYTRF command was running. In this situation, if part of the report generated is based on the new OM values, it will be inconsistent with the rest of the report.

Action: Enter the QUERYTRF command again to get a report based on the updated OM values.

FAILED, NO LINKSET POSTED.

Meaning: The QUERYTRF command can only run if there is a posted linkset.

Action: Post a linkset using the POST command before using the QUERYTRF command.

WRONG NUMBER OF PARAMETERS

Meaning: This message is generated if too many parameters are entered. Enter ALL or the number of one link.

Action: Re-enter the command with one parameter.

WRONG INPUT PARAMETER

Meaning: This message is generated if an invalid parameter is entered. Enter ALL or the number of one link (0-15).

Action: Re-enter the command with the correct parameter.

NO EQUIPPED LINKS IN THIS LINKSET

Meaning: This message is generated when the posted linkset has no equipped links.

Action: None

THIS LINK IS NOT EQUIPPED

Meaning: The specified link is not equipped.

Action: None

QUERYTRF FAILED, INCONSISTENT OM TIMESTAMPS

Meaning: This message indicates that the timestamps associated with the current OM registers are inconsistent. For example, this might be caused by an incorrectly reset system clock.

Action: Check the system clock or wait for the next OM transfer.

QUERYTRF (end)

Command responses (Sheet 4 of 4)**Responses for the QUERYTRF command**

QUERYTRF FAILED, OM DATA NOT YET AVAILABLE

Meaning: This message indicates that the first OM transfer has not yet occurred. Data for the QUERYTRF calculations is not available until after the OM transfer.

Action: Wait for the first OM transfer to take place.

OMS ARE INCONSISTENT FOR THIS LINK

Meaning: This message indicates that the values of the OM registers are inconsistent. For example, the OM registers indicate more traffic was transmitted on the link than is possible at its current speed.

Action: The situation may correct itself when the OM registers are reset at the next OM transfer.

QUERYUSR

Command

QUERYUSR

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the QUERYUSR command to list all routesets that use the posted linkset as one of its routes. The output indicates the signaling point code, the routeset CLLI, and the network name of the routeset. The definition of a routeset is the network name plus its destination point code (DPC).

Usage notes

None

Command parameters and variables

None

QUERYUSR (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERYUSR command									
>QUERYUSR									
<i>MAP response:</i>									
CCIS6	CCS7	CCITT6							
2LK	1LK	*							
Link Set	TORONTOTOMTRL	-	ISTb						
	Traf	Sync	STC	Transmission	Link	Action	In		
LK	Stat	Stat	No	Stat	CLLI	ExtrkNM	Stat	Progress	
0	InSv	Sync	2	InSv	TORONTOTOMTRL	100	SZD		
1	ManB	Alnd	5	InSv	TORONTOTOMTRL	101	SZD		
2	SysB	SysB	0	InSv	TORONTOTOMTRL	102	SZD/Proving		
3	SysB	SysB	1	InSv	TORONTOTOMTRL	103	SZD/Proving		
Queryusr									
Routeset	CLLI	Network	Name	Point	Code				
Montreal	123	TCTS		ANSI7	045 222 111				
Ottawa	89	TCTS		ANSI7	101 002 159				
Toronto	200	TCTS		ANSI7	243 098 087				
Quebec City	45	TCTS		ANSI7	155 198 212				
Explanation: The system lists the routesets of the posted linkset.									

QUERYUSR (end)

Responses

The following table describes the MAP responses.

Command responses

Responses for the QUERYUSR command	
MAP output	Meaning and action
<pre>ROUTESET NAME NETWORK NAME POINT CODE <rteset_name> <network_name> <pt_code></pre>	<p>Meaning: The MAP shows the QUERYUSR information, where <rteset_name> is the full name of the routeset. <network_name> is the name assigned to the network in system table C7RTESET. <pt_code> is the point code of the routeset.</p> <p>Action: None</p>

QUIT**Command**

QUIT

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0 to 6. However, the system cannot accept a level number higher than the number of the current level.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p><i>MAP response:</i></p> <pre>CCS7:</pre> <p>Explanation: The C7LKSET sublevel has changed to a previous CCS7 sublevel.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
<pre>CI:</pre>	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
<pre>QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1</pre>	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.</p> <p>Action: Reenter the command using an appropriate level number.</p>
<p>The system replaces the C7LKSET level menu with a menu that is two or more levels higher.</p>	<p>Meaning: You entered the quit command with an <i>n</i> variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
<p>The system replaces the display of the C7LKSET level with the display of the next higher MAP level.</p>	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

RTS

Command

RTS

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the RTS command to return to service the selected link of a posted linkset. If the all parameter is used, all links in the posted linkset are returned to service.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

RTS command parameters and variables	
Command	Parameters and variables
RTS	ALL link_number
ALL	This parameter returns to service all links in the posted linkset.
link_number	This variable specifies the number of the link to be returned to service. The range is 0 to 15.

RTS (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the RTS command							
>RTS 0							
<i>where</i>							
0 is the link number							
<i>MAP response:</i>							
	CCIS6		CCS7		CCITT6		
	2LKM		*		*		
Link Set OCALATOALASKA - ISTb							
	Traf	Sync	STC	Transmission	Link	Action	In
LK	Stat	Stat	No	Stat	CLLI ExtrkNM	Stat	Progress
0	ManB	Alnd	2	InSv	OCALATOALASKA	100	SZD
1	InSv	Sync	5	InSv	OCALATOALASKA	101	SZD
2	InSv	Sync	0	InSv	OCALATOALASKA	102	SZD
3	InSv	Sync	1	InSv	OCALATOALASKA	103	SZD
RTS 0							
Link 0: Passed							
Explanation: Link 0 has been returned to service.							

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the RTS command	
MAP output	Meaning and action
LINK <nn>: Command already done.	<p>Meaning: The link is already in the in-service state.</p> <p>Action: None</p>
LINK <nn>: FAILED, LINK IS NOT IN MAN BUSY STATE	<p>Meaning: The link must be in the manual busy state to return the link to service.</p> <p>Action: Using the busy command, set the link to the manual busy state. Then, reenter the rts command.</p>
LINK <nn>: MAINTENANCE COMMAND IN PROGRESS	<p>Meaning: Another command is being processed at the MAP. Since only one command at a time can be acted upon from the MAP, the rts command was not initiated.</p> <p>Action: Repeat the command later.</p>
LINK <nn> : PASSED	<p>Meaning: The link has been returned to service.</p> <p>Action: None</p>
The link is not equipped.	<p>Meaning: An invalid link number has been entered.</p> <p>Action: Enter the command again, using a valid number.</p>

TST

Command

TST

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the TST command to initiate a signaling route test (SRT) on a link in the posted linkset. The test includes transmitting a message with the standard SNM routing label and a two byte test pattern to a specified end-point. The same message is expected to be returned as acknowledgement.

Usage notes

The TST command has the following limitations and restrictions:

- Signaling links must be in the synchronized state before testing. Use the ACT command to synchronize the links.
- If the all parameter is used, only those links that are in the synchronized state are tested. If there are no links in the sync state, the command is aborted.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

TST command parameters and variables					
Command	Parameters and variables				
TST	ALL	<u>FEP</u>			
	link_number				
	route_id	D	mainarea	subarea	areaunit
		R	routeset		
Item	Description				
ALL	This parameter selects all links in the posted linkset.				

TST (continued)**Parameters and variables (Sheet 2 of 2)**

TST command parameters and variables	
Command	Parameters and variables
areaunit	This variable selects the unit signaling point. The unit signaling point is a unique numerical address in the CCS7 destination point code (DPC) message. The range is 0 to 127.
D	This parameter selects DPC as the far end code to be specified.
<u>FEP</u>	This default parameter, which is never entered, indicates that the far end point code of the linkset will be the destination point code used as the SRT whenever neither the D or R parameter is entered.
link_number	This variable selects the link to be tested. The range is 0 to 15.
mainarea	This variable selects the main signaling area. The main signaling area is a unique numerical address in the CCS7 DPC message. The range is 0 to 31.
R	This parameter selects the routeset.
route_id	This variable selects the specific routes in CCS7 message.
routeset	This variable is the routeset common language location identifier (CLLI) that must be supplied when the R parameter is entered. The DPC of this routeset will be used as the DPC in the routing label of the SRT.
subarea	This variable selects the SUB signaling area. The SUB signaling area is a unique numerical address in the CCS7 DPC message. The range is 0 to 15.

TST (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the TST command									
>TST 0									
<i>where</i>									
0 is the link number									
<i>MAP response:</i>									
CCIS6					CCS7				CCITT6
2LKM		1LK							
Linkset OCALATOALASKA - ISTb									
	Traf	Sync	STC	Transmission	Link	Action	In	Progress	
LK	Stat	Stat	No	Stat	CLLI	Extrknm	Stat		
0	InSv	Sync	2	InSv	OCALATOALASKA	100	SZD		
1	ManB	Alnd	5	InSv	OCALATOALASKA	101	SZD		
2	InSv	Sync	0	InSv	OCALATOALASKA	102	SZD		
3	SysB	SysB	1	InSv	OCALATOALASKA	103	SZD		
									Prvng
Tst 0									
Link 0: Test passed									
Explanation: Link 0 has been tested successfully.									

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 5)

Responses for the TST command	
MAP output	Meaning and action
Cannot send message to signaling management	<p>Meaning: A problem exists with internal communication.</p> <p>Action: Check for and save any logs. Contact the next level of support.</p>
Failed to get DPC for specified routeset	

TST (continued)**Command responses (Sheet 2 of 5)**

Responses for the TST command	
MAP output	Meaning and action
	<p>Meaning: The routeset supplied with the R parameter does not have a corresponding DPC based on the current datafill.</p> <p>Action: Issue the command with the correct routeset.</p>
Inconsistent data - check logs	<p>Meaning: A problem exists with the internal data.</p> <p>Action: Check for and save any logs. Contact the next level of support.</p>
LINK : FAILED, FAR END DID NOT REPLY TO REQUEST	<p>Meaning: The far-end office failed to respond to the request for a test transmission. The far-end office is in one of the following states: manual busy, system busy, or offline.</p> <p>Action: Contact the far-end office to determine the cause of the fault.</p>
LINK : FAILED, NO RESPONSE FROM MSB7	<p>Meaning: The MSB7 did not respond to the TST command. The MSB7 is in one of the following states: manual busy, system busy, or offline.</p> <p>Action: Use PM maintenance to check the MSB7.</p>
LINK : LINK MUST BE SYNCHRONIZED	<p>Meaning: The link synchronization state is not in the in-service or synchronized state. Therefore, the link is not in the proper state to undergo testing.</p> <p>Action: Activate using the act command and return the link to service using the rts command. Then, reenter the TST command.</p>
LINK : Other maintenance command in progress	<p>Meaning: Another command is being processed at the MAP. Because only one command can be acted on at any one time from the MAP, the command TST command was not initiated.</p> <p>Action: Repeat the command later.</p>
link : TEST ALREADY REQUESTED	<p>Meaning: The test procedure has already started.</p> <p>Action: None</p>

TST (continued)

Command responses (Sheet 3 of 5)

Responses for the TST command	
MAP output	Meaning and action
LINK : TEST CANCELLED BY OTHER MAINTENANCE COMMAND	<p>Meaning: Another command using the force parameter has been entered, forcing the premature completion of the TST command.</p> <p>Action: Repeat the command later.</p>
LINK : TEST FAILED	<p>Meaning: An acknowledgment was not received (in 1 s) from the far-end office, or the test pattern received was different from that sent. There is noise on the signaling link or a fault in the resource.</p> <p>Action: Access both the TRKS maintenance level and the PM maintenance level to check the signaling link and the resource.</p>
Link nn: Test failed, far end did not reply to request	<p>Meaning: No SRA was received from the far end in the allotted time.</p> <p>Action: Ascertain source of the error. Reenter the command. If the response recurs, contact the next level of support.</p>
Link nn: Test failed, no response from LIU7	<p>Meaning: The link interface unit (LIU) did not reply to the request in the allotted time.</p> <p>Action: Check for and save any logs. Contact the next level of support.</p>
LINK : Test failed, no timer available	<p>Meaning: No timers are currently available for use.</p> <p>Action: Repeat the command later.</p>
Link nn: TEST FAILED, REPLY ARRIVED ON A DIFFERENT LINK	<p>Meaning: The test acknowledgment was received on a different link than the one on which the test message was sent.</p> <p>Action: Contact the far-end office to determine the cause of the fault.</p>
Link nn: Test failed, test patterns mismatched	

TST (continued)**Command responses (Sheet 4 of 5)**

Responses for the TST command	
MAP output	Meaning and action
	<p>Meaning: The SRA that was received in response to the transmitted SRT contained an error in the test pattern field.</p> <p>Action: Ascertain source of the error. Reenter the command. If the response recurs, contact the next level of support.</p>
LINK : TEST PASSED	<p>Meaning: The test pattern received at the far-end office corresponds with the one sent by the system. No further action is taken on the link.</p> <p>Action: None</p>
Specified routeset must have a full PC scope	<p>Meaning: The routeset supplied does not have a corresponding DPC with a full point code scope based on the current datafill.</p> <p>Action: Issue the command with a different routeset.</p>
This DPC does not correspond to any valid routeset	<p>Meaning: The DPC supplied with the D parameter does not correspond to a valid routeset based on the current datafill.</p> <p>Action: Issue the command with the correct parameter.</p>
This is not a valid routeset	<p>Meaning: The routeset supplied with the R parameter does not correspond to a valid routeset based on the current datafill.</p> <p>Action: Issue the command with the correct routeset.</p>
This linkset is not a route in the specified routeset	<p>Meaning: The test was aborted because the posted linkset is not a route in the specified routeset.</p> <p>Action: Enter the command again with the routeset that the posted linkset is a route in.</p>
Wrong input parameter	<p>Meaning: An improper parameter was supplied with the command</p> <p>Action: Reissue the command with the correct parameters.</p>

TST (end)

Command responses (Sheet 5 of 5)

Responses for the TST command	
MAP output	Meaning and action
WRONG NUMBER OF PARAMETERS	<p>Meaning: The data entered with the command consists of more than one parameter.</p> <p>Action: Verify the parameter and reenter the command with the number of parameters.</p>

UINH

Command

UINH

Sublevel

MAPCI;MTC;CCS;CCS7;C7LKSET

Function

Use the UINH command to restore traffic back to previously inhibited links. A request to uninhibit is sent to the far-end office. Reception of an uninhibit acknowledgement allows the system to return the lines to service.

Usage notes

The UINH command is not allowed on JPN7 linksets although the command is displayed as a valid command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

UINH command parameters and variables	
Command	Parameters and variables
UINH	ALL link
ALL	This parameter selects all links in the posted linkset.
link	This variable selects the link to be uninhibited. The range is 0 to 15.

UINH (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the UINH command
<pre>>UINH 0</pre> <p><i>where</i></p> <p>0 is the link number</p> <p><i>MAP response:</i></p> <pre>LINK 0: PASSED</pre> <p>Explanation: The link 0 has been uninhibited and the traffic transferred to another link.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the UINH command	
MAP output	Meaning and action
<pre>FAILED, LINKSET DESTINATION IS OFFLINE OR MANBSY</pre>	<p>Meaning: The destination for the specified linkset is Offl or ManB.</p> <p>Action: Contact the far-end office to determine the problem.</p>
<pre>FAILED, LINKS IN THIS NETWORK CANNOT BE UNINHIBITED</pre>	<p>Meaning: You entered a link from a network that cannot be uninhibited.</p> <p>Action: None</p>
<pre>LINK <nn>: COMMAND ALREADY DONE</pre>	<p>Meaning: The selected link is already uninhibited.</p> <p>Action: None</p>
<pre>LINK <nn>: FAILED, COMMAND ALREADY IN PROGRESS</pre>	<p>Meaning: The system is in the process of uninhibiting the link as a result of a command issued from another MAP.</p> <p>Action: None</p>
<pre>LINK <nn>: FAILED, FAR-END DENIED REQUEST</pre>	

UINH (end)**Command responses (Sheet 2 of 2)**

Responses for the UINH command	
MAP output	Meaning and action
	<p>Meaning: The far-end office denied the request from the sending office. Action: Contact the far-end office to determine the cause.</p> <p>LINK <nn>: FAILED, FAR-END DID NOT REPLY TO REQUEST</p>
	<p>Meaning: The far-end office did not reply within the prescribed time limits. Action: Contact the far-end office to determine the cause.</p> <p>LINK <nn>: FAILED, LINK IS OFFLINE</p>
	<p>Meaning: Offline links cannot carry traffic and therefore cannot be inhibited or uninhibited. Action: None</p> <p>LINK <nn>: FAILED, MAINTENANCE COMMAND IN PROGRESS</p>
	<p>Meaning: The MAP terminal is already processing another command. Action: When the current command is finished, reenter the UINH command.</p> <p>LINK <nn>: FAILED, THIS IS THE LAST AVAILABLE LINK IN ROUTESET</p>
	<p>Meaning: The link is the last one available for a given routeset to use. Action: None</p>

6 C7MSUVER level commands

C7MSUVER menu

Use the C7MSUVER level of the MAP to build message signaling units (MSU), subject them to the screening rules of the CCS7 link interface unit 7 (LIU7), and display the results of screening rules that were encountered. Receiving screening rule information lets you verify if a message will be discarded or allowed.

The following figure shows the C7MSUVER menu and status display.

Figure 6-1 C7MSUVER MAP level menu

```

      CM      MS      IOD      Net      PM      CCS      Trks      Ext      APPL
      .       .       .       .       .       .       .       .       .

C7MSUVER          CCS7
0  Quit
2  Post_          Message
3  Save_          SIO: Network Ind=  Priority=  Services=
4  SetSIO_        DPC:              OPC:
5  SetDPC_
6  SetOPC_
7
8
9                C7MSUVER:
10
11
12
13
14
15 SetNWK
16 Clear
17 IntMess
18 Screen_

Hidden commands
SETAFPC  SETDEST
SETCDPA  SETH0H1
SETCGPA  SETSCMG

```

Note: Hidden commands are not visible on the MAP display.

The C7MSUVER level has one main MAP display, but allows access to other MAP displays for various MSU service types. The main C7MSUVER MAP display shows only the message transfer part (MTP) of the message, that is, only the service information octet (SIO), the origination point code (OPC), and the destination point code (DPC). Then, if the service type indicated in the service indicator (SI) field requires additional message fields, a different C7MSUVER menu display appears. The additional MAP displays correspond to the following MSU service types:

- signaling network management (SNM)
- signaling connection control part (SCCP)
- telephone user part (TUP)

Since the SNM, SCCP, and TUP menu displays are subdisplays of the C7MSUVER level, all commands available from the four menu displays are included in the C7MSUVER directory. However, you can access certain commands only within a particular sublevel. The field names correspond with the available menu commands. For example, the setdest command is only available within the SNM sublevel. You cannot see the destination field in the message template until you access the SNM sublevel display.

Accessing the C7MSUVER level

To access the C7MSUVER level, enter the following command from the CI MAP level:

```
>MAPCI ;MTC ;CCS ;CCS7 ;C7MSUVER
```

and press the Enter key.

C7MSUVER commands

This chapter describes commands available at the C7MSUVER level of the MAP display. The commands are arranged in alphabetical order. The following C7MSUVER commands are described in this chapter:

- CLEAR
- INTMESS
- POST
- QUIT
- SAVE
- SCREEN
- SETAFPC
- SETCDPA
- SETCGPA

- SETDEST
- SETDPC
- SETH0H1
- SETNWK
- SETOPC
- SETSCMG
- SETSIO

CLEAR

Command

CLEAR

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the CLEAR command to erase the currently displayed message (made up of the entries in the message fields).

Usage notes

The CLEAR command is qualified by the following exceptions, restrictions, and limitations:

- When you use the CLEAR command, the basic MAP display is shown. The message that was displayed when you entered the command is no longer shown. It is not deleted from the table unless you use the save command.
- When in either the SNM, SCCP, or TUP sublevel, the CLEAR command returns you to the main C7MSUVER MAP display.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the CLEAR command			
>CLEAR			
<i>MAP response:</i>			
SIO:	Network Ind=	Priority=	Service=
DPC:		OPC:	
Explanation: The displayed message disappears from the MAP terminal, and the basic message template reappears.			

INTMESS

Command

INTMESS

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the INTMESS command to interpret the message displayed on the MAP display. The system translates the codes into an easily readable and understandable format.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the INTMESS command
<pre>>INTMESS MAP response: Service Indicator Octet: Network Indicator=NATL Priority=0 Service Indicator=TUP Plus Origination Point Code: Point Code=ANSI7 001 001 001 C7ROUTESET1 Destination Point Code: Point Code=ANSI7 002 002 002 C7ROUTESET2 Explanation: The message is displayed in an easily readable and understandable format. The system identifies the codes, abbreviations, and acronyms used in the message fields.</pre>

MAP responses

The following table describes the MAP responses.

INTMESS (end)

Command responses

Response for the INTMESS command	
MAP output	Meaning and action
<pre>Service Indicator Octet: Network Indicator= ni Priority= pri Service Indicator= si Origination Point Code: Point Code= opc opc routeset Destination Point Code: Point Code= dpc dpc routeset</pre>	
<p>Meaning: The message is displayed in an easily readable and understandable format. The system identifies the codes, abbreviations, and acronyms used in the message fields.</p> <p>Action: None</p>	

POST

Command

POST

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the POST command to display a message from the verification message table.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

POST command parameters and variables	
Command	Parameters and variables
POST	msgno
Item	Description
msgno	This variable specifies the number of the message you want to post. The message number ranges from 0 to 9.

Usage examples

The following table provides an example of the command.

POST (continued)**Command example**

Example of the POST command
<pre>>POST 9 where 9 is the message number MAP response: Message: SIO: Network Ind=1 Priority=2 Service=2 DPC: ANSI7 003 001 000 OPC: CCITT7 BASIC 00005</pre> <p>Explanation: The system overwrites the current message template with the contents of message 9.</p>

MAP responses

The following table describes the MAP responses to the POST command. The following generic characters are used in the responses to represent specific numbers:

- ni is the network indicator
- nn is the verification message number
- pc is the point code

Command responses (Sheet 1 of 2)

Responses for the POST command	
MAP output	Meaning and action
<pre>LOCAL POINT CODE FOR NETWORK INDICATOR <ni> IS <pc></pre>	<p>Meaning: The network indicator and corresponding point code are valid. The system updates the message template with the new message information.</p> <p>Action: None</p> <p>The current message has not been saved. Do you wish to continue posting the message? Please enter Yes or No.</p>

POST (end)

Command responses (Sheet 2 of 2)

Responses for the POST command	
MAP output	Meaning and action
	<p>Meaning: You have not yet saved the current message. If you do not save the current message, the new message will overwrite the current one.</p> <p>Action: Enter the word yes to overwrite the current message with the new one. Enter the word no to stop the posting process. Then, use the save command to save the current message.</p>
VERIFICATION MESSAGE <nn>: ALREADY POSTED	<p>Meaning: You specified a message that is already posted at another MAP.</p> <p>Action: Determine if the message is posted at another MAP. If it is, wait until later, then reenter the command. Or, quit from the C7MSUVER level at the other MAP and reenter the command at your MAP.</p>
WARNING: NO LOCAL PC IN TABLE C7NETWRK FOR NI <ni>	<p>Meaning: There is no entry in the C7NETWRK table for the network indicator you entered. The system updates the other message fields with the new message information.</p> <p>Action: None</p>

QUIT**Command**

QUIT

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0 to 6. However, the system cannot accept a level number higher than the number of the current level.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p><i>MAP response:</i></p> <p>The display changes to the display of a higher level menu.</p> <p>Explanation: The C7MSUVER level has changed to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
CI:	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.</p> <p>Action: Reenter the command using an appropriate level number.</p>
The system replaces the C7MSUVER level menu with a menu that is two or more levels higher.	<p>Meaning: You entered the quit command with an <i>n</i> variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
The system replaces the display of the C7MSUVER level with the display of the next higher MAP level.	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

SAVE**Command**

SAVE

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the SAVE command to save a message in the verification message table under a specified message number.

Usage notes

The SAVE command is qualified by the following exceptions, restrictions, and limitations:

- You can save a maximum of ten messages.
- You must use the SAVE command to save any changes to a temporary message or a previously saved message from the verification message table.
- If you exit from the C7MSUVER MAP level without saving your messages, the system prompts you to choose whether or not to save the messages you built or changed. If you choose to save your messages and cancel the quit sequence, you have to access the SAVE command. The system does not automatically save the messages once you cancel the quit command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

SAVE command parameters and variables	
Command	Parameters and variables
SAVE	msgno
Item	Description
msgno	This variable specifies the number under which the message will be recorded in the verification message table. The message number ranges from 0 to 9.

SAVE (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the SAVE command
<pre>>SAVE 9 where 9 is the message number MAP response: Message: SIO: Network Ind=1 Priority=2 Service=15 DPC: ANSI7 003 001 000 OPC: CCITT7 BASIC 00005 Explanation: The system records the current message template as message 9 in the verification message table.</pre>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the SAVE command	
MAP output	Meaning and action
<pre>VERIFICATION MESSAGE <n> IN USE. MESSAGE IS NOT SAVED.</pre>	<p>Meaning: You specified a message that is already posted at another MAP terminal. The system cannot save a message in use at another MAP terminal.</p> <p>Action: Reenter the command using another message number.</p>
<pre>DO YOU WISH TO OVERWRITE EXISTING DATA FOR VERIFICATION MESSAGE <n> PLEASE ENTER YES OR NO VERIFICATION MESSAGE IS SAVED or MESSAGE IS NOT SAVED</pre>	

SAVE (end)**Command responses (Sheet 2 of 2)**

Responses for the SAVE command	
MAP output	Meaning and action
	<p>Meaning: A message has already been saved with the number you entered. You have the choice of either overwriting the saved message with the current message, or canceling the command.</p> <p>Action: Enter the word yes if you want to overwrite the saved message with the current message. Then, the response "Verification message is saved" appears. Enter the word no if you want to cancel the command. Then, the response "Message is not saved" appears.</p>
	<p>VERIFICATION MESSAGE IS SAVED AND VERIFICATION MESSAGE IS NO LONGER POSTED</p> <p>Meaning: The current message is saved under the specified verification table number, which is different from the currently posted message number.</p> <p>Action: None</p>

SCREEN

Command

SCREEN

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the SCREEN command to send a displayed MAP message to a Common Channel Signaling 7 (CCS7) link interface unit (LIU7) in order to verify a previously specified routing path. The screen command verifies that the network protocol, specified by command SETNWK, matches the point code protocol specified by commands SETOPC, SETDPC, and SETCGPA.

Usage notes

The SCREEN command may affect the operational measurements (OM) and message signaling unit detailed recording 7 (MDR7) if the ENABLED field in table C7GTWLKS is set to the value Y.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

SCREEN command parameters and variables	
Command	Parameters and variables
SCREEN	linkst_name link_no
Item	Description
link_no	This variable specifies the link number, ranging from 0 to 15.
linkst_name	This variable specifies the name of the linkset.

SCREEN (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the SCREEN command
<pre>>SCREEN LKSET 10</pre> <p>where</p> <p>LKSET is the linkset name</p> <p>10 is the link number</p> <p><i>MAP response:</i></p> <pre>Sending verification message to LKSET1 0 02 0F 56 78 09 0D D4 A1 23 6C 56 23 12 12 23 45</pre> <p>Explanation: The message is being sent to the specified linkset name and link number. The verification message appears in hexadecimal format on the second line.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 5)

Responses for the SCREEN command	
MAP output	Meaning and action
ERROR: CALLED PARTY ADDRESS NOT DEFINED	<p>Meaning: You specified a signaling connection control part (SCCP) message by setting the SI field to 3 in the service information octet (SIO), but the called party address (CDPA) field is not valid for an SCCP message.</p> <p>Action: For SCCP messages, use command SETCDPA to set the value for the CDPA field of the message template.</p>
ERROR: CALLING PARTY ADDRESS NOT DEFINED	<p>Meaning: You specified an SCCP message by setting the SI field to 3 in the SIO, but the calling party address (CGPA) field is not correct for an SCCP message.</p> <p>Action: For SCCP messages, use command SETCGPA to set the value for the CGPA field of the message template.</p>
ERROR: INVALID NETWORK TYPE	

SCREEN (continued)**Command responses (Sheet 2 of 5)**

Responses for the SCREEN command	
MAP output	Meaning and action
	<p>Meaning: You specified a network type in the network indicator (NI) field of the SIO that is not datafilled in table C7NETWRK. The system cancels the SCREEN command request.</p> <p>Action: Change the NI of the SIO field to show a valid network that is datafilled in table C7NETWRK. Reenter the SCREEN command.</p>
	<p>ERROR: THE PC DOES NOT MATCH NI PROVIDED</p> <p>Meaning: You specified an NI that does not match the originating point code (OPC) or destination point code (DPC).</p> <p>Action: None</p>
	<p><linkset_name> <link_number> IS NOT A VALID LINK</p> <p>Meaning: You specified a linkset name and link number that are not correct for an LIU7 link.</p> <p>Action: Reenter the command using a correct LIU7 linkset name and number.</p>
	<p><linkset_name> IS NOT A VALID LINKSET NAME</p> <p>Meaning: You specified a linkset name that is not datafilled in table C7LKSET.</p> <p>Action: Reenter the command using a linkset name that is datafilled in table C7LKSET.</p>
	<p><linkset_name> IS NOT DATAFILLED IN TABLE C7GTWLKS</p> <p>Meaning: You specified a linkset name that is not datafilled in table C7GTWLKS.</p> <p>Action: Reenter the command using a linkset name that is datafilled in table C7GTWLKS.</p>
	<p><linkset_name> <linkset_number> IS NOT RESPONDING. REASON:<rsn_text></p> <p>Meaning: The specified link did not receive the verification message. The reason for the failure appears on the display.</p> <p>Action: Retry the SCREEN command. If the problem continues, contact your next level of support.</p>
	<p><linkset_name> <linkset_number>: LIU7 IS NOT IN SERVICE</p>

SCREEN (continued)**Command responses (Sheet 3 of 5)**

Responses for the SCREEN command	
MAP output	Meaning and action
	<p>Meaning: You specified an LIU7 that is not in service.</p> <p>Action: Reenter the command using an LIU7 that is in service or put the LIU7 into the in-service state and reenter the command.</p> <p><number> screening functions were performed: screening started|continued with function <funct> screening error occurred because <error msg> or screening was aborted because <error msg> or screening ended or screening failed because <error msg></p> <p>Meaning: This message contains details about the screening applied to the verification message. The first line shows the number of screening functions performed. The second line (or lines depending on the number of functions performed) lists the functions performed. The third line shows the result of the screening procedure and describes any associated screening error.</p> <p>The meaning of each result line is listed below.</p> <ul style="list-style-type: none"> • screening error occurred because <error msg> The message was allowed to proceed. • screening was aborted because <error msg> • screening ended The message was allowed to proceed. • screening failed because <error msg> The message was discarded. <p>Action: None</p> <p>SENDING VERIFICATION MESSAGE TO <linkset_name> <linkset_number> verification message</p>

SCREEN (continued)

Command responses (Sheet 4 of 5)

Responses for the SCREEN command	
MAP output	Meaning and action
	<p>Meaning: The message is being sent to the specified linkset and link number. The verification message appears in hexadecimal format on the second line of the response.</p> <p>Action: None</p>
THERE IS NO VERIFICATION MESSAGE DEFINED NO MESSAGE SENT	<p>Meaning: There is no verification message currently displayed on the MAP. The system cancels the SCREEN command.</p> <p>Action: Either post a message from the verification message table or build a verification message before reentering the command.</p>
UNABLE TO SEND <linkset_name> <linkset_number>. REASON:	<p>Meaning: The system could not send the verification message to the specified link. The reason for the failure appears on the display. The system cancels the SCREEN command.</p> <p>Action: Retry the SCREEN command. If the problem continues, contact your next level of support.</p>
WARNING: SCREENING IS ENABLED ON LINKSET <linkset_name> C7GTWSCR OMs WILL BE AFFECTED	<p>Meaning: OMs will be affected because you specified a linkset name and link number with screening enabled.</p> <p>Action: If you do not want to affect the OMs, ensure the ENABLED field in table C7GTWLKS is datafilled with the value "n". Otherwise, no action is required.</p>
WARNING: GT FORMAT=0001 NATURE OF ADDRESS ONLY TRANSLATION TYPE <trans type> WILL NOT BE PRESENT IN THE MESSAGE	<p>Meaning: You entered a global title (GT) format indicator of 0001 using command SETCDPA. A GT format indicator of 001 means the GT section of the CDPA specifies the nature of address (NA) only. A GT format indicator of 001 is not valid for network type CCITT. The system continues to execute the SCREEN command. This response is a warning only.</p> <p>Action: If you want to use the translation type as part of the CCITT SCCP message, select a different GT format indicator. Otherwise, disregard the response.</p>

SCREEN (end)**Command responses (Sheet 5 of 5)**

Responses for the SCREEN command	
MAP output	Meaning and action
No network defined.	<p>Meaning: The SETNWK command was not issued before the SCREEN command.</p> <p>Action: Issue the SETNWK command before the SCREEN command.</p>
The network type is not <network protocol>.	<p>Meaning: The protocol of the the network, set by command SETNWK, does not match the protocol of the point codes set by commands SETOPC, SETDPC, SETSIO, or SETCGPA. The network protocol values are ANSI, NTC7, or CCITT.</p> <p>Action: Select a different network or change the point code protocols to match the protocol of the selected network.</p>

SETAFPC

Command

SETAFPC

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the SETAFPC command to set the affected point code (AFPC) of the verification message. Use this command to set the subsystem number for the signaling connection control part management (SCMG) field of the verification message.

Usage notes

The SETAFPC command has the following limitations and restrictions:

- When you use this command, the previously entered data is overwritten by the new data you enter.
- Before setting the affected point code and subsystem number for the SCMG field, use the SETCDPA command to set the called party subsystem number to 1.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 3)

SETAFPC command parameters and variables							
Command	Parameters and variables						
SETAFPC	ssnum	ANSI7	NETWORK	network			
			CLUSTER	network	cluster		
			FULL	network	cluster	member	
	CCITT7		BASIC	pc			
			INTL	zone	areanetw	sigpoint	
			INTL2	network	region	group	member
			GERMAN	numarea	hvst	kvst	sigpoint
	NTC7		main_area	sub_area	sigpoint		
	Item	Description					
ANSI7	This parameter specifies that the OPC is network type ANSI7.						

SETAFPC (continued)**Parameters and variables (Sheet 2 of 3)**

SETAFPC command parameters and variables	
Command	Parameters and variables
areanetw	This variable specifies the area network of the OPC in the INTL format for a CCITT7 network. The area network number ranges from 0 to 255.
BASIC	This variable specifies the cluster of the OPC. The cluster number ranges from 0 to 255.
CCITT7	This parameter specifies that the OPC has a network type of CCITT7.
CLUSTER	This parameter specifies that the scope of the ANSI network is cluster.
cluster	This variable specifies the cluster of the OPC. The cluster number ranges from 0 to 255.
FULL	This parameter specifies that the scope of the ANSI network is full.
GERMAN	This parameter specifies that the format of the CCITT7 network is German.
group	This variable specifies the scope of the CCITT7 network in format INTL2. The group number ranges from 0 to 15.
hvst	This variable specifies the Hauptvermittlungsstelle (tandem level switching exchange) of a German format OPC in the CCITT7 network type. The number ranges from 0 to 7.
INTL	This parameter specifies that the format of the CCITT7 network is the generic international three-field format.
INTL2	This parameter specifies that the format of the CCITT7 network is the generic international four-field format.
kvst	This variable specifies the Knotenvermittlungsstelle (trunk tandem switching exchange, regional exchange, 3rd level of transit/long distance network) of a German format OPC in the CCITT7 network type. The number ranges from 0 to 15.
main area	This variable specifies the main area of the OPC for network type NTC7. The main area ranges from 0 to 255.

SETAFPC (continued)**Parameters and variables (Sheet 3 of 3)**

SETAFPC command parameters and variables	
Command	Parameters and variables
member	This variable specifies the member of the OPC for network type ANSI and for network type CCITT7 in the INTL2 format. The number for network type CCITT7 ranges from 0 to 7. The number for network type ANSI ranges from 0 to 255.
NETWORK	This parameter specifies that the scope of an ANSI network type is network.
network	This variable specifies the network of the OPC for ANSI7 networks and CCITT7 networks in the INTL2 format. The network number for CCITT7 ranges from 0 to 15. The network number for ANSI7 ranges from 0 to 255.
NTC7	This parameter specifies that the OPC has a network type of NTC7.
numarea	This variable specifies the number area of the OPC for network type CCITT7 in the German format. The number area ranges from 0 to 15.
pc	This variable specifies the point code of the OPC for network type CCITT7 in the basic format. The point code number ranges from 0 to 16383.
region	This variable specifies the region of the OPC for network type CCITT7 in the INTL2 format. The signaling point number ranges from 0 to 7.
sigpoint	This variable specifies the signaling point of the OPC for network type NTC7 and network type CCITT7 with the INTL or German format. The signaling point number for CCITT7 ranges from 0 to 255. The signaling point for German format ranges from 0 to 7 and the signaling point for NTC7 ranges from 0 to 255.
sub_area	This variable specifies the sub area of the OPC for network type NTC7. The sub area number ranges from 0 to 255.
zone	This variable specifies the zone of the OPC for network type CCITT7 in the INTL format. The zone number ranges from 0 to 7.

SETAFPC (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the SETAFPC command
<pre>>SETAFPC 34 CCITT7 BASIC 3456</pre> <p>where</p> <p>34 is the subsystem number (ssnum)</p> <p>3456 is the point code number (pc)</p> <p>MAP response:</p> <pre>SCMG: MT= 5 SSN= 34 Affected PC= 3456</pre> <p><i>Explanation:</i>The system updates the SCMG SSN and Affected PC fields with the new data specified in the SETAFPC command string.</p>

MAP Responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Response for the SETAFPC command	
MAP output	Meaning and action
<pre>SCMG: MT= <message_type> SSN= <subsystem_number> Affected PC= <pc_number></pre>	<p>Meaning: The system updates the SCMG SSN and Affected PC fields with the new data entered by using the SETAFPC command</p> <p>Action: None</p>
<pre>The CPDA SSN is not SCMG (1)</pre>	<p>Meaning: For SCCP management messages, the system cannot update the SCMG field unless the subsystem number (SSN) of the called party address is set to 1.</p> <p>Action: Use the SETCDPA command to set the subsystem number to 1.</p>

SETAFPC (end)

Command responses (Sheet 2 of 2)

Response for the SETAFPC command	
MAP output	Meaning and action
Command invalid	<p>Meaning: The SETAFPC command is not available from the currently displayed MAP level. The SETAFPC command is only available from the SCCP management level of the C7MSUVER MAP level.</p> <p>Action: Access the SCCP sublevel from the C7MSUVER level and repeat the command. Set the service indicator field of the service information octet (SIO) to 3 using the SETSIO command.</p>

SETCDPA**Command**

SETCDPA

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the SETCDPA command to set the SCCP called party address (CDPA) fields in the verification message template.

Usage notes

The SETCDPA command is qualified by the following exceptions, restrictions, and limitations:

- Any old data is overwritten by the new data you enter.
- This command can only be accessed from the SCCP sublevel. You can access this sublevel by setting the service indicator field in the service information octet to 3.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

SETCDPA command parameters and variables					
Command	Parameters and variables				
SETCDPA	NOSSN	NOGT		GT	
	SSN ss_num	GT	format	type	SSN
Parameters and variables	Description				
format	This variable, ranging from 1 to 15, specifies the number of the global title format.				
GT	This parameter, global title, specifies two things, depending on its location in the command string. When preceded by a subsystem number, it indicates that the global title for the subsystem will appear in the message. When preceded by the GT type variable or the NOGT parameter, it represents a global title translation routing type.				
NOGT	This parameter specifies that the global title for the subsystem will not appear in the message.				

SETCDPA (continued)**Parameters and variables (Sheet 2 of 2)**

SETCDPA command parameters and variables	
Command	Parameters and variables
NOSSN	This parameter specifies that the subsystem number will not appear in the message.
SSN	This parameter, subsystem number, specifies two things, depending on its location in the command string. When preceded by the SETCDPA command, it indicates that the subsystem number will appear in the message. When preceded by either the NOGT parameter or the GT type variable, it represents a subsystem number routing type.
ss_num	This variable, ranging from 0 to 255, specifies the number of the subsystem to appear in the message.
type	This variable, ranging from 0 to 255, specifies the number of the global title translation type.

Usage examples

The following table provides an example of the command.

Command example

Example of the SETCDPA command
<pre>>SETCDPA SSN 12 GT 2 45 GT</pre> <p><i>where</i></p> <p>12 is the number of the subsystem (variable ss_num)</p> <p>2 is the number of the global title format</p> <p>45 is the number of the global title translation type</p> <p><i>MAP response:</i></p> <pre>CDPA: SSN= 12 GT Format= 2 Trans Type= 45 Routing= GT</pre> <p>Explanation:The system sets the CDPA to the specifications you entered. The system updates the display headers for the CDPA fields in the message template.</p>

SETCDPA (end)**MAP responses**

The following table describes the MAP responses.

Command responses

Response for the SETCDPA command	
MAP output	Meaning and action
CDPA:SSN= <ss_number> GT Format= <format_number> Trans Type=<type_number> Routing= <routing_indicator>	<p>Meaning: The system updates the CDPA fields in the message template with the specified attributes you entered.</p> <p>Action: None</p>
Command invalid	<p>Meaning: The SETCDPA command is not available from the currently displayed MAP level. The SETCDPA command is only available from the SCCP management level of the C7MSUVER MAP level.</p> <p>Action: Access the SCCP sublevel from the C7MSUVER level by setting the service indicator field of the SIO to 3, using the setsio command.</p>

SETCGPA

Command

SETCGPA

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the SETCGPA command to set the signaling connection control part (SCCP) calling party address (CGPA) of the verification message.

Usage notes

The following exceptions, restrictions, and limitations qualify the SETCGPA command:

- When you use this command, the newly set CGPA replaces any CGPA set before.
- When specifying the scope of an ANSI7 network, use the parameters NETWORK, CLUSTER, or FULL. When using the NETWORK parameter, the system assigns a nil value to the cluster and member fields. When using the CLUSTER parameter, the system assigns a nil value to the member field. These nil values are indicated on the MAP display by the dollar symbol (\$).
- You can access the SETCGPA command only through the SCCP sublevel of the C7MSUVER MAP level. To access the SCCP sublevel, you must set the service indicator field of the SIO to 3, using the SETSIO command.

SETCGPA (continued)**Command parameters and variables**

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 3)

SETCGPA command parameters and variables								
Command	Parameters and variables							
SETCGPA	NOSSN		NOPC					(1)
	SSN	ssnum	PC	ANSI7	NETWORK	network		(2)
					CLUSTER	cluster		(3)
					FULL	network		(4)
				CCITT7	BASIC	pc		(5)
					INTL	zone		(6)
					INTL2	network		(7)
					GERMAN	numarea		(8)
				NTC7	main_area	sub_area		(9)
SETCGPA	(1)			sccpmt				
	(2)							
	(3)	member						
	(4)	cluster	member					
	(5)							
	(6)	areantw	sigpoint					
	(7)	region	group	member				
	(8)	hvst	kvst	sigpoint				
	(9)	sigpoint						
Item	Description							
ANSI7	This parameter specifies that the affected point code is network type ANSI7.							
areantw	This variable specifies the area network of the destination field for a CCITT7 network. The area network number ranges from 0 to 255.							
BASIC	This parameter specifies that the format of the CCITT7 network is basic.							
CCITT7	This parameter specifies that the affected point code is network type CCITT7.							
CLUSTER	This parameter specifies that the scope of the ANSI network is cluster.							

SETCGPA (continued)**Parameters and variables (Sheet 2 of 3)**

SETCGPA command parameters and variables	
Command	Parameters and variables
cluster	This variable specifies the cluster of the specified point code for network type ANSI7. The cluster number ranges from 0 to 255.
FULL	This parameter specifies that the scope of the ANSI network is full.
GERMAN	This parameter specifies that the format of the CCITT7 network is German.
group	This variable specifies the group of the affected point code in network type CCITT7, format INTL2. The group number ranges from 0 to 15.
hvst	This variable specifies the Hauptvermittlungsstelle (tandem level switching exchange) of the CGPA in German format, network type CCITT7. The number ranges from 0 to 7.
INTL	This parameter specifies that the format of the CCITT7 network is the generic international three-bit format.
INTL2	This parameter specifies the format of the CCITT7 network is the generic international four-field format.
kvst	This variable specifies the Knotenvermittlungsstelle (trunk tandem switching exchange, regional exchange, 3rd level of transit/long distance network) of the CGPA in German format, network type CCITT7. The number ranges from 0 to 15.
main area	This variable specifies the main area of the CGPA for network type NTC7. The main area number ranges from 0 to 255.
member	This variable specifies the member of the CGPA for network type ANSI or network type CCITT7 in the INTL2 format. The number for network type CCITT7 ranges from 0 to 7. The number for network type ANSI ranges from 0 to 255.
NTC7	This parameter specifies that the affected point code is network type NTC7.
network	This variable specifies the network of the affected point code for network types ANSI7 and CCITT7. The network number ranges from 0 to 255 for ANSI networks and from 0 to 15 for CCITT7 networks.
NOPC	This parameter specifies that no point code will appear in the map display.
NOSSN	This parameter specifies that no subsystem number will appear in the message template.
numarea	This variable specifies the number area of the affected point code for network type CCITT7 in the German format. The network number ranges from 0 to 15.

SETCGPA (continued)**Parameters and variables (Sheet 3 of 3)**

SETCGPA command parameters and variables	
Command	Parameters and variables
PC	This parameter specifies that a point code will appear in the message template.
pc	This variable specifies the point code of the affected point code for network type CCITT7. The point code number ranges from 0 to 16383.
region	This variable specifies the region of the affected point code for network type CCITT7 in the INTL2 format. The region ranges from 0 to 7.
sigpoint	This variable specifies the signaling point of the CGPA for network type NTC7 and for network type CCITT7 in the INTL format and German format. The signaling point number for INTL ranges from 0 to 255. The signaling point number for German format ranges from 0 to 7. The signaling point number for NTC7 ranges from 0 to 255.
SSN	This parameter specifies that a subsystem type appears in the message template.
ssnum	This variable specifies the subsystem number. The number ranges from 0 to 255.
sub_area	This variable specifies the sub area of the affected point code for network type NTC7. The sub area number ranges from 0 to 255.
zone	This variable specifies the zone of the affected point code for network type CCITT7 in the INTL format. The zone number ranges from 0 to 7.

SETCGPA (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the SETCGPA command
<pre>>SETCGPA SSN 123 PC ANS17 FULL 2 3 4 9</pre> <p><i>where</i></p> <p>123 is the the subsystem number</p> <p>2 is the network of the affected point code for network type ANS17</p> <p>3 is the cluster of the specified point code for network type ANS17</p> <p>4 is the member of the affected point code for network type ANS17</p> <p>9 is the SCCP message type number</p> <p><i>MAP response:</i></p> <pre>CGPA: SSN= 123 PC= ANS17 FULL 2 3 4 SCCPMT= 9</pre> <p>Explanation: The system updates the CGPA headers to show the new setting for the CGPA point code.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the SETCGPA command	
MAP output	Meaning and action
<pre>CGPA: SSN= <subsystem_number> PC= <ntwrk_type> <ntwrk_format></pre>	<p>Meaning: The system updates the subsystem and point code fields of the CGPA field with the data entered using the SETCGPA command.</p> <p>Action: None</p>

SETCGPA (end)

Command responses (Sheet 2 of 2)

Responses for the SETCGPA command	
MAP output	Meaning and action
Command invalid	<p>Meaning: The SETCGPA command is not available from the currently displayed MAP level. The SETCGPA command is only available from the SCCP management level of the C7MSUVER MAP level.</p> <p>Action: Access the SCCP sublevel from the C7MSUVER level. Set the service indicator field of the SIO to 3, using the SETSIO command.</p>

SETDEST

Command

SETDEST

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the SETDEST command to set the signaling network management (SNM) destination field in the message template.

Usage notes

The SETDEST command is qualified by the following exceptions, restrictions, and limitations:

- Any old data in the destination field is overwritten by the new data you enter.
- The SETDEST command is only applicable to the SNM sublevel of the C7MSUVER level. To access the SNM sublevel, you must set the service indicator field to 0, 1, or 2, using the SETSIO command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

SETDEST command parameters and variables					
Command	Parameters and variables				
SETDEST	ANSI7	NETWORK	network		
		CLUSTER	network	cluster	
		FULL	network	cluster	member
	CCITT7	BASIC	pc		
	INTL	zone	areanetw	sigpoint	
Item	Description				
ANSI7	This parameter specifies that the OPC is network type ANSI7.				
areanetw	This variable specifies the area network of the OPC in the INTL format for a CCITT7 network. The area network number ranges from 0 to 255.				

SETDEST (continued)**Parameters and variables (Sheet 2 of 2)**

SETDEST command parameters and variables	
Command	Parameters and variables
BASIC	This variable specifies the cluster of the OPC. The cluster number ranges from 0 to 255.
CCITT7	This parameter specifies that the OPC has a network type of CCITT7.
CLUSTER	This parameter specifies that the scope of the ANSI network is cluster.
cluster	This variable specifies the cluster of the OPC. The cluster number ranges from 0 to 255.
FULL	This parameter specifies that the scope of the ANSI network is full.
INTL	This parameter specifies that the format of the CCITT7 network is the generic international three-field format.
INTL2	This parameter specifies that the format of the CCITT7 network is the generic international four-field format.
member	This variable specifies the member of the OPC for network type ANSI and for network type CCITT7 in the INTL2 format. The number for network type CCITT7 ranges from 0 to 7. The number for network type ANSI ranges from 0 to 255.
NETWORK	This parameter specifies that the scope of an ANSI network type is network.
network	This variable specifies the network of the OPC for ANSI7 networks and CCITT7 networks in the INTL2 format. The network number for CCITT7 ranges from 0 to 15. The network number for ANSI7 ranges from 0 to 255.
pc	This variable specifies the point code of the OPC for network type CCITT7 in the basic format. The point code number ranges from 0 to 16383.
sigpoint	This variable specifies the signaling point of the OPC for network type NTC7 and network type CCITT7 with the INTL or German format. The signaling point number for CCITT7 ranges from 0 to 255. The signaling point for German format ranges from 0 to 7 and the signaling point for NTC7 ranges from 0 to 255.
zone	This variable specifies the zone of the OPC for network type CCITT7 in the INTL format. The zone number ranges from 0 to 7.

SETDEST (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the SETDEST command
<pre>>SETDEST ANSI7 NETWORK 1</pre> <p>where</p> <p>1 is the network of the destination field for ANSI7 network type</p> <p>MAP response:</p> <pre>SNM: H0= 0 H1= 0 Dest Field= ANSI7 NETWORK 1</pre> <p>Explanation: The destination field is set for ANSI7 NETWORK 1. The system updates the Dest Field display header.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the SETDEST command	
MAP output	Meaning and action
<pre>SNM: H0= 0 H1= 0 Dest Field= <network_type> <network_scope></pre>	<p>Meaning: The system updates the Dest Field display header with the specified destination code. The ANSI7 and CCITT parameters represent the network type. The NETWORK, CLUSTER, and FULL parameters, along with the network and member variables, represent the network scope.</p> <p>Action: None</p>
<pre>Command invalid</pre>	<p>Meaning: The SETDEST command is not available for the currently displayed MAP level. The SETDEST command is only applicable to the SNM sublevel of the C7MSUVER level.</p> <p>Action: None</p>

SETDPC**Command**

SETDPC

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the SETDPC command to set the destination point code (DPC) field of a verification message.

Usage notes

When you use this command, the system replaces old DPC field data with new data.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 3)

SETDPC command parameters and variables						
Command	Parameters and variables					
SETDPC	ANSI7	NETWORK	network			
		CLUSTER	network	cluster		
		FULL	network	cluster	member	
	CCITT7	BASIC	pc			
INTL		zone	areanetw	sigpoint		
INTL2		network	region	group	member	
GERMAN		numarea	hvst	kvst	sigpoint	
	NTC7	main_area	sub_area	sigpoint		
Item	Description					
ANSI7	This parameter specifies that the OPC is network type ANSI7.					
areanetw	This variable specifies the area network of the OPC in the INTL format for a CCITT7 network. The area network number ranges from 0 to 255.					

SETDPC (continued)**Parameters and variables (Sheet 2 of 3)**

SETDPC command parameters and variables	
Command	Parameters and variables
BASIC	This variable specifies the cluster of the OPC. The cluster number ranges from 0 to 255.
CCITT7	This parameter specifies that the OPC has a network type of CCITT7.
CLUSTER	This parameter specifies that the scope of the ANSI network is cluster.
cluster	This variable specifies the cluster of the OPC. The cluster number ranges from 0 to 255.
FULL	This parameter specifies that the scope of the ANSI network is full.
GERMAN	This parameter specifies that the format of the CCITT7 network is German.
group	This variable specifies the scope of the CCITT7 network in format INTL2. The group number ranges from 0 to 15.
hvtst	This variable specifies the Hauptvermittlungsstelle (tandem level switching exchange) of a German format OPC in the CCITT7 network type. The number ranges from 0 to 7.
INTL	This parameter specifies that the format of the CCITT7 network is the generic international three-field format.
INTL2	This parameter specifies that the format of the CCITT7 network is the generic international four-field format.
kvst	This variable specifies the Knotenvermittlungsstelle (trunk tandem switching exchange, regional exchange, 3rd level of transit/long distance network) of a German format OPC in the CCITT7 network type. The number ranges from 0 to 15.
main area	This variable specifies the main area of the OPC for network type NTC7. The main area ranges from 0 to 255.
member	This variable specifies the member of the OPC for network type ANSI and for network type CCITT7 in the INTL2 format. The number for network type CCITT7 ranges from 0 to 7. The number for network type ANSI ranges from 0 to 255.
NETWORK	This parameter specifies that the scope of an ANSI network type is network.
network	This variable specifies the network of the OPC for ANSI7 networks and CCITT7 networks in the INTL2 format. The network number for CCITT7 ranges from 0 to 15. The network number for ANSI7 ranges from 0 to 255.

SETDPC (continued)**Parameters and variables (Sheet 3 of 3)**

SETDPC command parameters and variables	
Command	Parameters and variables
NTC7	This parameter specifies that the OPC has a network type of NTC7.
numarea	This variable specifies the number area of the OPC for network type CCITT7 in the German format. The number area ranges from 0 to 15.
pc	This variable specifies the point code of the OPC for network type CCITT7 in the basic format. The point code number ranges from 0 to 16383.
region	This variable specifies the region of the OPC for network type CCITT7 in the INTL2 format. The signaling point number ranges from 0 to 7.
sigpoint	This variable specifies the signaling point of the OPC for network type NTC7 and network type CCITT7 with the INTL or German format. The signaling point number for CCITT7 ranges from 0 to 255. The signaling point for German format ranges from 0 to 7 and the signaling point for NTC7 ranges from 0 to 255.
sub_area	This variable specifies the sub area of the OPC for network type NTC7. The sub area number ranges from 0 to 255.
zone	This variable specifies the zone of the OPC for network type CCITT7 in the INTL format. The zone number ranges from 0 to 7.

Usage examples

The following table provides an example of the command.

Command example

Example of the SETDPC command
<pre>>SETDPC ANSI7 FULL 1 1 1</pre> <p><i>where</i></p> <p>1 is the network of the DPC for network type ANSI7</p> <p>1 is the cluster of the DPC for network type ANSI7</p> <p>1 is the member of the DPC for network type ANSI7</p> <p><i>MAP response:</i></p> <pre>DPC: ANSI7 001 001 001</pre> <p>Explanation: The system updates the DPC field in the map display.</p>

SETDPC (end)

MAP responses

The following table describes the MAP responses.

Command responses

Response for the SETDPC command	
MAP output	Meaning and action
DPC: ANSI7 <scope_name> <variables> or DPC: CCITT7 <format> <variables> or DPC: NTC7 <variables>	<p>Meaning: The system updates the DPC field with the information you specified in the command string.</p> <p>Action: None</p>

SETH0H1**Command**

SETH0H1

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the SETH0H1 command to set the H0 and H1 header fields of the message signal unit. The designated H0 and H1 codes appear on the MAP display in the message template. The H0 field specifies the message group, and the H1 field contains signal codes for the message being built.

Usage notes

The SETH0H1 command is qualified by the following exceptions, restrictions, and limitations:

- The H0 and H1 fields only apply to SNM and TUP messages. Use the SETSIO command to access the SNM and TUP displays.
- When the SNM or TUP MAP displays appear, the default value of zero appears in both the H0 and H1 fields. Unless the fields are modified, the default values remain in the message when sent to the LIU7 for screening. However, when you enter the SETH0H1 command, the system requires input.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

SETH0H1 command parameters and variables	
Command	Parameters and variables
SETH0H1	h0code h1code
Item	Description
h0code	This variable, ranging from 0 to 15, sets the H0 field in the message signal unit.
h1code	This variable, ranging from 0 to 15, sets the H1 field in the message signal unit.

SETH0H1 (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the SETH0H1 command
<pre>>SETH0H1 1 0</pre>
<i>where</i>
1 is the value for the h0code variable, which sets the H0 field in the message signal unit
0 is the value for the h1code variable, which sets the H1 field in the message signal unit
<i>MAP response:</i>
H0= 1 H1= 0
<i>Explanation:</i> The system updates the message template with the specified h0 and h1 values.

MAP responses

The following table describes the MAP responses.

Command responses

Response to the SETH0H1 command	
MAP output	Meaning and action
H0= <h0_code> H1= <h1_code>	
	Meaning: The message template shows the values set for the H0 and H1 fields.
	Action: None

SETNWK

Command

SETNWK

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the SETNWK command to associate an SS7 test message with an internal SS7 network name when verifying gateway screening provisioning.

Usage notes

Use the SETNWK command before using the interpret message (IntMess) command. If the SETNWK command is not used first, no information will be displayed when the INTMESS command is executed.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

SETNWK command parameters and variables	
Command	Parameters and variables
SETNWK	network_name
Item	Description
network_name	This variable specifies the internal network name used to interpret gateway screening messages. Valid values exist in field network_name in table C7NETWRK.

Usage examples

The following table provides an example of the command.

SETNWK (end)

Command example

Example of the SETNWK command
<pre>>SETNWK WSCPNET2</pre> <p><i>where</i></p> <p>WSCPNET2 is the network name</p> <p><i>MAP response:</i></p> <p>The network name is set to WSCPNET2.</p> <p>Explanation: The specified network has been set. If the INTMESS command is executed after the SETNWK command, the subsystems datafilled against the specified network name appear on the MAP display.</p>

Responses

The following table describes the MAP responses.

Command responses

Responses for the SETNWK command	
MAP output	Meaning and action
This is not a valid network name.	<p>Meaning: The specified network name is not correct.</p> <p>Action: Re-enter the SETNWK command using a correct network name.</p>

SETOPC**Command**

SETOPC

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the SETOPC command to set the originating point code (OPC) field of a verification message.

Usage notes

When you use this command, the newly set OPC replaces the OPC set before.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 3)

SETOPC command parameters and variables						
Command	Parameters and variables					
SETOPC	ANSI7	NETWORK	network			
		CLUSTER	network	cluster		
		FULL	network	cluster	member	
	CCITT7	BASIC	pc			
		INTL	zone	areanetw	sigpoint	
		INTL2	network	region	group	member
		GERMAN	numarea	hvst	kvst	sigpoint
	NTC7	main_area	sub_area	sigpoint		
Item	Description					
ANSI7	This parameter specifies that the OPC is network type ANSI7.					
areanetw	This variable specifies the area network of the OPC in the INTL format for a CCITT7 network. The area network number ranges from 0 to 255.					
BASIC	This variable specifies the cluster of the OPC. The cluster number ranges from 0 to 255.					
CCITT7	This parameter specifies that the OPC has a network type of CCITT7.					

SETOPC (continued)**Parameters and variables (Sheet 2 of 3)**

SETOPC command parameters and variables	
Command	Parameters and variables
CLUSTER	This parameter specifies that the scope of the ANSI network is cluster.
cluster	This variable specifies the cluster of the OPC. The cluster number ranges from 0 to 255.
FULL	This parameter specifies that the scope of the ANSI network is full.
GERMAN	This parameter specifies that the format of the CCITT7 network is German.
group	This variable specifies the scope of the CCITT7 network in format INTL2. The group number ranges from 0 to 15.
hvtst	This variable specifies the Hauptvermittlungsstelle (tandem level switching exchange) of a German format OPC in the CCITT7 network type. The number ranges from 0 to 7.
INTL	This parameter specifies that the format of the CCITT7 network is the generic international three-field format.
INTL2	This parameter specifies that the format of the CCITT7 network is the generic international four-field format.
kvst	This variable specifies the Knotenvermittlungsstelle (trunk tandem switching exchange, regional exchange, 3rd level of transit/long distance network) of a German format OPC in the CCITT7 network type. The number ranges from 0 to 15.
main area	This variable specifies the main area of the OPC for network type NTC7. The main area ranges from 0 to 255.
member	This variable specifies the member of the OPC for network type ANSI and for network type CCITT7 in the INTL2 format. The number for network type CCITT7 ranges from 0 to 7. The number for network type ANSI ranges from 0 to 255.
NETWORK	This parameter specifies that the scope of an ANSI network type is network.
network	This variable specifies the network of the OPC for ANSI7 networks and CCITT7 networks in the INTL2 format. The network number for CCITT7 ranges from 0 to 15. The network number for ANSI7 ranges from 0 to 255.
NTC7	This parameter specifies that the OPC has a network type of NTC7.
numarea	This variable specifies the number area of the OPC for network type CCITT7 in the German format. The number area ranges from 0 to 15.

SETOPC (continued)**Parameters and variables (Sheet 3 of 3)**

SETOPC command parameters and variables	
Command	Parameters and variables
pc	This variable specifies the point code of the OPC for network type CCITT7 in the basic format. The point code number ranges from 0 to 16383.
region	This variable specifies the region of the OPC for network type CCITT7 in the INTL2 format. The signaling point number ranges from 0 to 7.
sigpoint	This variable specifies the signaling point of the OPC for network type NTC7 and network type CCITT7 with the INTL or German format. The signaling point number for CCITT7 ranges from 0 to 255. The signaling point for German format ranges from 0 to 7 and the signaling point for NTC7 ranges from 0 to 255.
sub_area	This variable specifies the sub area of the OPC for network type NTC7. The sub area number ranges from 0 to 255.
zone	This variable specifies the zone of the OPC for network type CCITT7 in the INTL format. The zone number ranges from 0 to 7.

Usage examples

The following table provides an example of the command.

Command example

Example of the SETOPC command
<pre>>SETOPC CCITT7 INTL 1 2 3</pre> <p><i>where</i></p> <ul style="list-style-type: none"> 1 is the zone number of the OPC 2 is the area network number of the OPC 3 is the signaling point number of the OPC <p><i>MAP response:</i></p> <pre>OPC: CCITT7 INTL 1 002 3</pre> <p>Explanation: The system updates the OPC field in the MAP display.</p>

SETOPC (end)

MAP responses

The following table describes the MAP responses.

Command responses

Response for the SETOPC command	
MAP output	Meaning and action
OPC: ANSI7 <scope_name> <variables> or OPC: CCITT7 (format) (variables) or OPC: NTC7 (variables)	<p>Meaning: The system updated the OPC field with the information the user specified in the command string.</p> <p>Action: None</p>

SETSCMG**Command**

SETSCMG

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the SETSCMG command to set the SCCP management fields in the message template.

Usage notes

The SETSCMG command is qualified by the following exceptions, restrictions, and limitations:

- Any old data in the SCMG field is overwritten by the new data you enter using the SETSCMG command.
- You can access the SETSCMG command through the SCCP sublevel of the C7MSUVER MAP level only. To access the SCCP sublevel, you must set the service indicator field of the service information octet to 3, using the SETSIO command.
- To set the SCMG field, the subsystem number (SSN) of the called party address (CDPA) must be set to 1. When the CDPA SSN is set to 1, the system automatically sets the SCMG MT field to 0.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

SETSCMG command parameters and variables	
Command	Parameters and variables
SETSCMG	msgtype
Item	Description
msgtype	This variable specifies the message type to appear in the signaling connection control part management (SCMG) field of the message template. The message type ranges from 0 to 255.

SETSCMG (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the SETSCMG command
<pre>>SETSCMG 5</pre> <p>where</p> <p> 5</p> <p> is the message type</p> <p>MAP response:</p> <p>SCMG: MT= 5 SSN= Affected PC=</p> <p><i>Explanation:</i>The system updates the message type in the SCMG field.</p>

The following table describes the MAP responses.

Command responses

Response for the SETSCMG command	
MAP output	Meaning and action
SCMG: MT= <message_type> SSN= Affected PC=	<p>Meaning:The system displays the new message type in the SCMG MT field of the message template.</p> <p>Action:None</p>
The CPDA SSN is not SCMG (1)	<p>Meaning: For SCCP management messages, the system cannot update the SCMG field unless the subsystem number (SSN) of the called party address is set to 1.</p> <p>Action: Use the SETCDPA (called party address) command to set the subsystem number to 1.</p>
Command invalid	<p>Meaning: The SETSCMG command is not available from the currently displayed MAP level. The SETSCMG command is only available from the SCCP management level of the C7MSUVER MAP level.</p> <p>Action: Access the SCCP sublevel from the C7MSUVER level by setting the service indicator field of the service information octet to 3, using the SETSIO command.</p>

SETSIO**Command**

SETSIO

Sublevel

MAPCI;MTC;CCS;CCS7;C7MSUVER

Function

Use the SETSIO command to set the service information octet (SIO) fields in the message template.

Usage notes

The SETSIO command is qualified by the following exceptions, restrictions, and limitations:

- Any old data is overwritten by the new data you enter.
- Depending on the SI you enter, you may see a different C7MSUVER MAP display. A new MAP display shows additional message fields and commands corresponding to the service type indicated by the SI number. The following service types have their own C7MSUVER MAP displays:
 - SNM (SI codes 0, 1, and 2)
 - SCCP (SI code 3)
 - TUP (SI code 4)

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

SETSIO command parameters and variables			
Command	Parameters and variables		
SETSIO	netwrk_ind	priority	service_ind
Parameters and variables	Description		

SETSIO (continued)

Parameters and variables (Sheet 2 of 2)

SETSIO command parameters and variables	
Command	Parameters and variables
netwrk_ind	<p>This variable specifies the network from which the message signal unit (MSU) originated. The following codes, 0 to 3, referred to as network indicators (NI), represent the four network types:</p> <ul style="list-style-type: none"> • 0-international network • 1-international network (spare) • 2-national network • 3-national network (spare)
priority	<p>This variable, ranging from 0 to 3, specifies the priority of the message. Priority 0 indicates the lowest priority</p>
service_ind	<p>This variable, ranging from 0 to 15, specifies the service type of the MSU originated. This variable is often referred to as the service indicator (SI). Values for the service indicator are</p> <ul style="list-style-type: none"> • 0-Signaling Network Management (SNM) • 1-SNM testing • 2-SNM testing special • 3-Signaling Connection Control Part (SCCP) • 4-Telephone User Part (TUP) • 5-ISDN User Part (ISUP) • 6-Data User Part • 7-Data User Part Maintenance • 15-Telephone User Part Plus <p>Values 8 to 14 do not have a matching service type.</p>

SETSIO (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the SETSIO command
<pre>>SETSIO 3 3 15</pre> <p><i>where</i></p> <p>3 is the network indicator (national network spare)</p> <p>3 is the priority</p> <p>15 is the service indicator (Telephone User Part Plus)</p> <p><i>MAP response:</i></p> <pre>Local point code for network indicator 3 is ANSI7 054 055 056 SIO: Network Ind= 3 Priority= 3 Service= 15 DPC: OPC:</pre> <p>Explanation: The system displays the local point code for the specified network. Since the specified service indicator does not require additional message fields, the C7MSUVER menu remains the same. The SIO values are updated in the message template.</p>

SETSIO (end)

MAP responses

The following table provides explanations of the responses to the SETSIO command. The following generic characters, which do not actually appear on the MAP display, are used in the responses to represent specific numbers:

- ni is the network indicator value
- pc is the point code value

Command responses

Responses for the SETSIO command	
MAP output	Meaning and action
Local point code for network indicator (ni) IS (pc)	<p>Meaning: You entered a valid network indicator. The system displays the network indicator and its corresponding point code. The message template, which shows the values for various message fields, shows the new entries for network indicator, priority, and service indicator.</p> <p>Action: None</p>
NO local PC in table C7NETWRK for NI <ni>	<p>Meaning: The network indicator value you entered is not in the C7NETWRK table. The specific network indicator value is displayed.</p> <p>Action: Reenter the message using a valid network indicator.</p>

7 C7OMAP level commands

C7OMAP menu

Use the C7OMAP level of the MAP to access the message transfer part (MTP) routing verification test (MRVT) level.

Note: The C7OMAP and MRVT levels are available only for signaling transfer point (STP) nodes.

The following figure shows the C7OMAP menu and status display.

Figure 7-1 C7OMAP MAP level menu

	CM	MS	IOD	Net	PM	CCS	Trks	Ext	APPL

C7OMAP		CCS7							
0 Quit		.							
2									
3									
4 MRVT									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									

Accessing the C7OMAP level

To access the C7OMAP level, enter the following command from the CI MAP level:

```
>MAPCI ;MTC ;CCS ;CCS7 ;C7OMAP
```

and press the Enter key.

C7OMAP commands

This chapter describes commands available at the C7OMAP level of the MAP display. The commands are arranged in alphabetical order. The following C7OMAP commands are described in this chapter:

- MRVT
- QUIT

MRVT

Command

MRVT

Directory

MAPCI;MTC;CCS;CCS7;C7OMAP

Function

Use the MRVT command to access the MRVT MAP (maintenance and administration position) level.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Example of the MRVT command
<pre>>MRVT MAP response: MRVT :</pre> <p>Explanation: The system displays the MRVT level.</p>

MRVT (end)

Responses

The following table describes the MAP responses.

Command responses

Responses for the MRVT command	
MAP output	Meaning and action
Please turn on DLOG before starting the MRVT test.	<p>Meaning: The MRVT command executed successfully. This is a standard response for the MRVT command. A warning message appears reminding the user to turn on DLOG. If the user does not turn on DLOG, other MRVT logs are generated.</p> <p>Action: None.</p>
CANNOT SETUP C7MRVT DIRECTORY.	<p>Meaning: MAP level C7MRVT could not be displayed.</p> <p>Action: Access level C7OMAP and repeat command MRVT.</p>

QUIT**Command**

QUIT

Directory

MAPCI;MTC;CCS;CCS7;C7OMAP

Function

Use the QUIT command to exit the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to quit one menu level.
ALL	This parameter causes the system to quit all MAP levels and display the CI level.
incrname	This variable causes the system to exit the specified level and all sublevels below it. The system displays the next level higher than the one specified. Values for incrname are the names of MAP levels.
n	This variable causes the system to quit a specific number of levels. The range of this variable is 0 to 6. Do not specify a number higher than the number of levels currently open.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT ALL</pre> <p><i>MAP response:</i></p> <p>The display returns to CI level</p> <p>Explanation: The system quits all open MAP levels and returns to the CI level.</p>

Responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
Return to CI level	<p>Meaning: The user executes QUIT ALL command to return to CI level.</p> <p>Action: None</p>
Return to CCS7 level	<p>Meaning: The user executes QUIT command to quit one MAP level.</p> <p>Action: None</p>

8 C7ROUTER level commands

C7ROUTER menu

Use the C7ROUTER level of the MAP to perform maintenance functions on the Common Channel Signaling 7 (CCS7) link interface unit (LIU7) external routers.

The following figure shows the C7ROUTER menu and status display.

Figure 8-1 C7ROUTER MAP level menu

```

      CM      MS      IOD      Net      PM      CCS      Trks  Ext  APPL
      CM Flt  MSpair  NODLOG  .      PMLOAD  .      .    .    .
      M      *C*      M
C7ROUTER      CCS7
0 Quit      .
2 Post      External Routing  OffL
3
4
5           11111111  11122222  22222333
6           12345678  90123456  78901234  56789012
7 Bsy      Router  -----  -----  -----  -----
8 RTS      Rtr   State  Resource  PM State
9 Offl
10          C7ROUTER:
11
12 Next
13
14 QueryRtr
15
16 QueryTrf
17
18

```

Accessing the C7ROUTER level

To access the C7ROUTER level, enter the following command from the CI (command interpreter) MAP level:

```
>MAPCI ;MTC ;CCS ;CCS7 ;C7ROUTER
```

and press the Enter key.

C7ROUTER commands

This chapter describes commands available at the C7ROUTER level of the MAP display. The commands are arranged in alphabetical order. The following C7ROUTER commands are described in this chapter:

- BSY
- NEXT
- OFFL
- POST
- QUERYRTR
- QUERYTRF
- QUIT
- RTS

BSY**Command**

BSY

Sublevel

MAPCI;MTC;CCS;CCS7;C7ROUTER

Function

Use the BSY command to change the current state of a posted router to the manual busy (ManB) state.

Usage notes

Post the router that you want to busy before using the BSY command.

Note: Busying a router can cause congestion on the routers that remain in service (InSv).

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

BSYcommand parameters and variables	
Command	Parameters and variables
BSY	ALL router_number
Item	Description
ALL	This parameter places all routers in the posted set into the ManB state.
router_number	This variable is the number of the router and has a range of 1 to 8.

BSY (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY 1</pre> <p>where</p> <p>1 is the router number</p> <p>MAP response: Bsy passed.</p> <p>Explanation: The posted router number 1 is in the ManB state.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the BSY command	
MAP output	Meaning and action
<pre>Traffic is running. Busying router <#> may increase the risk of routing congestion. Please confirm. Y: Router <#>: Bsy passed. N: Router <#>: Bsy not done.</pre>	<p>Meaning: The system warns you that by busying the specified router you can cause a traffic congestion on routers that remain in service. You are asked to confirm. If you enter Y or YES, the BSY command passes. If you enter N or NO, the command does not pass and the router remains in service.</p> <p>Action: Enter Y to confirm the command or N to abort it.</p>
<pre>Bsy already done.</pre>	<p>Meaning: The router is already in busy state.</p> <p>Action: None</p>

Command responses (Sheet 2 of 2)

Responses for the BSY command	
MAP output	Meaning and action
Bsy Failed. Posted Set is empty.	<p>Meaning: The command fails because no routers are posted.</p> <p>Action: Use the POST command to post the router that you want to busy. Enter the BSY command again.</p>
Undefined command <COMMAND>.	<p>Meaning: The command was entered incorrectly.</p> <p>Action: Enter the command again.</p>
This could cause an office outage. Type "START_OUTAGE" to continue, or "N" or "NO" to abort.	<p>Meaning: You are trying to busy the last external router. The system warns you that this action can cause an office outage. The system asks you to confirm the command. If you enter START_OUTAGE, the BSY command passes. If you enter N or NO, the command does not pass and the last router remains in service.</p> <p>Action: Enter START_OUTAGE to continue the command. Enter NO or N to abort it.</p>

NEXT

Command

NEXT

Sublevel

MAPCI;MTC;CCS;CCS7;C7ROUTER

Function

Use the NEXT command to display the next posted router.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the NEXT command				
>NEXT				
<i>MAP response:</i>				
Rtr	State	Resource	PM	State
2	InSv	LIU7	120	ISTb
Explanation: The system displays the next router.				

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the NEXT command	
MAP output	Meaning and action
No more routers in Posted Set.	<p>Meaning: There are no more routers within the posted set.</p> <p>Action: None</p>

NEXT (end)

Command responses (Sheet 2 of 2)

Responses for the NEXT command	
MAP output	Meaning and action
Next failed. Posted set is empty.	<p>Meaning: There are no routers posted.</p> <p>Action: Use the POST command to post the desired routers.</p>
Undefined command <COMMAND>.	<p>Meaning: The command was entered incorrectly.</p> <p>Action: Enter the command again.</p>

OFFFL

Command

OFFFL

Sublevel

MAPCI;MTC;CCS;CCS7;C7ROUTER

Function

Use the OFFFL command to remove a router from the system maintenance, allowing you to make office data modifications for the router.

Usage notes

Use the POST command to post the router before using OFFFL command. The posted router must be in the manual busy (ManB) state before being taken offline.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

OFFFLcommand parameters and variables	
Command	Parameters and variables
OFFFL	ALL router_number
Item	Description
ALL	This parameter takes all routers in the posted set offline.
router_number	This variable is the number of the router and has a range of 1 to 8.

OFFL (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the OFFL command
<pre>>OFFL 1</pre> <p>where</p> <p> 1 is the router number</p> <p>MAP response:</p> <p>OffL passed.</p> <p>Explanation: The posted router is in the offline state.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the OFFL command	
MAP output	Meaning and action
OffL failed. Router is not in ManB state.	<p>Meaning: The router is not in the ManB state.</p> <p>Action: Use the BSY command to change the router state to the ManB state and enter the OFFL command again.</p>
OffL already done.	<p>Meaning: The route is already in the offline state.</p> <p>Action: None</p>
OffL failed. Posted Set is empty	<p>Meaning: There are no routers posted.</p> <p>Action: Use the POST command to post the router, and enter the OFFL command again.</p>

OFFL (end)

Command responses (Sheet 2 of 2)

Responses for the OFFL command	
MAP output	Meaning and action
Undefined command <COMMAND>.	<p>Meaning: The command was entered incorrectly.</p> <p>Action: Enter the command again.</p>

POST**Command**

POST

Sublevel

MAPCI;MTC;CCS;CCS7;C7ROUTER

Function

Use the POST command to select a router for maintenance actions.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

POST command parameters and variables	
Command	Parameters and variables
POST	router_number ALL router_state
Item	Description
router_number	This variable specifies the router index location. The valid range is 1 to 8.
ALL	This parameter specifies that all routers are to be posted.
router_state	This variable indicates that all routers in a specified state are to be posted. Enter one of the following values: <ul style="list-style-type: none"> • InSv in service • ISTb in–service trouble • ManB manually busy • OffL offline • SysB system busy

POST (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the POST command			
>POST 1			
<i>where</i>			
1			
is the router number			
<i>MAP response:</i>			
Rtr	State	Resource	PM Status
1	InSv	LIU7 101	ISTb
Size of Posted Set = 1			
Explanation: Router 1 is posted.			

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the POST command	
MAP output	Meaning and action
POST <state>	
Post Failed. Posted Set is empty.	<p>Meaning: There are no routers in the specified state.</p> <p>Action: None</p>
Post Router <#> Failed. Rtr not datafilled in table C7ROUTER.	
Post Failed. Posted Set is empty.	<p>Meaning: The specified router is not datafilled in table C7ROUTER.</p> <p>Action: Choose another router and enter the command again.</p>
EITHER incorrect optional parameter(s) OR too many parameters.	
	<p>Meaning: Incorrect information was entered.</p> <p>Action: Reenter the command.</p>

POST (end)

Command responses (Sheet 2 of 2)

Responses for the POST command	
MAP output	Meaning and action
Undefined command <command>	<p>Meaning: The command was entered incorrectly.</p> <p>Action: Reenter the command.</p>

QUERYRTR

Command

QUERYRTR

Sublevel

MAPCI;MTC;CCS;CCS7;C7ROUTER

Function

Use the QUERYRTR command to display the processing information for a router.

Usage notes

Use the POST command to post the router before using the QUERYRTR command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYRTR command parameters and variables	
Command	Parameters and variables
QUERYRTR	router_number STATUS OCCUPANCY ALL
Item	Description
router_number	This variable specifies the router index location. The valid range is 1 to 8.
ALL	This parameter specifies that the processing information for all posted routers will be displayed.
STATUS	This optional parameter specifies that only the status information for the specified router or routers will be displayed.
OCCUPANCY	This optional parameter specifies that only the occupancy information for the specified router or routers will be displayed.

QUERYRTR (continued)**Usage examples**

The following table provides an example of the command.

Command example**Example of the QUERYRTR command**

```
>QUERYRTR 1
```

where

1 is the router number

MAP response:

```
QueryRtr: Router Status
```

Rtr	State	Resource	PM	State	Congestion	Level
1	InSv	LIU7 101	ISTb			0

```
QueryRtr: Router Occupancy for 14:30:00 - 15:00:00
```

```
- - - - - NCMCPUST OM Group Registers - - - - -
```

Rtr	CALLP	SCHED	SYST	MAINT	BKG	IDLE	INTER
1	0%	8%	2%	1%	1%	88%	0%

Explanation: The processing information for router number 1 is displayed.

QUERYRTR (continued)

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 3)

Responses for the QUERYRTR command	
MAP output	Meaning and action
<pre> QueryRtr: Router Status Rtr State Resource PM State Congestion Level 1 InSv LIU7 8 ISTb 0 QueryRtr: Router Occupancy for 08:00:00 - 08:15:00 - - - - - NCMCPUST OM Group Registers - - - - - Rtr CALLP SCHED SYST MAINT BKG IDLE INTER 1 0% 9% 2% 0% 0% 89% 0%</pre>	<p>Meaning: The information about the router status and occupancy is displayed.</p> <p>This is an example of response to one of the following command syntaxes:</p> <p>> QUERYRTR router_number STATUS OCCUPANCY Occupancy and status information for router in control position row</p> <p>> QUERYRTR ALL STATUS OCCUPANCY Occupancy and status information for routers in control position row</p> <p>> QUERYRTR router_number Occupancy and status information for specified router</p> <p>> QUERYRTR ALL Occupancy and status information for all routers in posted set</p> <p>> QUERYRTR STATUS OCCUPANCY Occupancy and status information for router in control position row</p> <p>Action: None</p>
<pre> QueryRtr: Router Status Rtr State Resource PM State Congestion Level 1 InSv LIU7 8 ISTb 0</pre>	

QUERYRTR (continued)**Command responses (Sheet 2 of 3)**

Responses for the QUERYRTR command	
MAP output	Meaning and action
	<p>Meaning: The information about the router status is displayed.</p> <p>This is an example of response to one of the following command syntaxes:</p> <p>> QUERYRTR STATUS</p> <p>Status information for router in control position row</p> <p>> QUERYRTR router_number STATUS</p> <p>Status information for specified router</p> <p>> QUERYRTR ALL STATUS</p> <p>Status information for all routers in posted set</p> <p>Action: None</p> <pre> QueryRtr: Router Occupancy for 08:00:00 - 08:15:00 - - - - - NCMCPUST OM Group Registers - - - - - Rtr CALLP SCHED SYST MAINT BKG IDLE INTER 1 0% 9% 2% 0% 0% 89% 0% </pre> <p>Meaning: The information about the router occupancy is displayed.</p> <p>This is an example of response to one of the following command syntaxes:</p> <p>> QUERYRTR OCCUPANCY</p> <p>Occupancy information for router in control position row</p> <p>> QUERYRTR router_number OCCUPANCY</p> <p>Occupancy information for specified router</p> <p>> QUERYRTR ALL OCCUPANCY</p> <p>Occupancy information for all routers in posted set</p> <p>Action: None</p> <pre> QueryRtr Failed. Router <#> not posted. </pre> <p>Meaning: The router specified in the command is not posted.</p> <p>Action: Use the POST command to post the selected router. Enter the QUERYRTR command again.</p>

QUERYRTR (end)

Command responses (Sheet 3 of 3)

Responses for the QUERYRTR command	
MAP output	Meaning and action
Undefined command <"COMMAND">	<p>Meaning: The command was entered incorrectly.</p> <p>Action: Enter the command again.</p>

QUERYTRF

Command

QUERYTRF

Sublevel

MAPCI;MTC;CCS;CCS7;C7ROUTER

Function

Use the QUERYTRF command to query the traffic on a router.

Usage notes

Use the POST command to post a router before using the QUERYTRF command or use command QUERYTRF with variable router_number to query traffic on a specified router that is not posted.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYTRF command parameters and variables	
Command	Parameters and variables
QUERYTRF	router_number
Item	Description
router_number	This variable specifies the router index location. The valid range is 1 to 8. Use the variable only if the selected router has not been posted first.

QUERYTRF (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERYTRF command	
<pre>>QUERYTRF 2</pre> <p><i>where</i></p> <p>2 is the router number</p> <p><i>MAP response:</i></p> <pre>QueryTrf: Router Occupancy for 14:30:00 - 15:00:00 Rtr Bytes/Sec MSU/Sec MSU Len Erlang Total MSU Dsc 2 0 0 0 0.00 0</pre> <p>Explanation: The information about traffic on router 2 is displayed.</p>	

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUERYTRF command	
MAP output	Meaning and action
QueryTrf Failed. Router <#> not posted.	<p>Meaning: The router specified in the command is not posted.</p> <p>Action: Either use the POST command to post the selected router before reentering command QUERYTRF or enter command QUERYTRF with variable router_number.</p>
Undefined command <"COMMAND">	<p>Meaning: The command was entered incorrectly.</p> <p>Action: Enter the command again.</p>

QUIT**Command**

QUIT

Sublevel

MAPCI;MTC;CCS;CCS7;C7ROUTER

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies the number of levels to be exited. The range of levels is 0 to 6. Do not specify a number greater than the number of levels currently open.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p><i>MAP response:</i></p> <pre>CCS7:</pre> <p>Explanation: The C7ROUTER sublevel has changed to a previous CCS7 sublevel.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
<pre>CI:</pre>	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
<pre>QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1</pre>	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of open MAP levels.</p> <p>Action: Reenter the command using an appropriate level number.</p>
<pre>The system replaces the C7ROUTER level menu with a menu that is two or more levels higher.</pre>	<p>Meaning: You entered the quit command with an <i>n</i> variable value of 2 or more, or entered an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
<pre>The system replaces the display of the C7ROUTER level with the display of the next higher MAP level.</pre>	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

RTS**Command**

RTS

Sublevel

MAPCI;MTC;CCS;CCS7;C7ROUTER

Function

Use the RTS command to return the posted router to the in-service (InSv) state.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

RTS command parameters and variables	
Command	Parameters and variables
RTS	router_number
Item	Description
router_number	This variable specifies the router index location. The valid range is 1 to 8.

Usage examples

The following table provides an example of the command.

Command example

Example of the RTS command
<pre>>RTS 1 where 1 is the router number MAP response: Router 1: RTS passed. Explanation: Router 1 is returned to service.</pre>

RTS (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the RTS command	
MAP output	Meaning and action
Router <#>: RTS already done.	Meaning: The selected router is in service. Action: None
Router <#>: RTS failed. Router is not in ManB state.	Meaning: The selected router cannot be returned to service because it is not in the manual busy (ManB) state. Action: Use the BSY command to busy the offline router before using the RTR command again.
RTS failed. Posted set is empty.	Meaning: There are no routers posted. Action: Use the POST command to post routers that you want to return to service.
Undefined command <"COMMAND">	Meaning: The command was entered incorrectly. Action: Enter the command again.

9 C7RTESET level commands

C7RTESET menu

Use the C7RTESET level of the MAP to display information about or change the state of a routeset.

The following figure shows the C7RTESET menu and status display.

Figure 9-1 C7RTESET MAP level menu

```

      CM      MS      IOD      Net      PM      CCS      Trks      Ext      APPL
      .        .        .        .        .        .        .        .        .

C7RTESET          CCS7
0 Quit
2 Post
3          C7ROUTESET          LINKSET  TRANSFER
          RTE STATE  MODE COST LINKSET  STATE  STATUS
4
5 Trnsl
6
7 Bsy
8 RTS
9 Offl
10
11
12 Next
13
14 QueryFlt
15
16
17
18

```

Hidden command

QueryPC

Note: Hidden commands are not visible on the MAP display.

Accessing the C7RTESET level

To access the C7RTESET level, enter the following command from the CI MAP level:

```
>MAPCI;MTC;CCS;CCS7;C7RTESET
```

and press the Enter key.

C7RTESET commands

This chapter describes commands available at the C7RTESET level of the MAP display. The commands are arranged in alphabetical order. The following C7RTESET commands are described in this chapter:

- BSY
- NEXT
- OFFL
- POST
- QUERYFLT
- QUERYPC
- QUIT
- RTS
- TRNSL

BSY**Command**

BSY

Sublevel

MAPCI;MTC;CCS;CCS7;C7RTESET

Function

Use the BSY command to change the current state of a posted routeset to the manually busy state.

Usage notes

The BSY command has the following limitations and restrictions:

- Use the POST command to post the routeset before using the BSY command.
- Associated linksets must be in the manually busy state before the routeset can be busied.
- When office parameter USP_ACTIVE_IN_NETWORK is set to Y, attempts to use the BSY command generates the following message:

The USP is now used to administer the SS7 data.

 SS7 routes, linksets and links now only exist on the USP.
 Go to the GUI on the USP to access this data.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

BSY command parameters and variables	
Command	Parameters and variables
BSY	<u>NOFORCE</u> FORCE
Item	Description
FORCE	This parameter forces the posted routeset into the busy state immediately, with the possibility of losing traffic. The system does not attempt to reroute traffic.

BSY (continued)

Parameters and variables (Continued) (Sheet 2 of 2)

BSY command parameters and variables	
Command	Parameters and variables
NOFORCE	This default parameter causes the system to refuse the BSY command if placing the routeset in the manually busy state would cause a loss of traffic. Do not enter this parameter.

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY FORCE</pre> <p><i>MAP response:</i></p> <p>Passed.</p> <p>Explanation: The posted routeset is manually busied.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the BSY command	
MAP output	Meaning and action
FAILED, Command already requested from another map	<p>Meaning: The system is attempting to complete the BSY command from another MAP.</p> <p>Action: None</p>
FAILED, No routeset posted	<p>Meaning: There are no routesets posted at the MAP.</p> <p>Action: Post the required routeset and repeat the BSY command.</p>

Command responses (Continued) (Sheet 2 of 2)

Responses for the BSY command	
MAP output	Meaning and action
Failed, traffic running on routeset	<p>Meaning: Traffic cannot be routed to another routeset. Either there is only one routeset in the system or all other routesets are not able to carry traffic. To busy this routeset the FORCE parameter must be used.</p> <p>Action: Use the BSY command at the C7LkSet level to busy all linksets in the routeset. If it is essential that the routeset be placed in the manually busy state, enter the BSY command using the FORCE parameter.</p>
Maintenance command in progress	<p>Meaning: The system cannot complete the command at this time because another command is in progress.</p> <p>Action: Enter the BSY command again later.</p>
Maintenance level already achieved	<p>Meaning: The routeset is already in the busy state.</p> <p>Action: None</p>
No response from signaling network management	<p>Meaning: There has been no response from signaling network management within the appropriate time period.</p> <p>Action: Enter the BSY command again. If the problem persists, contact maintenance support personnel.</p>
Passed	<p>Meaning: The routeset has been set to the manually busy state. The states in the display change to reflect the new state of the routeset.</p> <p>Action: None</p>

NEXT

Command

NEXT

Sublevel

MAPCI;MTC;CCS;CCS7;C7RTESET

Function

Use the NEXT command to display the next posted routeset.

Usage notes

Not applicable

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the NEXT command						
>NEXT						
<i>MAP response:</i>						
C7routeset	C7RTESET	SysB	Linkset	Transfer		
Rte	State	Mode	Cost	Linkset	State	Status
0	SysB	Assoc	0	C7LKSET	SysB	
Explanation: The next routeset is displayed.						

MAP responses

The following table describes the MAP responses.

NEXT (end)**Command responses**

Responses for the NEXT command	
MAP output	Meaning and action
End of posted set	<p>Meaning: There are no more posted routesets.</p> <p>Action: None</p>
FAILED, No routeset posted	<p>Meaning: There are no posted routesets.</p> <p>Action: None</p>
Next not valid with posting by NAME	<p>Meaning: The POST command was entered with the C parameter and a routeset_cli variable, so only one routeset was posted. There are no more posted routesets to be displayed.</p> <p>Action: None</p>
The status display changes to show the next posted routeset:	
<pre>C7routeset routeset_cli stat Linkset Transfer Rte State Mode Cost Linkset State Status 0 SysB Assoc 0 C7LKSET1 SysB</pre>	<p>Meaning: The information for the next posted routeset is displayed.</p> <p>Action: None</p>

OFFFL

Command

OFFFL

Sublevel

MAPCI;MTC;CCS;CCS7;C7RTESET

Function

Use the OFFFL command to remove a routeset from the system maintenance, allowing you to make office data modifications for the routeset.

Usage notes

The command has the following limitations and restrictions:

- Routesets must be in the manual busy state before being taken offline.
- An offline routeset cannot cause an alarm.
- When office parameter USP_ACTIVE_IN_NETWORK is set to Y, attempts to use the OFFFL command generates the following message.

The USP is now used to administer the SS7 data.

SS7 routes, linksets and links now only exist on the USP.
Go to the GUI on the USP to access this data.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFFL command
>OFFFL
<i>MAP response:</i>
Passed
Explanation: The posted routeset is in the offline state.

OFFL (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFL command	
MAP output	Meaning and action
FAILED, Routeset not in man busy state	<p>Meaning: The routeset is not in the busy state.</p> <p>Action: Use the BSY command to change the routeset state to manually busy, and enter the OFFL command again.</p>
Maintenance level already achieved	<p>Meaning: The routeset is already in the offline state.</p> <p>Action: None</p>
Passed	<p>Meaning: The routeset is in the offline state.</p> <p>Action: None</p>

POST (continued)**Parameters and variables (Sheet 2 of 2)**

POST command parameters and variables	
Command	Parameters and variables
routeset_clli	This variable specifies the routeset CLLI.
N	This parameter specifies that routesets will be posted by network name.
network_name	This variable specifies the network name of the internal SS7 node. The value can be any correct network name found in field network_name in table C7NETWRK.
S	This parameter specifies that a group of routesets will be posted by routeset state.
routeset_state	This variable specifies the routeset state. The following are the possible values: <ul style="list-style-type: none"> • InSv (in service) • ISTb (in-service trouble) • ManB (manual busy) • OffL (offline) • SysB (system busy)

Usage examples

The following table provides an example of the command.

Command example

Example of the POST command							
>POST N NATLSSP01 S OFFL							
<i>MAP response:</i>							
Network	Name	NATLSSP01					
C7ROUTESET	NETRTSCOMC		OffL	Linkset	Transfer		
Rte	State	Mode	Cost	Linkset	State	Status	
0	OffL	Assoc	0	NETLKSCOMC	OffL		
Explanation: The system displays the first routeset of the posted set and the routes in that routeset. If more than one routeset is posted, use the NEXT command to display each of the remaining routesets.							

POST (end)

Responses

The following table describes the MAP responses.

Command responses

Responses for the POST command	
MAP output	Meaning and action
End of posted set	<p>Meaning: There are no routesets in the posted set.</p> <p>Action: None</p>
Invalid alarm state entered	<p>Meaning: The variable entered is not a correct alarm state.</p> <p>Action: Reenter the POST command using a correct alarm state.</p>
Invalid routeset state entered	<p>Meaning: The variable entered is not a correct routeset state.</p> <p>Action: Reenter the POST command using a correct routeset state.</p>
This is not a routeset	<p>Meaning: The data entered is not recognized as a routeset CLLI. No routeset is posted.</p> <p>Action: None</p>
This is not a valid network name.	<p>Meaning: The network name specified with the N parameter is not correct.</p> <p>Action: Re-enter the POST command using a correct network name.</p>
Invalid symbol: <SELECTOR C OR A OR S OR N> {C, A, S, N} Enter: <SELECTOR C OR A OR S OR N>	<p>Meaning: The message indicates that the value entered for Selector 1 is not valid.</p> <p>Action: Enter C, A, S, or N.</p>
Invalid symbol: <SELECTOR A OR S> {A,S} Enter: <SELECTOR A OR S>	<p>Meaning: The message indicates that the value entered for Selector 2 is not valid.</p> <p>Action: Enter A or S.</p>

QUERYFLT

Command

QUERYFLT

Sublevel

MAPCI;MTC;CCS;CCS7;C7RTESET

Note: Sublevel C7RTESET is an example; the QUERYFLT command can be used for all sublevels.

Function

Use the QUERYFLT command to display information about the fault status of a route or routes of a posted routeset and to determine why there are traffic problems on a routeset.

Usage notes

When office parameter USP_ACTIVE_IN_NETWORK is set to Y, attempts to use the QUERYFLT command generates the following message:

The USP is now used to administer the SS7 data.

 SS7 routes, linksets and links now only exist on the USP.
 Go to the GUI on the USP to access this data.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYFLT command parameters and variables	
Command	Parameters and variables
QUERYFLT	route_number
Item	Description
route_number	This variable specifies the route number in a posted routeset. Valid entries are 0 to 5.

Usage examples

The following table provides an example of the command.

QUERYFLT (end)

Command example

Example of the QUERYFLT command
<pre>>QUERYFLT 2</pre> <p><i>MAP response:</i></p> <p>Route 2: No fault exists on route at the moment.</p> <p>Explanation The fault status is displayed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUERYFLT command	
MAP output	Meaning and action
Route 0: Linkset is not able to carry traffic	<p>Meaning: The route cannot carry traffic because the associated linkset has failed.</p> <p>Action: Rectify the linkset fault.</p>
Route 1: Linkset offering degraded level of service	<p>Meaning: The route is faulty because the linkset cannot provide sufficient links for the route. Several links in the linkset are not in the in-service state.</p> <p>Action: Rectify the linkset fault.</p>
Route 3: No fault exists on route at the moment	<p>Meaning: The route is in the in-service state. There is no fault on the specified route.</p> <p>Action: None</p>
Route number entered not datafilled	<p>Meaning: The specified route number is not datafilled.</p> <p>Action: Enter the command again using a valid route number.</p>

QUERYPC**Command**

QUERYPC

Sublevel

MAPCI;MTC;CCS;CCS7;C7RTESET

Function

Use the QUERYPC command to display the destination point code (DPC) of the previously posted routeset. Use this command to display the far-end point code (FEPC) of a specified route on the routeset.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYPC command parameters and variables	
Command	Parameters and variables
QUERYPC	DPC FEPC route_num
Item	Description
DPC	This parameter directs the system to display the DPC of the posted routeset.
FEPC	This parameter directs the system to display the FEPC of the specified route on the posted routeset.
route_num	This variable specifies the index of the route on the posted routeset. Valid entries are 0 to 5.

Usage examples

The following table provides an example of the command.

QUERYPC (end)

Command example

Example of the QUERYPC command
<pre>>QUERYPC FEPC 0</pre> <p><i>where</i></p> <p>0 is the index for the route on the posted routeset</p> <p><i>MAP response:</i></p> <pre>Linkset Name Network Name FEPC</pre> <pre>RTPBLKSET C7TESTNET ANSI7 004 005 006</pre> <p>Explanation The system displays the requested FEPC.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUERYPC command	
MAP output	Meaning and action
<pre>Route number entered not datafilled</pre>	<p>Meaning: The route number specified is not datafilled. The route is not a valid route.</p> <p>Action: Enter the QUERYPC command again using a valid route number.</p>
<pre>Routeset Name Network Name DPC RTPBRTESET C7TESTNET ANSI7 004 005 006</pre>	<p>Meaning: The system displays the requested DPC.</p> <p>Action: None</p>
<pre>Wrong number of parameters</pre>	<p>Meaning: You entered command QUERYPC with invalid parameters.</p> <p>Action: Enter command QUERYPC again using valid parameters.</p>

QUIT**Command**

QUIT

Sublevel

MAPCI;MTC;CCS;CCS7;C7RTESET

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0 to 6. However, the system cannot accept a level number higher than the number of the current level.

QUIT (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p><i>MAP response:</i></p> <p>CCS7 :</p> <p>Explanation: The C7RTTESET sublevel has changed to a previous CCS7 sublevel.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the QUIT command	
MAP output	Meaning and action
<pre>CI :</pre>	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
<pre>QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1</pre>	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.</p> <p>Action: Reenter the command using an appropriate level number.</p>
<pre>The system replaces the C7RSet level menu with a menu that is two or more levels higher.</pre>	<p>Meaning: You entered the quit command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>

QUIT (end)

Command responses (Sheet 2 of 2)

Responses for the QUIT command	
MAP output	Meaning and action
	<p>The system replaces the display of the C7RTESET level with the display of the next higher MAP level.</p> <p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

RTS

Command

RTS

Sublevel

MAPCI;MTC;CCS;CCS7;C7RTESET

Function

Use the return to service (RTS) command to return the posted routeset to the in-service (InSv) state.

Usage notes

The command has the following restrictions and limitations:

- If all of the routes in a routeset cannot be returned to the InSv state, the routeset is put in the in-service trouble (ISTb) state. This indicates that the routeset can only provide degraded service.
- If all routes in a routeset are faulty, the result of the command is still passed, but the routeset state changes to system busy (SysB).
- When office parameter `USP_ACTIVE_IN_NETWORK` is set to Y, attempts to use the RTS command generates the following message:

The USP is now used to administer the SS7 data.

SS7 routes, linksets and links now only exist on the USP.
Go to the GUI on the USP to access this data.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example (Sheet 1 of 2)

Example of the RTS command
>RTS
MAP response:

RTS (continued)**Command example (Sheet 2 of 2)**

Example of the RTS command
Passed.
Explanation: The posted routeset is returned to service.

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the RTS command	
MAP output	Meaning and action
FAILED, No routeset posted	<p>Meaning: There are no posted routesets.</p> <p>Action: Post the selected routeset, then enter the RTS command again.</p>
Linkset not able to carry traffic	<p>Meaning: The linkset associated with the route is unable to carry traffic. The system has successfully completed the RTS command, but because the linkset is unable to carry traffic, the routeset enters or remains in the system-busy state.</p> <p>Action: Investigate the linkset problem.</p>
Maintenance command in progress	<p>Meaning: The system is unable to initiate the command while the system is busy completing a previous command.</p> <p>Action: Enter the RTS command again.</p>
Maintenance level already achieved	<p>Meaning: The selected routeset has already been returned to service, and is either in the in-service or the in-service trouble state.</p> <p>Action: None</p>
Passed	

RTS (end)

Command responses (Continued) (Sheet 2 of 2)

Responses for the RTS command	
MAP output	Meaning and action
	<p>Meaning: The system has tested the individual routes and allows the routes to carry traffic. When all routes have passed, the states in the display are upgraded to show the states of the routes and the routeset.</p> <p>Action: None</p>
Routeset not in man busy state	<p>Meaning: The routeset can only be returned to service from the manual-busy state.</p> <p>Action: Use the bsy command to busy the routeset and enter the RTS command again.</p>

TRNSL**Command**

TRNSL

Sublevel

MAPCI;MTC;CCS;CCS7;C7RTESET

Function

Use the TRNSL command to search and display routesets based on the following criteria:

- a specified network indicator
- a specified network name
- all network indicators and network names

Usage notes

When office parameter USP_ACTIVE_IN_NETWORK is set to Y, attempts to use the OFFL command generates the following message:

The USP is now used to administer the SS7 data.

 SS7 routes, linksets and links now only exist on the USP.
 Go to the GUI on the USP to access this data.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 5)

TRNSL command parameters and variables						
Command	Parameters and variables					
TRNSL	NI	INTL	ANSI7	NETWORK	(1)	
		INTLSP		CLUSTER	(2)	
		NATL		FULL	(3)	
		NATLSP			(4)	
			CCITT7	BASIC	(5)	
	NW	network_name		INTL	(6)	
				AUSTRIA	(7)	

TRNSL (continued)

Parameters and variables (Continued) (Sheet 2 of 5)

TRNSL command parameters and variables				
Command	Parameters and variables			
	ALL		CHINA	(8)
			GERMAN	(9)
				(10)
		JPN7	MAIN	(11)
			SUB	(12)
			UNIT	(13)
				(14)
		NTC7	main_area	(15)
				(16)
		TTC7	main_area	(17)
(1)	network			
(2)	network	cluster		
(3)	network	cluster	member	
(4)				
(5)	pointcode			
(6)	zone	areanetwsigpoint		
(7)	zone	region	sigpoint	
(8)	zone	exchangesigpoint		
(9)	numarea	hvst	kvst	sigpoint
(10)				
(11)	main_area			
(12)	main_area	sub_area		
(13)	main_area	sub_area	area_unit	

TRNSL (continued)**Parameters and variables (Continued) (Sheet 3 of 5)**

TRNSL command parameters and variables	
Command	Parameters and variables
	(14)
	(15) sub_area sigpoint
	(16)
	(17) sub_area area_unit
Item	Description
ANSI7	This parameter specifies that the network type is ANSI7
ALL	This parameter specifies that the search for routesets includes all network indicators.
areanetw	This variable specifies the destination point code (DPC) area network for a CCITT7 network type in INTL format. The value ranges from 0 to 255.
area_unit	This variable specifies the DPC area unit for JPN7 and TTC7 network types. The value ranges from 0 to 127.
AUSTRIA	This parameter specifies that the format for network type CCITT7 is AUSTRIA.
BASIC	This parameter specifies that the format for network type CCITT7 is BASIC.
CCITT7	This parameter specifies that the type of network is CCITT7.
CHINA	This parameter specifies that the format for network type CCITT7 is CHINA.
CLUSTER	This parameter specifies that the scope of the ANSI7 network is CLUSTER.
exchange	This variable specifies the DPC exchange for CCITT7 networks in CHINA format. The value ranges from 0 to 127.
FULL	This parameter specifies that the scope of the ANSI7 network is FULL.
GERMAN	This parameter specifies that the format for network type CCITT7 is GERMAN.
hsvt	This variable specifies the hauptvermittlungsstelle (tandem level switching exchange), for a GERMAN format in the CCITT7 network type. The value ranges from 0 to 7.
INTL	This parameter specifies that the network indicator (NI) is international or that the format for the CCITT7 network is international.
INTLSP	This parameter specifies that the NI is international spare.

TRNSL (continued)

Parameters and variables (Continued) (Sheet 4 of 5)

TRNSL command parameters and variables	
Command	Parameters and variables
JPN7	This parameter specifies that the network type is JPN7.
kvst	This variable specifies the knotenvermittlungsstelle (trunk tandem switching exchange, a regional exchange, 3rd level of transmit/long distance network) for a GERMAN format in the CCITT7 network type. The value ranges from 0 to 15.
MAIN	This parameter specifies that the DPC scope for network type JPN7 is main.
main_area	This variable specifies the main area of the DPC for network types JPN7, TTC7, and NTC7. The value ranges from 0 to 31.
member	This variable specifies the member of the DPC for network type ANSI7. The value ranges from 0 to 255.
NATL	This parameter specifies that the NI is national.
NATLSP	This parameter specifies that the NI is national spare.
NETWORK	This parameter specifies that the scope of the ANSI7 network is NETWORK.
NI	This parameter specifies that routesets will be posted by network indicator.
NTC7	This parameter specifies that the network type is NTC7.
numarea	This variable specifies the network of the DPC for CCITT7 network type in the GERMAN format. The value ranges from 0 to 15.
NW	This parameter specifies that routesets will be searched by the network name of the internal SS7 node.
pointcode	This variable specifies the pointcode for a CCITT7 network in the BASIC format. The value ranges from 0 to 16383.
region	This variable specifies the region for a CCITT7 network in the AUSTRIA format. The value ranges from 0 to 15.
sigpoint	This variable specifies the signal point for a CCITT7 network in INTL, AUSTRIA, and CHINA formats or for an NTC7 network. The value ranges from 0 to 7 for INTL and CHINA formats, 0 to 31 for AUSTRIA format, and 0 to 255 for network type NTC7.
SUB	This parameter specifies that the scope for network type JPN7 is sub.

TRNSL (continued)**Parameters and variables (Continued) (Sheet 5 of 5)**

TRNSL command parameters and variables	
Command	Parameters and variables
sub_area	This variable specifies the sub area for JPN7 network type with a DPC scope of SUB or UNIT. This variable also specifies the sub area for NTC7 and TTC7 network types. The value ranges from 0 to 15 for network types JPN7 and TTC7. The value ranges from 0 to 255 for network type NTC7.
TTC7	This parameter specifies the network type as TTC7.
UNIT	This parameter specifies the scope for JPN7 network type as UNIT.
zone	This variable specifies the zone for a CCITT7 network in formats INTL, AUSTRIA, and CHINA. The value ranges from 0 to 7 for INTL, 0 to 31 for AUSTRIA, and 0 to 15 for CHINA.

TRNSL (continued)

Usage examples

The following table provides an example of the TRNSL command.

Command example

Example of the TRNSL command	
<pre>>TRNSL NW WSCPNET2 ANS17 NETWORK 100</pre>	
<p><i>where</i></p>	
NW	indicates that the routeset search will be done by network name
WSCPNET2	indicates the network name
ANS17	is the network type
NETWORK	indicates that the scope of the ANS17 network is network
100	is the network number
<p><i>MAP response:</i></p>	
<pre>trnsl nw wscpnet2 ansi7 network 100 Routeset Name Network Name NIDPC NETWORKRS WSCPNET2 NATL ANS17 100 \$ \$ CLUSTERRS WSCPNET2 NATL ANS17 100 100\$ DESTPCRS WSCPNET2 NATL ANS17 100 100 100</pre>	
<p>Explanation: The display shows the routesets for network WSCPNET2 having ANS17 protocol, network indicator NATL, and DPC network number 100.</p>	

Responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the TRNSL command	
MAP output	Meaning and action
Cannot Translate Point Code	<p>Meaning: The syntax of the command is not correct or the point code was not found The translation did not take place.</p>

TRNSL (end)**Command responses (Sheet 2 of 2)**

Responses for the TRNSL command	
MAP output	Meaning and action
	<p>Action: Use correct TRNSL command syntax.</p> <p>This is not a valid network name.</p> <p>Meaning: The network name entered is not correct.</p> <p>Action: Enter a correct network name.</p> <p>Invalid symbol: <SELECTOR NI OR NW OR ALL> {NI, NW, ALL}</p> <p>Enter: <SELECTOR NI OR NW OR ALL></p> <p>Meaning: The message indicates that the value entered for the selector is not valid.</p> <p>Action: Enter NI, NW, or ALL.</p>

10 EIU level commands

EIU menu

Use the EIU level of the MAP display to perform maintenance activities on the Ethernet interface unit (EIU).

The following figure shows the EIU menu and status display. The insert showing hidden commands is not a visible part of the menu display.

Figure 10-1 EIU MAP level menu

	CM	MS	IOD	Net	PM	CCS	LNS	Trks	Ext	APPL

EIU										
0 Quit										
1										
2 Post			PM	0	0	1	1	0	2	
3 ListSet			EIU	0	0	0	0	0	1	
4										
5			EIU	'no'	'state'	RSVD				
6 Tst_										
7 Bsy_										
8 RTS_										
9 Offl										
10 LoadPM_										
11 Disp_										
12 next										
13										
14 QueryPM_										
15										
16										
17										
18										

Hidden commands

PMReset

Accessing the EIU level

To access the EIU level, enter the following command from the CI (command interpreter) MAP level:

```
>MAPCI;MTC;PM;POST EIU eiu_number
```

and press the Enter key.

where

`eiu_number` is the number of the EIU to be posted

EIU commands

This chapter describes commands available at the EIU level of the MAP display. The commands are arranged in alphabetical order. The following commands are described in this chapter:

- BSY
- DISP
- LISTSET
- LOADPM
- NEXT
- OFFL
- PMRESET
- POST
- QUERYPM
- QUIT
- RTS
- TST

BSY**Command**

BSY

Sublevel

MAPCI;MTC;PM;POST EIU eiu_number

Function

Use the BSY command to place the posted Ethernet interface unit (EIU) or all EIUs in the manual busy (ManB) state.

Usage notes

Use the POST command to post a set of EIUs before using the BSY command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

BSY command parameters and variables	
Command	Parameters and variables
BSY	<u>POSTED</u> <u>NOFORCE</u> <u>WAIT</u> ALL FORCE NOWAIT
Item	Description
ALL	This parameter causes all posted EIUs to be busied.
FORCE	This parameter causes EIU inaccessibility to be ignored.
<u>NOFORCE</u>	This default parameter indicates EIUs that are not accessible will not be busied.
NOWAIT	This parameter allows other commands to be entered at a MAP terminal before the BSY command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted EIU in the control position will be busied.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered at a MAP terminal until the BSY command finishes executing.

BSY (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY</pre> <p><i>MAP response:</i></p> <pre>EIU18 BSY Passed</pre> <p>Explanation: The posted EIU currently in the control position is EIU18. It has been busied.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the BSY command	
MAP output	Meaning and action
<pre>Request Invalid - EIU <eiu #> is <state></pre> <pre>No Action Taken</pre>	<p>Meaning: The EIU is in the incorrect state for the BSY command to execute. It must be in one of the following states:</p> <ul style="list-style-type: none"> • offline (OffL) • system busy (SysB) • in service (InSv) • in-service trouble (STb) <p>Action:</p> <p>None</p>
<pre>Busy EIU <eiu #> will take a link out of service</pre> <pre>PLEASE CONFIRM (YES or NO).</pre>	<p>Meaning: The EIU is currently reserved by linkset management, and confirmation is required.</p>

Command responses (Sheet 2 of 2)

Responses for the BSY command	
MAP output	Meaning and action
	Action: Respond by entering YES or NO.
EIU <eiu #> BSY Passed	Meaning: The command passed. Action: None
EIU <eiu #> BSY Rejected	Meaning: The command was rejected by EIU resident maintenance. This is an indication of a serious problem. Action: Contact your next level of support.

DISP

Command

DISP

Sublevel

MAPCI;MTC;PM;POST EIU eiu_number

Function

Use the DISP command to display a list of all Ethernet interface units (EIU) in a specified peripheral module (PM) state.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

DISP command parameters and variables	
Command	Parameters and variables
DISP	STATE pm_state EIU
Item	Description
EIU	This parameter specifies that the type of the PM node is EIU.
pm_state	This variable specifies one of the following PM state codes: <ul style="list-style-type: none"> • CBSy central-side busy • Idl idle • InSv in service • ISTb in-service trouble • ManB manual busy • NEQ not equipped • OffL offline • SysB system busy
STATE	This parameter specifies that PM state code information follows.

Usage examples

The following table provides an example of the command.

Command example

Example of the DISP command
<p>>DISP STATE istb EIU</p> <p><i>where</i></p> <p>ISTB is the state of the EIUs to be displayed.</p> <p><i>MAP response:</i></p> <p>ISTb EIU: NONE</p> <p>Explanation: There are no EIUs in the in-service trouble state.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the DISP command	
MAP output	Meaning and action
<pm_state> EIU <eiu#>	<p>Meaning: The system displays all EIUs that are in the specified state.</p> <p>Action: None</p>

LISTSET

Command

LISTSET

Sublevel

MAPCI;MTC;PM;POST EIU eiu_number

Function

Use the LISTSET command to list the contents of the posted set.

Usage notes

Use the POST command to post a set of Ethernet interface units (EIU) before using command LISTSET.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

LISTSET command parameters and variables	
Command	Parameters and variables
LISTSET	ALL pm_type
Item	Description
ALL	This parameter causes all peripheral modules (PM) in the posted set to be listed.
pm_type	This variable indicates a type of PM. Only PMs of that type will be listed. To display EIUs, enter EIU.

LISTSET (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the LISTSET command
<pre>>LISTSET EIU where EIU is the pm_type MAP response: EIU 0, 6, 12, 18, 24, 30</pre> <p>Explanation: The posted set contains the EIUs listed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the LISTSET command	
MAP output	Meaning and action
<pre>No PM posted Post set is empty</pre>	<p>Meaning: No EIUs exist in the posted set.</p> <p>Action: None</p>

LOADPM

Command

LOADPM

Sublevel

MAPCI;MTC;PM;POST EIU eiu_number

Function

Use the LOADPM command to load the Ethernet interface units (EIUs) with the software load specified in either the inventory table or an optional file.

Usage notes

All the EIUs must have the same loadfile datafiled and must have the same processor or type.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

LOADPM command parameters and variables	
Command	Parameters and variables
LOADPM	<u>POSTED</u> <u>INVEN</u> <u>WAIT</u> ALL file NOWAIT
Item	Description
ALL	This parameter causes all posted EIUs to be loaded.
<u>INVEN</u>	This parameter allows other commands to be entered before the LOADPM command finishes executing.
file	This variable specifies the file from which the software will be loaded. The value is an alphanumeric string.
NOWAIT	This parameter allows other commands to be entered before the LOADPM command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted EIU in the control position will be loaded.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered at a MAP until the LOADPM command finishes executing.

LOADPM (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the LOADPM command
<p>>LOADPM</p> <p><i>MAP response:</i></p> <p>EIU 12 LOADPM Passed.</p> <p>Explanation: The LOADPM command passed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the LOADPM command	
MAP output	Meaning and action
Request Invalid - EIU <eiu#> is <status> No Action Taken	<p>Meaning: The EIU is in the incorrect state for the LOADPM command to execute. The EIU must be in the ManB state.</p> <p>Action: Use the BSY command to busy the EIU. Enter the command again.</p>
EIU <eiu#> LOADPM Failed No Action Taken	<p>Meaning: The LOADPM command failed for an unspecified reason.</p> <p>Action: Determine the cause of the problem. If necessary, contact your next level of support.</p>
EIU 12 LOADPM Passed.	<p>Meaning: The LOADPM command passed.</p> <p>Action: None</p>

NEXT

Command

NEXT

Sublevel

MAPCI;MTC;PM;POST EIU eiu_number

Function

Use the NEXT command to place the next PM in the set of posted Ethernet interface units (EIU) into the control position.

Usage notes

Use the POST command to post a set of EIUs before using the NEXT command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

NEXT command parameters and variables	
Command	Parameters and variables
NEXT	<u>NEXT</u> pm_type
Item	Description
NEXT	This default parameter indicates that the next posted PM, regardless of PM type, will be placed in the control position.
pm_type	This variable specifies the type of the PM to be moved into the control position. Use the DISP command to display the list of PM types in the posted set. The system selects the PMs in the sequence displayed by this list.

NEXT (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the NEXT command
<p>>NEXT</p> <p><i>MAP response:</i></p> <p>(display of MAP screen for the next PM)</p> <p>Explanation: The next PM of the posted set is in the control position.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Response for the NEXT command	
MAP output	Meaning and action
END OF POST SET	<p>Meaning: Either the currently displayed PM is the last in the posted set of PMs, or only one PM number has been posted. The display returns to the next higher menu level.</p> <p>Action: None</p>

OFFFL

Command

OFFFL

Sublevel

MAPCI;MTC;PM;POST EIU eiu_number

Function

Use the OFFFL command to put Ethernet interface units (EIU) in the offline state.

Usage notes

The EIU must be in the manual busy (ManB) state before the OFFFL command can be executed.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

OFFFL command parameters and variables	
Command	Parameters and variables
OFFFL	<u>POSTED</u> <u>WAIT</u> ALL NOWAIT
Item	Description
ALL	This parameter causes all posted EIUs to be placed in the offline state.
NOWAIT	This parameter allows other commands to be entered before the OFFFL command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted EIU in the control position will be affected.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the OFFFL command finishes executing.

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFFL command
<pre>>OFFFL</pre> <p><i>MAP response:</i></p> <pre>EIU 12 OFFFL Passed</pre> <p>Explanation: The posted EIU is now offline.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFFL command	
MAP output	Meaning and action
<pre>Request Invalid - EIU <eiu#> is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The EIU is in the incorrect state for the OFFFL command to execute. The EIU must be in the ManB state.</p> <p>Action: Use command BSY to change the state of the EIU to ManB. Repeat command OFFFL.</p>
<pre>EIU <eiu#> OFFFL Passed</pre>	<p>Meaning: The OFFFL command passed.</p> <p>Action: None</p>
<pre>EIU <eiu#> OFFFL Rejected</pre>	<p>Meaning: EIU resident maintenance rejected the command for an unspecified reason.</p> <p>Action: Determine the cause of the command rejection. Contact your next level of support.</p>

PMRESET

Command

PMRESET

Sublevel

MAPCI;MTC;PM;POST EIU eiu_number

Function

Use the PMRESET command to reset the posted Ethernet interface unit (EIU).

Usage notes

Use the POST command to post a set of EIUs before using the PMRESET command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

PMRESET command parameters and variables	
Command	Parameters and variables
PMRESET	PM <u>RUN</u> <u>WAIT</u> UNIT unit_no NORUN NOWAIT
Item	Description
NORUN	This parameter resets the EIU without initializing or sending static data and executables.
NOWAIT	This parameter allows additional commands to be entered before the PMRESET command finishes executing.
PM	This parameter reinitializes both units of the posted EIU.
<u>RUN</u>	This default parameter indicates that the EIU will be entirely reset.
UNIT	This parameter reinitializes a specified unit of the posted EIU.
unit_no	This variable specifies the unit to be reinitialized.
<u>WAIT</u>	This default parameter indicates that additional commands cannot be entered until the PMRESET command finishes executing.

PMRESET (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the PMRESET command
<pre>>PMRESET UNIT 1</pre> <p><i>where</i></p> <p>1 is the unit_no</p> <p><i>MAP response:</i></p> <pre>EIU 1 Unit 1 reset initiated. EIU 1 Unit 1 reset passed.</pre> <p>Explanation: The PMRESET command passed.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the PMRESET command	
MAP output	Meaning and action
EIU x UNIT y firmware is not responding; Reset failed.	<p>Meaning: The firmware in the unit is not acknowledging any messages.</p> <p>Action: None</p>
EIU x UNIT y has maintenance in progress; Reset action not taken.	<p>Meaning: A link interface module (LIM) cannot be reset while other maintenance is in progress. Use command BSY FORCE to override any maintenance actions in progress.</p> <p>Action: None</p>
EIU x UNIT y is not accessible; Reset action not taken.	<p>Meaning: Although a LIM need not be communicating with maintenance software in the core in order to be reset, the links to the unit must be physically usable.</p> <p>Action: None</p>
EIU x UNIT y is <status>; Reset action not taken.	

PMRESET (end)

Command responses (Sheet 2 of 2)

Responses for the PMRESET command	
MAP output	Meaning and action
	<p>Meaning: The LIM can only be reset if it is in the manual busy (ManB) state.</p> <p>Action: None</p>
EIU x UNIT y reset initiated.	<p>Meaning: The reset sequence started successfully.</p> <p>Action: None</p>
EIU <eiu#> UNIT <unit#> reset passed.	<p>Meaning: The reset sequence completed successfully. If the unit was running software, the software restarted successfully.</p> <p>Action: None</p>

POST**Command**

POST

Sublevel

MAPCI;MTC;PM;POST EIU eiu_number

Function

Use the POST command to select a specific Ethernet interface unit (EIU) for maintenance actions.

Usage notes

The POST command is qualified by the following exceptions, restrictions, and limitations.

- The POST command must be used before using commands TST, BSY, RTS, OFFL, LOADPM, or QUERYPM.
- When the command string HELP POST is entered to query the parameters of POST, not all of the displayed parameters apply to all offices or office networks. The applicability of the parameters depends on the types of PMs that are present in the office configuration. One of several responses indicates which parameters do not apply.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

POST command parameters and variables	
Command	Parameters and variables
POST	pm_type pm_no
Item	Description
pm_no	This variable identifies the discrimination number of the EIU to be posted. The range is 0 to 24. More than one EIU may be specified by entering more than one discrimination number separated by spaces as in the following example: 8 12 16
pm_type	This variable identifies a PM type. For an EIU the correct value is EIU. Omit variable pm_type from the command entry if the MAP level for the node type is open already. The default value is the type of the PM in the control position of the posted set.

POST (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the POST command
<pre>>POST EIU 8</pre> <p><i>where</i></p> <p>EIU is the pm_type</p> <p>8 is the pm_no</p> <p><i>MAP response:</i></p> <p>OK</p> <p>Explanation: EIU 8 is posted.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the POST command	
MAP output	Meaning and action
NO PM POSTED	<p>Meaning: The command failed because you did not enter the pm_number for the specified PM.</p> <p>Action: Enter the command again.</p>
pm pm_number n_state LINKS OOS: CSIDE nn PSIDE nn	
UNIT 0: activity u_state MTCE /LOADING: nnnn	
UNIT 1: activity u_state MTCE /LOADING: nnnn	

Command responses (Sheet 2 of 2)

Responses for the POST command	
MAP output	Meaning and action
	<p>Meaning: The system displays the status of the posted PM, where:</p> <p>pm is a type of a PM.</p> <p>pm_number is the discrimination number of the PM type.</p> <p>n_state is the state of the PM node. The displayed state depends on the state of one or both units. The n_states are the same as the u_states.</p> <p>LINKS_OOS indicates the quantity of equipped C-side and P-side links that are out-of-service because they are either system busy or manually busy.</p> <p>activity indicates which unit is available for call processing and which unit is on standby. ACT means the unit is active and able to handle call processing. INACT means the unit is on standby (inactive).</p> <p>u_state is the status of a unit.</p> <p>MTCE indicates that the unit is undergoing maintenance invoked manually or by the system (displayed with u_states ManB and SysB, respectively). MTCE is present only while maintenance occurs.</p> <p>/LOADING: indicates the unit is being updated with datafill, where nnnn is an increment of the load.</p> <p>Action: None</p> <p>OK</p> <p>Meaning: The specified PM is posted.</p> <p>Action: None</p>

QUERYPM

Command

QUERYPM

Sublevel

MAPCI;MTC;PM;POST EIU eiu_number

Function

Use the QUERYPM command to display information about the posted Ethernet interface unit (EIU), its host link interface module (LIM), and its two F-bus taps. The displayed information reflects the state of the host local message switches (LMS), message channels, taps, EIU locations, ISTb conditions, and linkset information.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYPM command parameters and variables	
Command	Parameters and variables
QUERYPM	<u>DISP</u> FLT
Item	Description
<u>DISP</u>	This default parameter indicates that a normal QUERYPM display will be presented.
FLT	This parameter causes fault information for the EIU to be displayed.

QUERYPM (continued)

Usage examples

The following table provides an example of the command.

Command example**Example of the QUERYPM command**

>QUERYPM

MAP response:

PM type: EIU PM no.: 2 States: Offl

LIM 0 Shelf 1 Sote: 10 EIU FTA 4244 1000

Default Load: EIU25

Running Load EIU25RTM

ISTB ...

Explanation: This is a typical response for command QUERYPM for EIUs.

QUERYPM (end)

MAP responses

The following table describes the MAP responses.

Command responses

Response for the QUERYPM command	
MAP output	Meaning and action
<pre>PM type: EIU PM no.: 2 States: Offl LIM 0 Shelf 1 Sote: 10 EIU FTA 4244 1000 Default Load: EIU25 Running Load EIU25RTM ISTB conditions: Loadname Mismatch Msg Channel #0 NA Msg Channel #1 NA TAP #0 00S/NA TAP #1 00S/NA LMS Slots : Offl Offl Auditing : No No Host Unit 0 is not in service Host Unit 1 is not in service Msg Channels : NA Acc Tap 1 B(NA) B(NA) EIU is not registered with Channelized Access Reserved EIU forms part of CCS7Linkset: SCP_LKS SLC:0 EIU is not allocated</pre>	<p>Meaning: This is a typical response to the QUERYPM command for EIUs.</p> <p>Action: None</p>

QUIT**Command**

QUIT

Sublevel

MAPCI;MTC;PM;POST EIU eiu_number

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system display the next higher MAP level.
ALL	This parameter causes the system to quit all currently open levels and display the CI level.
incrname	This variable causes the system to exit the specified level and all sublevels below it. The system displays the next level higher than the one specified. Values for variable incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of levels from which to exit. The range is 0 to 6. Do not enter a number that is higher than the number of levels currently open.

QUIT (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<p>>QUIT</p> <p><i>MAP response:</i></p> <p>The display changes to the display of a higher level menu.</p> <p>Explanation: The EIU level has changed to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the QUIT command	
MAP output	Meaning and action
<p>CI:</p>	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
<p>QUIT -- Unable to quit requested number of levels</p> <p>Last parameter evaluated was: 1</p>	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.</p> <p>Action: Enter the command using an appropriate level number.</p>
<p>The system replaces the EIU level menu with a menu that is two or more levels higher.</p>	<p>Meaning: You entered the QUIT command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
<p>The system replaces the display of the EIU level with the display of the next higher MAP level.</p>	

QUIT (end)

Command responses (Sheet 2 of 2)

Responses for the QUIT command	
MAP output	Meaning and action
	Meaning: The system exited to the next higher MAP level. Action: None

RTS

Command

RTS

Sublevel

MAPCI;MTC;PM;POST EIU eiu_number

Function

Use the RTS command to run diagnostics and return an out-of-service Ethernet interface unit (EIU) to service.

Usage notes

The EIU will not be returned to service if the out-of-service diagnostics do not pass.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

RTS command parameters and variables	
Command	Parameters and variables
RTS	<u>POSTED</u> <u>NOFORCE</u> <u>WAIT</u> ALL FORCE NOWAIT
Item	Description
ALL	This parameter causes all posted EIUs to be returned to service.
FORCE	This parameter causes EIU inaccessibility to be ignored.
<u>NOFORCE</u>	This default parameter indicates that EIUs that are not accessible will not be returned to service.
NOWAIT	This parameter allows other commands to be entered before the RTS command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted EIU in the control position will be returned to service.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the RTS command finishes executing.

RTS (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the RTS command
<p>>RTS</p> <p><i>MAP response:</i></p> <p>EIU 12 RTS passed</p> <p>Explanation: The posted EIU is returned to service.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the RTS command	
MAP output	Meaning and action
Request Invalid - EIU <eiu#> is <status>	
No Action Taken	<p>Meaning: The EIU is in the incorrect state for the RTS command to execute. The EIU must be in one of the following states:</p> <ul style="list-style-type: none"> • manual busy (ManB) • system busy (SysB) <p>Action: None</p>
EIU <eiu#> Failed	
<failure reason>	
<circuit location display>	<p>Meaning: The command failed. A cardlist may be produced.</p> <p>Action: Go to the appropriate alarm clearing or card replacement procedure to determine the cause of the failure.</p>
EIU <eiu#> RTS passed	
	<p>Meaning: The EIU returned to service.</p> <p>Action: None</p>

RTS (end)

Command responses (Sheet 2 of 2)

Responses for the RTS command	
MAP output	Meaning and action
EIU <eiu#> RTS Rejected	<p>Meaning: EIU resident maintenance rejected the command for an unspecified reason.</p> <p>Action: Determine the cause of the rejection. Contact your next level of support.</p>

TST**Command**

TST

Sublevel

MAPCI;MTC;PM;POST EIU eiu_number

Function

Use the TST command to run diagnostics on the posted Ethernet interface units (EIU).

Usage notes

The specific diagnostics run will be determined by the state of the EIU. In-service tests will be run on EIUs that are in service or in-service trouble. Out-of-service tests will be run on EIUs that are in the manual busy state.

Use the POST command to post a set of EIUs before using the TST command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TST command parameters and variables	
Command	Parameters and variables
TST	<u>POSTED</u> ALL
Item	Description
ALL	This parameter causes all posted EIUs to be tested.
<u>POSTED</u>	This default parameter indicates that only the posted EIU in the control position will be tested.

TST (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the TST command
<p>>TST</p> <p><i>MAP response:</i></p> <p>EIU 12 TST passed</p> <p>Explanation: The test of the posted EIU currently in the control position passed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Response for the TST command	
MAP output	Meaning and action
Request Invalid - EIU eiu# is status	
No Action Taken	<p>Meaning: The EIU is in the incorrect state for the TST command to be executed. The EIU must be in one of the following states:</p> <ul style="list-style-type: none"> • manual busy (ManB) • in service (InSv) • in-service trouble (ISTb) <p>Action: None</p>
EIU eiu# failed - failure reason - circuit location display	<p>Meaning: The EIU failed the test and the details of the failure are displayed. A cardlist may be displayed.</p> <p>Action: Go to the appropriate alarm clearing or card replacement procedure to correct the indicated problem.</p>
EIU eiu# TST passed	<p>Meaning: The EIU is tested and passes all tests.</p> <p>Action: None</p>

11 FBus level commands

FBus menu

Use the FBus level of the MAP display to access the frame transport bus (F-bus) maintenance system when the link interface module (LIM) is housed in a link peripheral processor (LPP) with single F-bus configuration.

The following figure shows the FBus menu and status display.

Figure 11-1 FBus MAP level menu

CM	MS	IOD	Net	PM	CCS	Trks	Ext	APPL			
CM Flt	MSpair	NODLOG	.	PMLOAD	.	.	.	.
.	*C*	M									
FBus			SysB	ManB	OffL	CBsy	ISTb	InSv			
0 Quit	PM		0	0	126	0	0	0			
2	LIM		0	0	5	0	0	0			
3											
4	LIM 0	OffL									
5 Trnsl_			Links_OOS	Taps_OOS							
6 Tst_	Unit0:	OffL	6	34							
7 Bsy_	Unit1:	OffL	6	34							
8 RTS											
9 Offl			Tap: 0	4	8	12	16	20	24	28	32
10	FBus0:SysB(RU)		BBBB	BBBB	BBBB	BBB-	BBBB	BBBB	-BBB	BBBB	BBBB
11											
12	FBUS:										
13											
14											
15											
16 QueryFB_											
17											
18											

CM MS IOD Net PM CCS Trks Ext APPL

Accessing the FBus level

To access the FBus level, enter the following command from the CI (command interpreter) MAP level:

```
>MAPCI;MTC;PM;POST LIM lim_number;FBUS
```

and press the Enter key.

where

lim_number is the number of the LIM to be posted

FBus commands

This chapter describes commands available at the FBus level of the MAP display. The commands are arranged in alphabetical order. The following commands are described in this chapter:

- BSY
- OFFL
- QUERYFB
- QUIT
- RTS
- TRNSL
- TST

BSY**Command**

BSY

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;FBUS

Function

Use the BSY command to busy an F-bus or a tap.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

BSY command parameters and variables	
Command	Parameters and variables
BSY	UNIT unit_no <u>NOFORCEWAIT</u> LINK unit_no link_no FORCE NOWAIT FBUS unit_no tap_no
Item	Description
FBUS	This parameter indicates that an F-bus will be busied.
FORCE	This parameter causes an override of any maintenance action currently in progress.
LINK	This parameter indicates that a link will be busied.
link_no	This variable is the number of the link and has a range 0 to 1.
NOFORCE	This default parameter, which is never entered, indicates that maintenance action currently in progress is not overridden because the force parameter is not entered.
NOWAIT	This parameter allows additional commands to be entered at the MAP without waiting for the BSY command to finish executing.

BSY (continued)

Parameters and variables (Sheet 2 of 2)

BSY command parameters and variables	
Command	Parameters and variables
tap_no	This variable is the number of the F-bus tap that will be busied and has a range of 0 to 35.
UNIT	This parameter indicates that a LIM will be busied.
unit_no	This is the number of the LIM unit that will be busied and has a range of 0 to 1.
<u>WAIT</u>	This default parameter, which is never entered, indicates that, because the NOWAIT parameter was not entered, commands cannot be entered at the MAP without waiting for the BSY command to finish executing.

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY FBUS 0 9 where 0 is the unit_no 9 is the tap_no MAP response: LIM 0 FBus 0 Tap 9 Busy initiated. LIM 0 FBus 0 Tap 9 Busy passed. Explanation: Standard response to this command.</pre>

MAP responses

The following table describes the MAP responses.

BSY (end)**Command responses**

Responses for the BSY command	
MAP output	Meaning and action
Lim x FBus y [tap z] is already busy. Busy action not taken.	<p>Meaning: The LIM F-bus or tap is already ManB.</p> <p>Action: None</p>
Lim x FBus y [tap z] Busy passed.	<p>Meaning: The LIM F-bus or tap is now ManB.</p> <p>Action: None</p>
Lim x FBus y [tap z] local maintenance not accessible Lim x FBus y [tap z] Busy passed.	<p>Meaning: The local maintenance for the F-bus or tap is not accessible, but the BSY command is allowed. This message warns that future commands can fail.</p> <p>Action: None</p>
Lim x FBus y [tap z] maintenance in progress. Busy action not taken.	<p>Meaning: Other maintenance actions are currently under way. The BSY command cannot be performed until these actions are completed.</p> <p>Action: None</p>
This action will take n LIU7s out of service. Please confirm, "Yes" or "No".	<p>Meaning: A number of LIU7s will be isolated if the LIM F-bus or tap is busied. The system requires the user to confirm this.</p> <p>Action: None</p>

OFFFL

Command

OFFFL

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;FBUS

Function

Use the OFFFL command to put both sides of the F-bus in the offline state.

Usage notes

Both units of the F-bus must be manual busy.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFFL command
<pre>>OFFFL MAP response: FBus offline passed. Explanation: Both sides of the F-bus are offline.</pre>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFL command	
MAP output	Meaning and action
LIM x has maintenance in progress; Offline action not taken.	<p>Meaning: The OFFLINE command cannot be performed if maintenance is under way on either unit.</p> <p>Action: None</p>
LIM x FBus y is already OffL.	<p>Meaning: The LIM and F-bus are already offline.</p> <p>Action: None</p>
LIM x FBus y - must be busy.	<p>Meaning: The LIM is not manual busy (ManB). The LIM must be ManB before it is placed offline.</p> <p>Action: None</p>

QUERYFB

Command

QUERYFB

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;FBUS

Function

Use the QUERYFB command to display miscellaneous information about the posted F-buses or taps.

Usage notes

Actual display data depends on current activity and includes fault conditions and F-bus or tap status.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYFB command parameters and variables	
Command	Parameters and variables
QUERYFB	FBUS unit_number tap_number
Item	Description
FBUS	This parameter indicates the F-bus is queried.
unit_number	This variable indicates the number of the F-bus to be queried (0 or 1)
tap_number	This variable indicates the number of the F-bus tap to be queried (0 to 35).

Usage examples

The following table provides an example of the command.

QUERYFB (end)

Command example

Example of the QUERYFB command
<p>>QUERYFB FBUS 0</p> <p><i>where</i></p> <p>0 is the unit_no</p> <p><i>MAP response:</i></p> <p>Information for LIM 1 FBus 0 State transition: NOV-18 02:06:13 (SysB (RU) TO InSV) Current faults: 0000 0000 0000 0000 0000 0000 0000 No faults found.</p> <p>Explanation: Current information about the posted F-bus is displayed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUERYFB command	
MAP output	Meaning and action
Information for LIM 1 FBus 0 Tap 0 State transition: NOV-18 02:06:13 (B TO .) Current faults: 0000 0000 0000 0000 0000 0000 0000 No faults found.	<p>Meaning: Tap 0 on F-bus 0 is currently active. No fault conditions were found.</p> <p>Action: None</p>
EITHER incorrect optional parameter(s) OR too many parameters. Problems getting the tap number	<p>Meaning: Incorrect information was entered.</p> <p>Action: Enter the command again.</p>
Undefined command <"COMMAND">	<p>Meaning: The command was entered incorrectly.</p> <p>Action: Enter the command again.</p>

QUIT

Command

QUIT

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;FBUS

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for the incrname variable are menu level names, such as MTC or MAPCI.
n	This variable identifies a specified number of levels that you can go to from the current level. The range of levels is 0 to 6. However, the system cannot accept a level number higher than the number of the current level.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<p>>QUIT</p> <p>MAP response:</p> <p>POST:</p> <p>Explanation: The F-bus sublevel has changed to the previous LIM level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
<p>CI:</p>	<p>Meaning: The system quit all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
<p>QUIT -- Unable to quit requested number of levels</p> <p>Last parameter evaluated was: 1</p>	<p>Meaning: You entered an invalid level number. The entered number exceeds the number of MAP levels you can quit from.</p> <p>Action: Enter the command again using an appropriate level number.</p>
<p>The system replaces the FBus level menu with a menu that is two or more levels higher.</p>	<p>Meaning: You entered the QUIT command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
<p>The system replaces the display of the FBus level with the display of the next higher MAP level.</p>	<p>Meaning: The system quit to the next higher MAP level.</p> <p>Action: None</p>

RTS

Command

RTS

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;FBUS

Function

Use the RTS command to return to service an F-bus or a tap.

Usage notes

The F-bus must be in the manual busy, system busy, or in-service trouble state.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

RTS command parameters and variables	
Command	Parameters and variables
RTS	UNIT unit_no <u>TESTWAIT</u> LINK unit_no link_no NOTEST NOWAIT FBUS unit_no tap_no
Item	Description
FBUS	This parameter indicates that an F-bus element is to be returned to service.
LINK	This parameter indicates that a link element is to be returned to service.
link_no	This variable is the number of the link and has a range 0 to 1.
NOTEST	This parameter causes the RTS command to be executed without testing the unit or element.
NOWAIT	This parameter allows additional commands to be entered at the MAP without waiting for the RTS command to finish executing.
tap_no	This variable is the number of the F-bus tap to be returned to service and has a range of 0 to 35.

RTS (continued)

Parameters and variables (Sheet 2 of 2)

RTS command parameters and variables	
Command	Parameters and variables
<u>TEST</u>	This default parameter, which is never entered, indicates that the RTS action will only occur after the unit or element has passed pre-RTS tests because the NOTEST parameter was not entered.
UNIT	This parameter indicates that it is a LIM element that is to be returned to service.
unit_no	This is the number of the LIM unit to be returned to service and has a range of 0 to 1.
<u>WAIT</u>	This default parameter, which is never entered, indicates that commands cannot be entered at the MAP without waiting for the RTS command to finish executing, because the NOWAIT parameter was not entered.

Usage examples

The following table provides an example of the command.

Command example

Example of the RTS command
<pre>>RTS FBUS 1 1</pre> <p><i>where</i></p> <p>1 is the unit_no</p> <p>1 is the tap_no</p> <p><i>MAP response:</i></p> <pre>LIM 1 FBus 1 Tap 1 Return to service initiated.</pre> <pre>LIM 1 FBus 1 Tap 1 Return to service passed.</pre> <p>Explanation: Standard response to this command.</p>

RTS (continued)

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the RTS command	
MAP output	Meaning and action
LIM X FBUS y [tap z] Return to Service initiated.	<p>Meaning: The return to service has been initiated on the LIM F-bus or tap.</p> <p>Action: None</p>
LIM X FBUS y [tap z] already in service Return to Service action not taken.	<p>Meaning: The return to service did not occur because the element was not ManB, ISTb, or SysB.</p> <p>Action: None</p>
LIM X FBUS y [tap z] RTS passed	<p>Meaning: The LIM F-bus or tap has been returned to service.</p> <p>Action: None</p>
LIM X FBUS y [tap z] RTS test failed	<p>Meaning: The pre-RTS tests failed and results are displayed.</p> <p>Action: Go to the appropriate alarm clearing or card replacement procedure to fix the problem and attempt to return the circuit to service again.</p>
LIM X FBUS y [tap z] RTS failed; check for LOGs.	<p>Meaning: This message occurs when the NOTEST parameter is entered and the RTS fails.</p> <p>Action: None</p>
LIM X FBUS y [tap z] is . Return to Service action not taken.	<p>Meaning: The LIM F-bus or tap is not manual busy, system busy, or in service.</p> <p>Action: Place element in the ManB state and enter the command again.</p>

Command responses (Sheet 2 of 2)

Responses for the RTS command	
MAP output	Meaning and action
	<p>Local maintenance not accessible.</p> <p>If manual intervention is desired, RTS host links if they are Manb. Otherwise, try Bsy, Tst, and RTS the LIM unit. Also, consult NTP for further manual intervention actions.</p> <p>Meaning: There is no communication path to local F-bus or tap software. The LIM unit could be in a system busy (SysB) or manual busy (ManB) state. This message also appears when you try to test the tap and there is no application specific unit (ASU) hardware installed.</p> <p>Action: Follow the displayed instructions. If necessary, contact the next level of support.</p>

TRNSL

Command

TRNSL

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;FBUS

Function

Use the TRNSL command to provide information about specified taps.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TRNSL command parameters and variables	
Command	Parameters and variables
TRNSL	<u>BOTH</u> <u>ALL</u> unit_no tap_no
Item	Description
<u>ALL</u>	This default parameter, which is never entered, indicates that information for all taps will be displayed because no tap_no is specified.
<u>BOTH</u>	This default parameter, which is never entered, indicates that information for taps on both F-bus units will be displayed because no unit_no is specified.
tap_no	This variable is the number of the tap and has a range of 0 to 35.
unit_no	This variable is the number of the F-bus unit and has a range of 0 to 1.

TRNSL (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the TRNSL command
<pre>>TRNSL 0 0</pre> <p><i>where</i></p> <p>0 is the unit_no</p> <p>0 is the tap_no</p> <p><i>MAP response:</i></p> <pre>LIM 1 FBus 0 Tap 0 is on LIU7 100.</pre> <p>Explanation: The command was successful. The information for the specified tap displays.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the TRNSL command	
MAP output	Meaning and action
Undefined command <"COMMAND">	<p>Meaning: The command was entered incorrectly.</p> <p>Action: Enter the command again.</p>
Either incorrect optional parameters or too many parameters.	<p>Meaning: Incorrect information was entered.</p> <p>Action: Enter the command again with the correct information.</p>

TST

Command

TST

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;FBUS

Function

Use the TST command to test an F-bus or a tap.

Usage notes

The F-bus must be in the manual busy (ManB), system busy (SysB), in-service (Insv), or in-service trouble (ISTb) state.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TST command parameters and variables	
Command	Parameters and variables
TST	UNIT unit_no LINK unit_no link_no FBUS unit_no tap_no
Item	Description
FBUS	This parameter indicates that an F-bus element is to be busied.
LINK	This parameter indicates that a link element is to be busied.
link_no	This variable is the number of the link and has a range 0 to 1.
tap_no	This variable is the number of the F-bus tap to be tested and has a range of 0 to 35.
UNIT	This parameter indicates that it is a LIM element that is to be tested.
unit_no	This is the number of the LIM unit to be tested and has a range of 0 to 1.

TST (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the TST command
<pre>>TST FBUS 1 0</pre> <p><i>where</i></p> <p>1 is the unit_no</p> <p>0 is the tap_no</p> <p><i>MAP response:</i></p> <pre>LIM 1 FBUS 1 Tap 0 Test initiated. LIM 1 FBUS 1 Tap 0 Test passed.</pre> <p>Explanation: F-bus 1 and tap 0 have been tested and no problems have been found.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the TST command	
MAP output	Meaning and action
LIM x FBus y [tap z] Test initiated.	<p>Meaning: Testing has been initiated on the LIM F-bus or tap.</p> <p>Action: None</p>
LIM x FBus y [tap z] Test passed.	<p>Meaning: The test initiated on the LIM F-bus or tap has passed.</p> <p>Action: None</p>
LIM x FBus y [tap] Test failed.	<p>Meaning: The test initiated on the LIM F-bus or tap has failed. Test results are given in a standard circuit display.</p> <p>Action: None</p>
LIM x FBus y [tap z] is Test action not taken.	

TST (end)

Command responses (Sheet 2 of 2)

Responses for the TST command	
MAP output	Meaning and action
	<p>Meaning: The LIM F-bus or tap is not ManB, SysB, Insv, or ISTb, which are the only valid states for testing.</p> <p>Action: None</p> <p>LIM x FBus y [tap z] maintenance in progress. Test action not taken</p>
	<p>Meaning: Other maintenance actions are currently active and therefore the test cannot be initiated.</p> <p>Action: None</p> <p>LIM x FBus y [tap z] test resources in use. TEst action not taken.</p>
	<p>Meaning: The resources needed for testing are being used for other maintenance purposes.</p> <p>Action: None</p> <p>Local maintenance not accessible. If manual intervention is desired, RTS host links if they are Manb. Otherwise, try Bsy, Tst, and RTS the LIM unit. Also, consult NTP for further manual intervention actions.</p>
	<p>Meaning: There is no communication path to local F-bus or tap software. The LIM unit could be in a system busy (SysB) or manual busy (ManB) state. If you tried to test the tap, this message also can indicate that there is no application specific unit (ASU) hardware equipped.</p> <p>Action: Follow the displayed instructions. If necessary, contact the next level of support.</p> <p>LIM x FBus y tap z Test failed, local maintenace not accessible.</p>
	<p>Meaning: The application specific unit (ASU) may be offline (OffL) or this message also can indicate that there is no ASU hardware equipped. You cannot test a tap on this ASU.</p> <p>Action: None</p>

12 HLIU level commands

HLIU menu

Use the HLIU level of the MAP display to access the Common Channel Signaling 7 (CCS7) high-speed link interface unit (HLIU) maintenance system.

The following figure shows the HLIU menu and status display.

Figure 12-1 HLIU MAP level menu

	CM	MS	IOD	Net	PM	CCS	LNS	Trks	Ext	APPL
					1HLIU					
					C					
HLIU					SysB	ManB	OffL	CBsy	ISTb	InSv
0 Quit
2 Post_			PM		0	0	1	1	0	123
3 ListSet			HLIU		1	1	0	0	0	5
4										
5										
6 Tst_			HLIU 12		ManB	Mtce		/Loading	(20%)	
7 Bsy_										
8 RTS_										
9 OffL_										
10 LoadPM_										
11 Disp_										
12 Next										
13										
14 QueryPM_										
15 LoopBk_										
16										
17										
18										

Accessing the HLIU level

To access the HLIU level, enter the following command from the CI (command interpreter) MAP level:

```
>MAPCI;MTC;PM;POST HLIU hliu_number
```

and press the Enter key.

where

`hliu_number` is the number of the HLIU to be posted

HLIU commands

This chapter describes commands available at the HLIU level of the MAP display. The commands are arranged in alphabetical order. The following commands are described in this chapter:

- BSY
- DISP
- LISTSET
- LOADPM
- LOOPBK
- NEXT
- OFFL
- POST
- QUERYPM
- QUIT
- RTS
- TST

BSY

Command

BSY

Sublevel

MAPCI;MTC;PM;POST HLIU hliu_number

Function

Use the BSY command to place high-speed link interface units (HLIU) in the manual busy (ManB) state.

Usage notes

Use the POST command to post the HLIUs before using the BSY command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

BSY command parameters and variables	
Command	Parameters and variables
BSY	<u>POSTED</u> <u>NOFORCE</u> <u>WAIT</u> ALL FORCE NOWAIT
Item	Description
ALL	This parameter causes all posted HLIUs to be busied.
FORCE	This parameter causes HLIU inaccessibility to be ignored.
<u>NOFORCE</u>	This default parameter indicates that HLIUs that are not accessible will not be busied.
NOWAIT	This parameter allows other commands to be entered before the BSY command has finished executing.
<u>POSTED</u>	This default parameter indicates that only the posted HLIU in the control position will be busied.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the BSY command has finished executing.

BSY (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY</pre> <p><i>MAP response:</i></p> <pre>HLIU 3 BSY Passed</pre> <p>Explanation: The posted HLIU currently in the control position is HLIU 3. It has been busied.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the BSY command	
MAP output	Meaning and action
<pre>Request Invalid - HLIU <hliu#> is <state></pre> <pre>No Action Taken</pre>	<p>Meaning: The HLIU is in the incorrect state for the BSY command to be executed. It must be in one of the following states:</p> <ul style="list-style-type: none"> • offline (OffL) • system busy (SysB) • in service (InSv) • in-service trouble (ISTb) <p>Action: None</p>
<pre>Busy HLIU <hliu#> will take a link out of service</pre> <pre>PLEASE CONFIRM (YES or NO).</pre>	<p>Meaning: The command requires confirmation because linkset management has reserved the HLIU.</p> <p>Action: Enter YES to confirm the command or NO to abort it.</p>
<pre>HLIU# BSY Passed</pre>	

BSY (end)

Command responses (Sheet 2 of 2)

Responses for the BSY command	
MAP output	Meaning and action
	Meaning: The command passed. Action: None
HLIU <hliu#> BSY Rejected	Meaning: The command was rejected by HLIU resident maintenance. A serious problem exists. Action: Contact your next level of support.

DISP

Command

DISP

Sublevel

MAPCI;MTC;PM;POST HLIU hliu_number

Function

Use the DISP command to display a list of all Common Channel Signaling 7 (CCS7) high-speed link interface units (HLIU) in a specified peripheral module (PM) state.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

DISP command parameters and variables	
Command	Parameters and variables
DISP	STATE pm_state HLIU
Item	Description
HLIU	This parameter indicates that the PM node-type is HLIU.
pm_state	This variable is one of the following PM state codes: <ul style="list-style-type: none"> • CBSy central-side-busy • Idl idle • InSv in-service • ISTb in-service trouble • ManB manual busy • NEQ not equipped • OffL offline • SysB system busy
STATE	Enter this parameter before the PM state code.

DISP (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the DISP command
<pre>>DISP STATE ISTB HLIU</pre> <p><i>where</i></p> <p>ISTB is the pm_state</p> <p><i>MAP response:</i></p> <pre>ISTb HLIU: NONE</pre> <p>Explanation: No HLIUs in the in-service trouble state exist.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the DISP command	
MAP output	Meaning and action
pm_state HLIU n, n	<p>Meaning: The system displays all HLIUs that are in the specified PM state.</p> <p>Action: None</p>

LISTSET

Command

LISTSET

Sublevel

MAPCI;MTC;PM;POST HLIU hliu_number

Function

Use the LISTSET command to list the contents of the posted set.

Usage notes

Use the POST command to post the Common Channel Signaling 7 (CCS7) high-speed link interface unit (HLIU) before using the LISTSET command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

LISTSET command parameters and variables	
Command	Parameters and variables
LISTSET	ALL pm_type
Item	Description
ALL	This parameter causes all PMs in the posted set to be listed.
pm_type	This variable indicates a type of PM. Only PMs of that type will be listed. For the HLIU, enter HLIU.

LISTSET (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the LISTSET command
<pre>>LISTSET HLIU where HLIU is the pm_type MAP response: HLIU 0, 6, 12 Explanation: All the posted HLIUs are listed.</pre>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the LISTSET command	
MAP output	Meaning and action
HLIU 0, 6, 12	<p>Meaning: All posted HLIUs are listed.</p> <p>Action: None</p>
No PM posted Post set is empty	<p>Meaning: No posted HLIUs exist.</p> <p>Action: None</p>

LOADPM

Command

LOADPM

Sublevel

MAPCI;MTC;PM;POST HLIU hliu_number

Function

Use the LOADPM command to load the Common Channel Signaling 7 (CCS7) high-speed link interface units (HLIU) with the software load specified in either the inventory table or an optional file.

Usage notes

All the HLIUs must have the same loadfile datafilled and must have the same processor or type.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

LOADPM command parameters and variables	
Command	Parameters and variables
LOADPM	<u>POSTED</u> <u>INVEN</u> <u>WAIT</u> ALL file NOWAIT
Item	Description
ALL	This parameter causes all posted HLIUs to be loaded.
<u>INVEN</u>	This default parameter indicates that the software will be loaded from that specified in the inventory table.
file	This variable specifies the file from which the software is to be loaded. The value is an alphanumeric string.
NOWAIT	This parameter allows other commands to be entered before the LOADPM command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted HLIU in the control position will be loaded.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered at a MAP until the LOADPM command finishes executing.

LOADPM (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the LOADPM command
<pre>>LOADPM</pre> <p><i>MAP response:</i></p> <pre>HLIU 12 LOADPM Passed.</pre> <p>Explanation: The LOADPM command passed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the LOADPM command	
MAP output	Meaning and action
<pre>Request Invalid - HLIU <hliu#> is status</pre> <pre>No Action Taken</pre>	<p>Meaning: The HLIU is in the incorrect state for the LOADPM command to be executed. The HLIU must be in the ManB state.</p> <p>Action: Use the BSY command to busy the HLIU. Enter command LOADPM again.</p>
<pre>HLIU hliu# LOADPM Failed</pre>	<p>Meaning: The LOADPM command was not successful.</p> <p>Action: Determine the cause of the failure.</p>

LOOPBK

Command

LOOPBK

Sublevel

MAPCI;MTC;PM;POST HLIU hliu_number

Function

Use the LOOPBK command to enable the high-speed link interface unit (HLIU) loopback mode.

Usage notes

Use the POST command to post the HLIUs before using the LOOPBK command.

The LOOPBK command can only be executed if the HLIU is idle (not reserved by linkset management) or, if reserved, not currently running traffic.

The following types of loopbacks are supported:

- local loopback
- loopback enable

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

LOOPBK command parameters and variables	
Command	Parameters and variables
LOOPBK	mode ALL
Item	Description

LOOPBK (continued)

Parameters and variables (Sheet 2 of 2)

LOOPBK command parameters and variables	
Command	Parameters and variables
ALL	This parameter sets the loopback on all posted HLIUs.
mode	<p>This variable determines the action the LOOPBK command takes. The following replacement values are used:</p> <ul style="list-style-type: none"> • c clear • e enable • l local • s status • r remote • p payload

Usage examples

The following table provides an example of the command.

Command example

Example of the LOOPBK command
<pre>>LOOPBK C ALL</pre> <p><i>MAP response:</i></p> <pre>HLIU hliu# LOOPBK Passed</pre> <p>ExplanationThe LOOPBK command executed successfully.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the LOOPBK command	
MAP output	Meaning and action
Request Invalid - HLIU <hliu#> is status	<p>Meaning: The HLIU is in the incorrect state for the LOOPBK command to execute. The HLIU must be either in service (InSv) or in-service trouble (ISTb).</p> <p>Action: None</p>

LOOPBK (end)

Command responses (Sheet 2 of 2)

Responses for the LOOPBK command	
MAP output	Meaning and action
Request Invalid - HLIU <hliu#> is allocated to CCS7 traffic	<p>Meaning: The HLIU is allocated by linkset management and is currently running traffic.</p> <p>Action: None</p>
HLIU <hliu#> LOOPBK Passed	<p>Meaning: The LOOPBK command executed successfully.</p> <p>Action: None</p>
HLIU <hliu#> LOOPBK Failed	<p>Meaning: The LOOPBK command failed.</p> <p>Action: None</p>
HLIU <hliu#> LOOPBK Rejected	<p>Meaning: The command was rejected by HLIU resident maintenance.</p> <p>Action: Contact your next level of support.</p>

NEXT**Command**

NEXT

Sublevel

MAPCI;MTC;PM;POST HLIU hliu_number

Function

Use the NEXT command to place the next higher peripheral module (PM) of the set of posted Common Channel Signaling 7 (CCS7) high-speed link interface units (HLIU) into the control position.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

NEXT command parameters and variables	
Command	Parameters and variables
NEXT	<u>NEXT</u> pm_type
Item	Description
<u>NEXT</u>	This default parameter indicates that the next posted PM, regardless of PM type, will be placed in the control position.
pm_type	This variable specifies the type of PM to be moved into the control position. Use the DISP command to display the list of PM types in the posted set. The system selects the PMs in the sequence displayed by this list.

NEXT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the NEXT command
>NEXT <i>MAP response:</i> (display of MAP screen for next PM) Explanation: The next PM of the posted set is in the control position.

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the NEXT command	
MAP output	Meaning and action
END OF POST SET	Meaning: Either the currently displayed PM is the last in the posted set of PMs, or only one PM number has been posted. The display returns to the next higher menu level. Action: None

OFFL

Command

OFFL

Sublevel

MAPCI;MTC;PM;POST HLIU hliu_number

Function

Use the OFFL command to put Common Channel Signaling 7 (CCS7) high-speed link interface units (HLIU) in the offline state.

Usage notes

The HLIU must be in the manual busy (ManB) state before the OFFL command can be executed.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

OFFL command parameters and variables	
Command	Parameters and variables
OFFL	<u>POSTED</u> <u>WAIT</u> ALL NOWAIT
Item	Description
ALL	This parameter causes all posted HLIUs to be offlined.
NOWAIT	This parameter allows other commands to be entered before the OFFL command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted HLIU in the control position will be offlined.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the OFFL command finishes executing.

OFFL (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFL command
<pre>>OFFL</pre> <p><i>MAP response:</i></p> <pre>HLIU 12 OFFL Passed</pre> <p>Explanation: HLIU 12 is now offline.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFL command	
MAP output	Meaning and action
<pre>Request Invalid - HLIU <hliu#> is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The HLIU is in the incorrect state for the OFFL command to execute. The HLIU must be in the manual busy (ManB) state.</p> <p>Action: None</p>
<pre>HLIU <hliu#> OFFL Passed</pre>	<p>Meaning: The OFFL command passed.</p> <p>Action: None</p>
<pre>HLIU <hliu#> OFFL Rejected</pre>	<p>Meaning: HLIU resident maintenance rejected the command.</p> <p>Action: Determine the cause of the failure. Contact your next level of support.</p>

POST**Command**

POST

Sublevel

MAPCI;MTC;PM

Function

Use the POST command to select a specific Common Channel Signaling 7 (CCS7) high-speed link interface unit (HLIU) for maintenance actions.

Usage notes

The POST command is qualified by the following exceptions, restrictions, and limitations.

- Use the POST command before using commands TST, BSY, RTS, OFFL, LOADPM, or QUERYPM.
- When the command string HELP POST is entered to query the parameters of POST, not all of the displayed parameters apply to all offices or office networks. The applicability of the parameters depends on the types of PMs present in the office configuration.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

POST command parameters and variables	
Command	Parameters and variables
POST	pm_type pm_no
Item	Description
pm_type	This variable identifies the discrimination number of the HLIU to be posted. The range is 0 to 12. To specify more than one HLIU, enter each discrimination number separated by a space as in the following example: ..8 12
pm_no	This variable identifies a PM type. For an HLIU enter HLIU. If the level of the node-type is already accessed, omit variable pm_type from the command entry. A PM in the control position of the posted set is the default.

POST (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the POST command
<pre>>POST HLIU 8</pre> <p><i>where</i></p> <p>HLIU is the pm_type</p> <p>8 is the pm_no</p> <p><i>MAP response:</i></p> <p>OK</p> <p>Explanation: The command passed. HLIU 8 is posted.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the POST command	
MAP output	Meaning and action
NO PM POSTED	<p>Meaning: The PM level was accessed, but no PMs were posted because variable pm_no was not entered.</p> <p>Action: None</p>
<pre>HLIU 0 InSv Rsvd PM: POST:</pre>	<p>Meaning: The command passed. HLIU 0 is in service.</p> <p>Action: None</p>

QUERYPM

Command

QUERYPM

Sublevel

MAPCI;MTC;PM;POST HLIU hliu_number

Function

Use the QUERYPM command to display information about the posted high-speed link interface unit (HLIU), its host link interface module (LIM), and the enhanced link peripheral processor (ELPP) triple F-bus taps. The displayed information reflects the state of the host local message switches (LMS), message channels, and taps. Information about HLIU locations, in-service trouble (ISTb) conditions, and linksets is also displayed.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYPM command parameters and variables	
Command	Parameters and variables
QUERYPM	<u>DISP</u> FLT
Item	Description
<u>DISP</u>	This default parameter indicates that a normal QUERYPM display will be presented.
FLT	This parameter causes fault information for the HLIU to be displayed.

QUERYPM (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERYPM command
<pre>>QUERYPM MAP response: PM type: HLIU PM No.: 2 Status: Offl LIM: 0 Shelf: 1 Slot: 10 HLIU FTA: 4244 1000 Default Load: HLIU25 Running Load HLIU25RTM ISTB ... ExplanationThis is a typical response to command QUERYPM for an HLIU.</pre>

QUERYPM (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUERYPM command	
MAP output	Meaning and action
<pre> PM type: HLIU PM No.: 12 Status: MANB LIM: 2 Shelf: 3 Slot: 24 HLIU FTA: 426A 1000 Default Load: xxx04BD Running Load: xxx04BD Potential service affecting conditions: Config Data Mismatch Msg Channel #0 NA Msg Channel #1 NA TAP #0 00S/NA TAP #1 00S/NA Host Unit 0 is not in service Host Unit 1 is not in service LMS Unit: 0 1 LMS States: ManB ManB Auditing: No No Msg Channels: NA NA TAP 31: B(NA) B(NA) Reserved HLIU forms part of CCS7 Linkset: TLU8 SLC:0 HLIU is not allocated </pre>	<p>Meaning: This is a typical response to command QUERYPM for an HLIU.</p> <p>Action: None</p>

QUIT

Command

QUIT

Sublevel

MAPCI;MTC;PM;POST HLIU hliu_number

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for variable incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of levels from which to exit. The range is 0 to 6. Do not enter a number that is higher than the number of levels currently open.

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<p>>QUIT</p> <p><i>MAP response:</i></p> <p>(The display changes to the display of a higher level menu.)</p> <p>Explanation: The HLIU level changes to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
<p>CI :</p>	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
<p>QUIT -- Unable to quit requested number of levels</p> <p>Last parameter evaluated was: 1</p>	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.</p> <p>Action: Reenter the command using an appropriate level number.</p>
<p>The system replaces the HLIU level menu with a menu that is two or more levels higher.</p>	<p>Meaning: You entered the QUIT command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
<p>The system replaces the display of the HLIU level with the display of the next higher MAP level.</p>	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

RTS

Command

RTS

Sublevel

MAPCI;MTC;PM;POST HLIU hliu_number

Function

Use the RTS command to run diagnostics and return an out-of-service Common Channel Signaling 7 (CCS7) high-speed link interface unit (HLIU) to service.

Usage notes

The HLIU does not return to service if the out-of-service diagnostics do not pass.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

RTS command parameters and variables	
Command	Parameters and variables
RTS	<u>POSTED</u> <u>NOFORCE</u> <u>WAIT</u> ALL FORCENO WAIT
Item	Description
ALL	This parameter causes all posted HLIUs to be returned to service.
FORCE	This parameter causes HLIU inaccessibility to be ignored.
<u>NOFORCE</u>	This default parameter indicates that HLIUs that are not accessible will not be returned to service.
NOWAIT	This parameter allows other commands to be entered before the RTS command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted HLIU in the control position will be returned to service.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the RTS command finishes executing.

RTS (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the RTS command
<pre>>RTS</pre> <p><i>MAP response:</i></p> <pre>HLIU 12 RTS passed</pre> <p>Explanation: The HLIU returns to service.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the RTS command	
MAP output	Meaning and action
<pre>Request Invalid - HLIU <hliu#> is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The HLIU is in an incorrect state for the RTS command to execute. The HLIU must be in one of the following states:</p> <ul style="list-style-type: none"> • manual busy (ManB) • system busy (SysB) <p>Action: None</p>
<pre>HLIU <hliu#> Failed</pre> <pre><failure reason></pre> <pre><circuit location display></pre>	<p>Meaning: The command failed. A cardlist may be produced.</p> <p>Action: Go to the appropriate alarm clearing or card replacement procedure to determine the cause of the failure.</p>
<pre>HLIU <hliu#> RTS passed</pre>	<p>Meaning: The HLIU returned to service.</p> <p>Action: None</p>

RTS (end)

Command responses (Sheet 2 of 2)

Responses for the RTS command	
MAP output	Meaning and action
HLIU <hliu#> RTS Rejected	<p>Meaning: The RTS was rejected by HLIU resident maintenance.</p> <p>Action: Determine the cause of the failure. Contact your next level of support.</p>

TST**Command**

TST

Sublevel

MAPCI;MTC;PM;POST HLIU hliu_number

Function

Use the TST command to run diagnostics on the posted Common Channel Signaling 7 (CCS7) high-speed link interface units (HLIU).

Usage notes

The specific diagnostics run are determined by the state of the HLIU. In-service tests are run on HLIUs that are in the in-service or in-service trouble states. Out-of-service tests are run on HLIUs that are in the manual busy state.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TST command parameters and variables	
Command	Parameters and variables
TST	<u>POSTED</u> ALL
Item	Description
ALL	This parameter causes all posted HLIUs to be tested.
POSTED	This default parameter indicates that only the posted HLIU in the control position will be tested.

TST (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the TST command
<pre>>TST</pre> <p><i>MAP response:</i></p> <pre>HLIU 12 TST passed</pre> <p>Explanation: The test of the posted HLIU currently in the control position passed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the TST command	
MAP output	Meaning and action
<pre>Request Invalid - HLIU <hliu#> is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The HLIU is in the incorrect state for the TST command to be executed. The HLIU must be in one of the following states:</p> <ul style="list-style-type: none"> • manual busy (ManB) • in service (InSv) • in-service trouble (ISTb) <p>Action: None</p>
<pre>HLIU <hliu#> failed - failure reason - circuit location display</pre>	<p>Meaning: The HLIU failed the test and the details of the failure are displayed. A cardlist may be displayed.</p> <p>Action: Go to the appropriate alarm clearing or card replacement procedure to correct the indicated problem.</p>
<pre>HLIU <hliu#> TST passed</pre>	<p>Meaning: The HLIU passed all tests.</p> <p>Action: None</p>

13 HSLR level commands

HSLR menu

Use the HSLR level of the MAP display to access the Common Channel Signaling 7 (CCS7) high-speed link router (HSLR) maintenance system.

The following figure shows the HSLR menu and status display.

Figure 13-1 HSLR MAP level menu

	CM	MS	IOD	Net	PM	CCS	LNS	Trks	Ext	APPL
					1HSLR					
					C					
HSLR					SysB	ManB	OffL	CBsy	ISTb	InSv
0 Quit
2 Post_			PM		0	0	1	1	0	123
3 ListSet			HSLR		1	1	0	0	0	5
4										
5										
6 Tst_			HSLR 12		ManB	Mtce		/Loading	(20%)	
7 Bsy_										
8 RTS_										
9 Offl_										
10 LoadPM_										
11 Disp_										
12 Next										
13										
14 QueryPM_										
15										
16										
17										
18										

Accessing the HSLR level

To access the HSLR level, enter the following command from the CI (command interpreter) MAP level:

```
>MAPCI;MTC;PM;POST HSLR hslr_number
```

and press the Enter key.

where

hslr_number is the number of the HSLR to be posted

HSLR commands

This chapter describes commands available at the HSLR level of the MAP display. The commands are arranged in alphabetical order. The following commands are described in this chapter:

- BSY
- DISP
- LISTSET
- LOADPM
- NEXT
- OFFL
- POST
- QUERYPM
- QUIT
- RTS
- TST

BSY**Command**

BSY

Sublevel

MAPCI;MTC;PM;POST HSLR hslr_number

Function

Use the BSY command to place high-speed link routers (HSLR) in the manual busy (ManB) state.

Usage notes

Use the POST command to post the HSLRs before using the BSY command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

BSY command parameters and variables	
Command	Parameters and variables
BSY	<u>POSTED</u> <u>NOFORCE</u> <u>WAIT</u> ALL FORCE NOWAIT
Item	Description
ALL	This parameter causes all posted HSLRs to be busied.
FORCE	This parameter causes HSLR inaccessibility to be ignored.
<u>NOFORCE</u>	This default parameter indicates that HSLRs that are not accessible will not be busied.
NOWAIT	This parameter allows other commands to be entered before the BSY command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted HSLR in the control position will be busied.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the BSY command finishes executing.

BSY (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY</pre> <p><i>MAP response:</i></p> <pre>HSLR 3 BSY Passed</pre> <p>Explanation: The posted HSLR currently in the control position is HSLR 3. It has been busied.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the BSY command	
MAP output	Meaning and action
<pre>Request Invalid - HSLR hslr# is <state></pre> <pre>No Action Taken</pre>	<p>Meaning: The HSLR is in the incorrect state for the BSY command to execute. It must be in one of the following states:</p> <ul style="list-style-type: none"> • offline (OffL) • system busy (SysB) • in service (InSv) • in-service trouble (ISTb) <p>Action: None</p>
<pre>Busy HSLR hslr# will take a link out of service</pre> <pre>PLEASE CONFIRM (YES or NO).</pre>	<p>Meaning: The command requires confirmation because linkset management reserved the HSLR.</p> <p>Action: Enter YES to confirm the command or NO to abort it.</p>
<pre>HSLR hslr# BSY Passed</pre>	

BSY (end)

Command responses (Sheet 2 of 2)

Responses for the BSY command	
MAP output	Meaning and action
	<p>Meaning: The command passed.</p> <p>Action: None</p>
HSLR hslr# BSY Rejected	<p>Meaning: The command was rejected by HSLR resident maintenance. A serious problem exists.</p> <p>Action: Contact your next level of support.</p>

DISP

Command

DISP

Sublevel

MAPCI;MTC;PM;POST HSLR hslr_number

Function

Use the DISP command to display a list of all Common Channel Signaling 7 (CCS7) high-speed link routers (HSLR) in a specified peripheral module (PM) state.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

DISP command parameters and variables	
Command	Parameters and variables
DISP	STATE pm_state HSLR
Item	Description
HSLR	This parameter indicates that the PM node-type is HSLR.
pm_state	This variable is one of the following PM codes: CBsy central-side-busy Idl idle InSv in service ISTb in-service trouble ManB manual busy NEQ not equipped OffL offline SysB system busy
STATE	Enter this parameter before the PM state code.

DISP (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the DISP command
<pre>>DISP STATE ISTB HSLR</pre> <p><i>where</i></p> <p>ISTB is the pm_state</p> <p><i>MAP response:</i></p> <pre>ISTb HSLR: NONE</pre> <p>Explanation: No HSLRs in the in-service trouble state exist.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the DISP command	
MAP output	Meaning and action
pm_state HSLR n, n	<p>Meaning: The system displays all HSLRs that are in the specified PM state.</p> <p>Action: None</p>

LISTSET

Command

LISTSET

Sublevel

MAPCI;MTC;PM;POST HSLR hslr_number

Function

Use the LISTSET command to list the contents of the posted set.

Usage notes

Use the POST command to post the Common Channel Signaling 7 (CCS7) high-speed link routers (HSLR) before using the LISTSET command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

LISTSET command parameters and variables	
Command	Parameters and variables
LISTSET	ALL pm_type
Item	Description
ALL	This parameter causes all PMs in the posted set to be listed.
pm_type	This variable indicates a type of PM. Only PMs of that type will be listed. For the HSLR, enter HSLR.

LISTSET (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the LISTSET command
<pre>>LISTSET HSLR where HSLR is the pm_type MAP response: HSLR 0, 6, 12</pre> <p>Explanation: All the posted HSLRs are listed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the LISTSET command	
MAP output	Meaning and action
HSLR 0, 6, 12	<p>Meaning: All posted HSLRs are listed.</p> <p>Action: None</p>
No PM posted Post set is empty	<p>Meaning: No posted HSLRs exist.</p> <p>Action: None</p>

LOADPM

Command

LOADPM

Sublevel

MAPCI;MTC;PM;POST HSLR hslr_number

Function

Use the LOADPM command to load Common Channel Signaling 7 (CCS7) high-speed link routers (HSLR) with the software load specified in either the inventory table or an optional file.

Usage notes

All the HSLRs must have the same loadfile datafiled and must have the same processor or type.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

LOADPM command parameters and variables	
Command	Parameters and variables
LOADPM	<u>POSTED</u> <u>INVEN</u> <u>WAIT</u> ALL file NOWAIT
Item	Description
ALL	This parameter causes all posted HSLRs to be loaded.
<u>INVEN</u>	This default parameter indicates that the HSLR will be loaded with the software load specified in the inventory table.
file	This variable specifies the file from which the software is to be loaded. The value is an alpha numeric string.
NOWAIT	This parameter allows other commands to be entered before the LOADPM command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted HSLR in the control position will be loaded.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the LOADPM command finishes executing.

LOADPM (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the LOADPM command
<p>>LOADPM</p> <p><i>MAP response:</i></p> <p>HSLR 12 LOADPM passed.</p> <p>Explanation: The LOADPM command passed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the LOADPM command	
MAP output	Meaning and action
Request Invalid - HSLR hslr# is <status>	
No Action Taken	<p>Meaning: The HSLR is in the incorrect state for the LOADPM command to executes. The HSLR must be in the manual busy (ManB) state.</p> <p>Action: Use the BSY command to busy the HSLR. Enter command LOADPM again.</p>
HSLR hslr# LOADPM Failed	<p>Meaning: The LOADPM command was not successful.</p> <p>Action: Determine the cause of the failure.</p>

NEXT

Command

NEXT

Sublevel

MAPCI;MTC;PM;POST HSLR hslr_number

Function

Use the NEXT command to place the next higher peripheral module (PM) of the set of posted Common Channel Signaling 7 (CCS7) high-speed link router (HSLR) into the control position.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

NEXT command parameters and variables	
Command	Parameters and variables
NEXT	NEXT pm_type
Item	Description
NEXT	This default parameter indicates that the next posted PM, regardless of PM type, will be placed in the control position.
pm_type	This variable specifies the PM type of the HSLR to be placed in the control position. Use the DISP command to display the list of PM types in the posted set. The system selects the PMs in the sequence displayed by this list.

NEXT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the NEXT command
<p>>NEXT</p> <p><i>MAP response:</i></p> <p>(display of MAP screen for next PM)</p> <p>Explanation: The next PM of the posted set is in the control position.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the NEXT command	
MAP output	Meaning and action
END OF POST SET	<p>Meaning: Either the currently displayed PM is the last in the posted set of PMs, or only one PM number has been posted. The display returns to the next higher menu level.</p> <p>Action: None</p>

OFFL

Command

OFFL

Sublevel

MAPCI;MTC;PM;POST HSLR hslr_number

Function

Use the OFFL command to put Common Channel Signaling 7 (CCS7) high-speed link routers (HSLR) in the offline state.

Usage notes

The HSLR must be in the manual busy (ManB) state before the OFFL command can be executed.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

OFFL command parameters and variables	
Command	Parameters and variables
OFFL	<u>POSTED</u> <u>WAIT</u> ALL NOWAIT
Item	Description
ALL	This parameter causes all posted HSLRs to be offlined.
NOWAIT	This parameter allows other commands to be entered before the OFFL command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted HSLR in the control position will be offlined.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the OFFL command has finished executing.

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFFL command
<pre>>OFFFL</pre> <p><i>MAP response:</i></p> <pre>HSLR 12 OFFFL Passed</pre> <p>Explanation: HSLR 12 is now offline.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFFL command	
MAP output	Meaning and action
<pre>Request Invalid - HSLR hslr# is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The HSLR is in the incorrect state for the OFFFL command to execute. The HSLR must be in the manual busy (ManB) state.</p> <p>Action: None</p>
<pre>HSLR hslr# OFFFL Passed</pre>	<p>Meaning: The OFFFL command passed.</p> <p>Action: None</p>
<pre>HSLR hslr# OFFFL Rejected</pre>	<p>Meaning: The command was rejected by HSLR resident maintenance.</p> <p>Action: Determine the cause of the failure. Contact your next level of support.</p>

POST

Command

POST

Sublevel

MAPCI;MTC;PM

Function

Use the POST command to select a specific Common Channel Signaling 7 (CCS7) high-speed link router (HSLR) for maintenance actions.

Usage notes

The POST command is qualified by the following exceptions, restrictions, and limitations.

- Use the POST command before using commands TST, BSY, RTS, OFFL, LOADPM, or QUERYPM.
- When the command string HELP POST is entered to query the parameters of POST, not all of the displayed parameters apply to all offices or office networks. The applicability of the parameters depends on the types of PMs present in the office configuration.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

POST command parameters and variables	
Command	Parameters and variables
POST	pm_type pm_no
Item	Description
pm_no	This variable identifies the discrimination number of the HSLR to be posted. The range is 0 to 12. To specify more than one HSLR, enter each discrimination number separated by a space as in the following example: ...8 12
pm_type	This variable identifies a PM type. For an HSLR, enter HSLR. If the level of the node-type is already accessed, omit the pm_type variable from the command entry. A PM in the control position of the posted set is the default.

POST (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the POST command
<p>>POST HSLR 8</p> <p><i>where</i></p> <p>HLIU is the pm_type</p> <p>8 is the pm_no</p> <p><i>MAP response:</i></p> <p>OK</p> <p>Explanation: The command passed. HSLR 8 is posted.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the POST command	
MAP output	Meaning and action
NO PM POSTED	<p>Meaning: The PM level was accessed, but no PMs were posted because variable pm_no was not entered.</p> <p>Action: None</p>
HSLR 0 InSv Rsvd PM: POST:	<p>Meaning: The command passed. HSLR 0 is in service.</p> <p>Action: None</p>
OK	<p>Meaning: The specified PM is posted.</p> <p>Action: None</p>

QUERYPM

Command

QUERYPM

Sublevel

MAPCI;MTC;PM;POST HSLR hslr_number

Function

Use the QUERYPM command to display information about the posted high-speed link interface router (HSLR), its host link interface module (LIM), and the enhanced link peripheral processor (ELPP) triple F-bus taps. The displayed information reflects the state of the host local message switches (LMS), message channels, and taps. Information about HSLR locations, in-service trouble (ISTb) conditions, and linksets is also displayed.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYPM command parameters and variables	
Command	Parameters and variables
QUERYPM	<u>DISP</u> FLT
Item	Description
<u>DISP</u>	This default parameter indicates that a normal QUERYPM display will be presented.
FLT	This parameter causes fault information for the HSLR to be displayed.

QUERYPM (continued)

Usage examples

The following table provides an example of the command.

Command example**Example of the QUERYPM command**

>QUERYPM

MAP response:

MAP response:

PM type: HSLR PM No.: 2 Status: Offl

LIM: 0 Shelf: 1 Slot: 10 HSLR FTA: 4244 1000

Default Load: HSLR25

Running Load: HSLR25RTM

ISTB ...

Explanation: This is a typical response to command QUERYPM for an HSLR.

QUERYPM (end)

MAP responses

The following table describes the MAP responses:

Command responses

Responses for the QUERYPM command	
MAP output	Meaning and action
<pre>PM type: HSLR PM no.: 12 Status: MANB LIM: 2 Shelf: 3 Slot: 24 HSLR FTA: 426A 1000 Default Load: xxx04BD Running Load: xxx04BD Potential service affecting conditions: Config Data Mismatch Msg Channel #0 NA Msg Channel #1 NA TAP #0 00S/NA TAP #1 00S/NA Host Unit 0 is not in service Host Unit 1 is not in service LMS Unit : 0 1 LMS States : ManB ManB Auditing : No No Msg Channels: NA NA Tap 31 : B(NA) B(NA) Reserved HSLR forms part of CCS7 Linkset: TLU8 SLC:0 HSLR is not allocated</pre>	<p>Meaning: This is a typical response to command QUERYPM for an HSLR.</p> <p>Action: None</p>

QUIT**Command**

QUIT

Sublevel

MAPCI;MTC;PM;POST HSLR hslr_number

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for variable incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of levels from which to exit. The range is 0 to 6. Do not enter a number that is higher than the number of levels currently open.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p><i>MAP response:</i></p> <p>(The display changes to the display of a higher level menu.)</p> <p>Explanation: The HSLR level has changes to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
<pre>CI:</pre>	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
<pre>QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1</pre>	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.</p> <p>Action: Reenter the command using an appropriate level number.</p>
<pre>The system replaces the HSLR level menu with a menu that is two or more levels higher.</pre>	<p>Meaning: You entered the QUIT command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
<pre>The system replaces the display of the HSLR level with the display of the next higher MAP level.</pre>	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

RTS**Command**

RTS

Sublevel

MAPCI;MTC;PM;POST HSLR hslr_number

Function

Use the RTS command to run diagnostics and return an out-of-service Common Channel Signaling 7 (CCS7) high-speed link router (HSLR) to service.

Usage notes

The HSLR does not return to service if the out-of-service diagnostics do not pass.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

RTS command parameters and variables	
Command	Parameters and variables
RTS	<u>POSTED</u> <u>NOFORCE</u> <u>WAIT</u> ALL FORCE NOWAIT
Item	Description
ALL	This parameter causes all posted HSLRs to be returned to service.
FORCE	This parameter causes HSLR inaccessibility to be ignored.
<u>NOFORCE</u>	This default parameter indicates that HSLRs that are not accessible will not be returned to service.
NOWAIT	This parameter allows other commands to be entered before the RTS command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted HSLR in the control position will be returned to service.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the RTS command finishes executing.

RTS (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the RTS command
<pre>>RTS</pre> <p><i>MAP response:</i></p> <pre>HSLR 12 RTS passed</pre> <p>Explanation: The HSLR returned to service.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the RTS command	
MAP output	Meaning and action
<pre>Request Invalid - HSLR hslr# is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The HSLR is in an incorrect state for the RTS command to be executed. The HSLR must be in one of the following states:</p> <ul style="list-style-type: none"> • manual busy (ManB) • system busy (SysB) <p>Action: None</p>
<pre>HSLR hslr# Failed</pre> <pre><failure reason></pre> <pre><circuit location display></pre>	<p>Meaning: The command failed. A cardlist might be produced.</p> <p>Action: Go to the appropriate alarm clearing or card replacement procedure to determine the cause of the failure.</p>
<pre>HSLR hslr# RTS passed</pre>	<p>Meaning: The HSLR returned to service.</p> <p>Action: None</p>

Command responses (Sheet 2 of 2)

Responses for the RTS command	
MAP output	Meaning and action
HSLR hslr# RTS Rejected	<p>Meaning: The RTS was rejected by HSLR resident maintenance.</p> <p>Action: Determine the cause of the failure. Contact your next level of support.</p>

TST

Command

TST

Sublevel

MAPCI;MTC;PM;POST HSLR hslr_number

Function

Use the TST command to run diagnostics on the posted Common Channel Signaling 7 (CCS7) high-speed link routers (HSLR).

Usage notes

The specific diagnostics run are determined by the state of the HSLR. In-service tests are run on HSLRs that are in-service or in-service trouble. Out-of-service tests are run on HSLRs that are in the manual busy state.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TST command parameters and variables	
Command	Parameters and variables
TST	<u>POSTED</u> ALL
Item	Description
ALL	This parameter causes all posted HSLRs to be tested.
<u>POSTED</u>	This default parameter indicates that only the posted HSLR in the control position will be tested.

Usage examples

The following table provides an example of the command.

Command example

Example of the TST command
<pre>>TST</pre> <p><i>MAP response:</i></p> <pre>HSLR 12 TST passed</pre> <p>Explanation: The test of the posted HSLR in the control position passed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the TST command	
MAP output	Meaning and action
<pre>Request Invalid - HSLR hslr# is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The HSLR is in the incorrect state for the TST command to execute. The HSLR must be in one of the following states:</p> <ul style="list-style-type: none"> • manual busy (ManB) • in service (InSv) • in-service trouble (ISTb) <p>Action: None</p>
<pre>HSLR hslr# failed - failure reason - circuit location display</pre>	<p>Meaning: The HSLR failed the test. Details of the failure are displayed. A cardlist might be displayed.</p> <p>Action: Go to the appropriate alarm clearing or card replacement procedure to correct the indicated problem.</p>
<pre>HSLR hslr# TST passed</pre>	<p>Meaning: The HSLR is tested and passed all tests.</p> <p>Action: None</p>

14 LIM level commands

LIM menu

Use the LIM level of the MAP display to perform maintenance functions on a link interface module (LIM).

The following figure shows the LIM menu and status display for the link peripheral processor (LPP).

Note: The insert with hidden commands is not a visible part of the menu display.

Figure 14-1 LIM MAP level menu for LPP

	CM	MS	IOD	Net	PM	CCS	LNS	Trks	Ext	APPL

LIM				SysB	ManB	OffL	CBsy	ISTb	InSv	
0 Quit		PM		0	0	0	0	0	123	
2 Post		LIM		0	0	0	0	0	5	
3 ListSet										
4			LIM 13	InSv						
5 Trnsl					Links_OOS	Taps_OOS				
6 Tst_		Unit 0	InSv		.	.				
7 Bsy_		Unit 1	InSv		.	.				
8 RTS_										
9 OffL_										
10 LoadPM										
11 Disp_										
12 Next										
13 REx_										
14 QueryPM_										
15										
16										
17										
18 FBus										

Hidden commands

PMReset

14-2 LIM level commands

The following figure shows the LIM menu and status display for the enhanced link peripheral processor (ELPP).

Note: The insert with hidden commands is not a visible part of the menu display.

Figure 14-2 LIM MAP level menu for ELPP

	CM	MS	IOD	Net	PM	CCS	LNS	Trks	Ext	APPL

LIM				SysB	ManB	OffL	CBSy	ISTb	InSv	
0 Quit		PM		0	0	2	0	0	117	
2 Post		LIM		0	0	0	0	0	4	
3 ListSet										
4		LIM 3	InSv		OOS		OOS_Taps			
5 Trnsl					Links	LIS1	LIS2	LIS3		
6 Tst_		Unit 0	InSv			.	.	.		
7 Bsy_		Unit 1	InSv			.	.	.		
8 RTS_										
9 OffL_		PM:								
10 LoadPM		POST:								
11 Disp_										
12 Next										
13 REx_										
14 QueryPM_										
15 QueryLS										
16										
17										
18 LIS										

Hidden commands

PMReset

Accessing the LIM level

To access the LIM level, enter the following command from the CI (command interpreter) MAP level:

>MAPCI;MTC;PM;POST LIM lim_no

and press the Enter key.

where

lim_no is the number of the LIM to be posted

LIM commands

This chapter describes commands available at the LIM level MAP display. The commands are arranged in alphabetical order. The following commands are described in this chapter:

- BSY
- DISP
- FBUS
- LIS
- LISTSET
- LOADPM
- NEXT
- OFFL
- PMRESET
- POST
- QUERYLS
- QUERYPM
- QUIT
- REX
- RTS
- TRNSL
- TST

BSY (continued)**Parameters and variables (Sheet 2 of 2)**

BSY command parameters and variables	
unit_no	This variable specifies the number of the LIM unit to busied.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered at a MAP display until the BSY command finishes executing.

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY LIM 1</pre> <p><i>MAP response:</i></p> <pre>LIM 1 UNIT 0 Busy initiated. LIM 1 UNIT 1 Busy initiated. LIM 1 UNIT 0 Busy passed. LIM 1 UNIT 1 Busy passed.</pre> <p>Explanation: The BSY PM command executed successfully.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 3)

Responses for the BSY command	
MAP output	Meaning and action
LIM x UNIT y Busy failed because no HOST links exist.	<p>Meaning: The command failed because no links connecting the LIM to the host message switch are datafilled in table LIMPTINV.</p> <p>Action: Consult feature AI0040 and AI0116 for information about datafilling LIM ports.</p>
LIM x UNIT y Busy has been aborted by FORCE.	<p>Meaning: The command aborted because another command was entered with parameter FORCE.</p> <p>Action: None</p>

BSY (continued)

Command responses (Sheet 2 of 3)

Responses for the BSY command	
MAP output	Meaning and action
LIM x UNIT y Busy initiated	<p>Meaning: The command started on the LIM.</p> <p>Action: None</p>
LIM x UNIT y Busy link failed because LINK n is unequipped.	<p>Meaning: The specified link is not datafilled in table LIMPTINV.</p> <p>Action: None</p>
LIM x UNIT y Busy passed	<p>Meaning: The posted LIM is manual busy.</p> <p>Action: None</p>
LIM x UNIT y Busy requires confirmation. Reason: it is not accessible and cannot be informed of the action. Please confirm ("Yes" or "No"):	<p>Meaning: The LIM is not accessible and cannot receive commands. The LIM is notified of the BSY command when communication is reestablished. The command passes, but the LIM itself might not be busy.</p> <p>Action: Enter YES to confirm the command or NO to abort it.</p>
LIM x UNIT y has maintenance in progress; Busy action not taken.	<p>Meaning: The command is not allowed because maintenance is already in progress on a LIM. The FORCE parameter can be used to override the maintenance in progress.</p> <p>Action: None</p>
LIM x UNIT y is already ManB	<p>Meaning: The BSY command has been issued to a LIM that is already busy.</p> <p>Action: None</p>
LIM x UNIT y is OffL; you must busy the whole PM.	<p>Meaning: When a LIM is offline, the units cannot be busied individually.</p> <p>Action: None</p>

BSY (end)

Command responses (Sheet 3 of 3)

Responses for the BSY command	
MAP output	Meaning and action
	<p>LIM x UNIT y LINK n is a HOST link and may only be manipulated from the MS MAP level; Busy link action not taken.</p> <p>Meaning: Host links connect the LIM to its host node, the message switch. These links can only be busied, tested, and returned to service from the MS MAP level.</p> <p>Action: None</p>

DISP

Command

DISP

Sublevel

MAPCI;MTC;PM

Function

Use the DISP command to display a list of all peripheral modules (PM) in the given state.

Usage notes

Use the POST command to post a link interface module (LIM) before using command DISP.

Command parameters and variables

The following table describes the command parameters and variables:

Parameters and variables

DISP Command Parameters and variables	
DISP	STATE pm_state <u>ALL</u> pm_type
Item	Description
<u>ALL</u>	This default parameter indicates that all PMs in the indicated state will be displayed.
pm_state	This variable indicates the state of PMs to be displayed.
pm_type	This variable indicates the type of PM to be displayed.
STATE	This parameter indicates that the PM state code follows.

Usage examples

The following table provides an example of the command.

Command example

Example of the DISP command
<pre>>DISP STATE INSV</pre> <p><i>where</i></p> <p>INSV is the pm_state</p> <p><i>MAP response:</i></p> <pre>InSv LIM: 1,3,5,7,9</pre> <p>Explanation: LIMs 1, 3, 5, 7, and 9 are in the in-service state.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Response for the DISP command	
MAP output	Meaning and action
<pre><state> <pm_type>: <n>, <n>, ... <n></pre>	<p>Meaning: The system displays the numbers of the PMs corresponding to the specified PM state and type.</p> <p>Action: None</p>

FBUS

Command

FBUS

Sublevel

MAPCI;MTC;PM

Function

On link peripheral processors (LPP), use the FBUS command to access the FBus level of the MAP. The FBus level displays information about posted link interface modules (LIM) and F-buses. Perform maintenance functions on LIMs and F-buses from this level.

Usage notes

Use the POST command to post a LIM before using the FBUS command.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the FBUS command
<pre>>FBUS MAP response: FBUS :</pre>
<p>Explanation: The FBus MAP level has been accessed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the FBUS command	
MAP output	Meaning and action
Undefined command.	<p>Meaning: The command was entered incorrectly.</p> <p>Action: Enter the command again.</p>

LIS

Command

LIS

Sublevel

MAPCI;MTC;PM

Function

On the enhanced link peripheral processor (ELPP) with triple F-bus configuration, use the LIS command to access the link interface shelf (LIS) maintenance sublevel on a link interface module (LIM) unit.

Usage notes

The LIS command allows operating company personnel to perform separate maintenance procedures on the independent F-buses in triple F-bus configuration.

Use command POST to post a LIM before using command LIS.

The LIS command can only be used if the LIM unit is in triple F-bus configuration.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

LIS command parameters and variables	
Command	Parameters and variables
LIS	lis_number
Item	Description
lis_number	This variable specifies the number of the LIS. The valid entry range is 1 to 3.

Usage examples

The following table provides an example of the command.

Command example

Example of the LIS command						
>LIS 1						
<i>where</i>						
1 is the lis_number						
<i>MAP response:</i>						
	SysB	ManB	OffL	CBsy	ISTb	InSv
PM	0	0	0	0	0	243
LIM	0	0	0	0	0	5
LIM 0	InSv		OOS		OOS_taps	
			Links	LIS1	LIS2	LIS3
Unit0:	InSv		.	.	.	.
Unit1:	InSv		.	.	.	.
	LIS1	Tap:	0	4	8	
FBus0:	InSv					
FBus1:	InSv					
Explanation: This is the standard MAP display for the LIS sublevel.						

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the LIS command	
MAP output	Meaning and action
The LIS level is not available in a Single FBus configuration.	<p>Meaning: The posted LIM unit is in single F-bus configuration.</p> <p>Action: Use the FBUS command to access information about F-buses in single F-bus configuration.</p>
EITHER incorrect optional parameter(s) OR too many parameters.	<p>Meaning: You entered incorrect information.</p> <p>Action: Reenter the command.</p>

LISTSET

Command

LISTSET

Sublevel

MAPCI;MTC;PM

Function

Use the LISTSET command to list the identification numbers of the link interface module (LIM) peripheral modules (PM) that are included in the posted set.

Usage notes

Use the POST command to post a set of PMs before using the command LISTSET.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

LISTSET command parameters and variables	
Command	Parameters and variables
LISTSET	ALL pm_type
Item	Description
ALL	This parameter lists all LIMs in the posted set.
pm_type	This variable indicates the type of PM to be listed.

LISTSET (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the LISTSET command
<pre>>LISTSET LIM where LIM is the pm_type MAP response: LIM 0, 6, 12, 18, 24, 30</pre> <p>Explanation: LIMs 0, 6, 12, 18, 24, and 30 are posted.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the LISTSET command	
MAP output	Meaning and action
LIM 0, 6, 12, 18, 24, 30	<p>Meaning: All posted LIMs are listed.</p> <p>Action: None</p>
No PM posted Post set is empty	<p>Meaning: No posted LIMs exist.</p> <p>Action: None</p>

LOADPM

Command

LOADPM

Sublevel

MAPCI;MTC;PM

Function

Use the LOADPM command to load one or both units of a posted link interface module (LIM).

Usage notes

The units to be loaded must be manual busy (ManB).

Use the POST command to post a set of PMs before using command LOADPM.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

LOADPM command parameters and variables	
Command	Parameters and variables
LOADPM	PM <u>NOFILE</u> <u>TEST</u> <u>WAIT</u> UNIT unit_no file_name NOTEST NOWAIT
Item	Description
file_name	This variable is the name of a specified file from which to load the LIM.
<u>NOFILE</u>	This default parameter indicates that the software will be loaded from the file name listed in table LIMINV.
NOTEST	This parameter prevents destructive memory tests being performed before the LIM units are loaded.
NOWAIT	This parameter allows additional commands to entered at the MAP display before the LOADPM command finishes executing.
PM	The parameter causes both units of the LIM to be loaded.
<u>TEST</u>	This default parameter indicates destructive memory tests will be performed before the LIM units are loaded.

LOADPM (continued)**Parameters and variables (Sheet 2 of 2)**

LOADPM command parameters and variables	
Command	Parameters and variables
UNIT	This parameter indicates that only one unit of the LIM is to be loaded.
unit_no	This parameter indicates that only one unit of the LIM is to be loaded.
<u>WAIT</u>	This default parameter indicates that no additional commands can be entered at the MAP until the LOADPM command finishes executing.

Usage examples

The following table provides an example of the command.

Command Example

Example of the LOADPM command
<pre>>LOADPM UNIT 1 where 1 is the unit_no MAP response: LIM 1 Unit 1 LoadPM completed. Explanation: Unit 1 of LIM 1 has been loaded.</pre>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the LOADPM command	
MAP output	Meaning and action
LIM x UNIT y firmware is not responding; LoadPM failed.	<p>Meaning: The firmware in the LIM unit failed to respond to the messages that comprise the loading sequence.</p> <p>Action: Repeat command LOADPM. If this response appears again hardware or firmware problems may exist. Take appropriate maintenance action, or contact your next level of support for assistance.</p>
LIM x UNIT y is <status> LoadPM action not taken.	

LOADPM (end)

Command responses (Sheet 2 of 2)

Responses for the LOADPM command	
MAP output	Meaning and action
	<p>Meaning: The unit must be manually busy to be loaded. Action: Manually busy the unit and repeat command LOADPM.</p>
LIM x UNIT y LoadPM completed.	<p>Meaning: The LIM or specified unit loaded successfully. Action: None</p>
LIM x UNIT y LoadPM failed; unable to find the load file	<p>Meaning: The system cannot locate the load file. Action: List the disk volume or mount the tape containing the file.</p>
LIM x UNIT y LoadPM failed after loading n kilowords. Message from loader: <message>	<p>Meaning: The LIM maintenance software experienced no problems preparing to load the unit but the loader experienced an error indicated by the message it provides. Action: None</p>
LIM x UNIT y LoadPM is not accessible; LoadPm action not taken.	<p>Meaning: Software in the DMS-core cannot communicate with the unit because of link failures or other reasons. The unit cannot be loaded while it is isolated. Action: None</p>
The ROM test failed on the following cards; <card list>	<p>Meaning: Because parameter NOTEST was not entered, a destructive memory test was performed on the LIM unit. Failures are reported. Action: None</p>

NEXT

Command

NEXT

Sublevel

MAPCI;MTC;PM

Function

Use the NEXT command to place the next peripheral module (PM) in the posted set into the control position.

Usage notes

Use the POST command to post a set of PMs before using command NEXT.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the NEXT command
<p>>NEXT</p> <p><i>MAP response:</i></p> <p>The MAP display for the next PM of the posted set appears.</p> <p>Explanation: The next PM in the posted set is in the control position.</p>

NEXT (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the NEXT command	
MAP output	Meaning and action
END OF POST SET	<p>Meaning: Either the currently displayed PM is the last in the posted set of PMs, or only one PM number has been posted. The display returns to the next higher menu level.</p> <p>Action: None</p>
<MAP display for the next posted PM>	<p>Meaning: The next PM in the posted set is in the control position.</p> <p>Action: None</p>

OFFL

Command

OFFL

Sublevel

MAPCI;MTC;PM

Function

Use the OFFL command to put a link interface module LIM in the offline (OffL) state.

Usage notes

Both units of the LIM must be manual busy (ManB).

Use the POST command to post a LIM before using command OFFL.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFL command
<pre>>OFFL MAP response: LIM 9 is Offline passed.</pre> <p>Explanation: The posted LIM is offline.</p>

OFFL (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFL command	
MAP output	Meaning and action
LIM x has maintenance in progress; Offline action not taken.	Meaning: The OFFL command cannot be performed if maintenance is underway on either unit. Action: None
LIM x is already Offl.	Meaning: The LIM is already offline. Action: None
LIM x is <status>; Offline action not taken.	Meaning: The LIM is not in the ManB state. Action: None
LIM x Offline has been aborted by force.	Meaning: The BSY FORCE command has been used to stop the offline action on the LIM. Action: None
LIM x Offline initiated.	Meaning: The offline process has begun on both units of the posted LIM. Action: None
LIM x Offline passed	Meaning: The posted LIM is offline. Action: None

PMRESET

Command

PMRESET

Sublevel

MAPCI;MTC;PM

Function

Use the PMRESET command to reset the posted link interface module (LIM).

Usage notes

Use the POST command to post a set of PMs before using command PMRESET.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

PMRESET command parameters and variables	
Command	Parameters and variables
PMRESET	PM <u>RUN</u> <u>WAIT</u> UNIT unit_no NORUN NOWAIT
Item	Description
NORUN	This parameter resets the LIM without initializing or sending static data and executables.
NOWAIT	This parameter allows additional commands to be entered at the MAP display before the PMRESET command finishes.
PM	This parameter reinitializes both units of the posted LIM
<u>RUN</u>	This default parameter indicates that the LIM is entirely reset.
UNIT	This parameter reinitializes a specified unit of the posted LIM.
unit_no	This variable specifies the unit to be reinitialized.
<u>WAIT</u>	This default parameter indicates that additional commands cannot be entered at the MAP display until the PMRESET command finishes executing.

PMRESET (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the PMRESET command
<pre>>PMRESET UNIT 1</pre> <p><i>where</i></p> <p>1 is the unit_no</p> <p><i>MAP response:</i></p> <pre>LIM 1 Unit 1 reset initiated. LIM 1 Unit 1 reset passed.</pre> <p>Explanation: The PMRESET command executed successfully.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the PMRESET command	
MAP output	Meaning and action
LIM x UNIT y firmware is not responding; Reset failed.	<p>Meaning: The firmware in the unit is not acknowledging any messages.</p> <p>Action: None</p>
LIM x UNIT y has maintenance in progress; Reset action not taken.	<p>Meaning: An LIM cannot be reset while other maintenance is in progress. The BSY FORCE command can be used to override any maintenance actions in progress.</p> <p>Action: None</p>
LIM x UNIT y is not accessible; Reset action not taken.	<p>Meaning: Although an LIM need not be communicating with maintenance software in the core in order to be reset, the links to the unit must be physically usable in order to reset it.</p> <p>Action: None</p>
LIM x UNIT y is <status>; Reset action not taken.	

PMRESET (end)

Command responses (Sheet 2 of 2)

Responses for the PMRESET command	
MAP output	Meaning and action
	<p>Meaning: The LIM can only be reset if it is manual busy.</p> <p>Action: None</p> <p>LIM x UNIT y reset initiated.</p>
	<p>Meaning: The reset sequence began successfully.</p> <p>Action: None</p> <p>LIM x UNIT y reset passed.</p>
	<p>Meaning: The reset sequence completed successfully. If the unit was running software, then the software has also restarted.</p> <p>Action: None</p>

POST

Command

POST

Sublevel

MAPCI;MTC;PM

Function

Use the POST command to select a set of LIMs on which to perform maintenance commands.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

POST command parameters and variables	
Command	Parameters and variables
POST	ALLPMS ALL pm_type pm_no pm_state
Item	Description
ALL	This parameter posts all LIMs.
ALLPMS	This parameter post all PMs including all LIMs
pm_no	This variable indicates the number of the specified PM type to be posted.
pm_state	This variable specifies a PM state and causes all PMs of that state to be posted.
pm_type	This variable specifies the type of PM to be posted. For a LIM level enter LIM.

POST (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the POST command
<pre>>POST LIM 1</pre> <p><i>where</i></p> <p>LIM is the pm_type</p> <p>1 is the pm_no</p> <p><i>MAP response:</i></p> <p>(MAP display for the posted LIM)</p> <p>Explanation: LIM 1 is now posted.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Response for the POST command	
MAP output	Meaning and action
NO PM POSTED	<p>Meaning: Indicates one of the following conditions:</p> <ul style="list-style-type: none"> • no PMs of the chosen type exist • no PMs in the specified state exist • no PMs exist <p>Action: None</p>

QUERYLS

Command

QUERYLS

Sublevel

MAPCI;MTC;PM

Function

Use the QUERYLS command to access rate adapter card data and F-bus status information at the LIM level of the MAP display on a link interface module (LIM) with triple F-bus configuration.

Usage notes

Use the POST command to post a LIM before using command QUERYLS.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYLS command parameters and variables	
Command	Parameters and variables
QUERYLS	lis_number fbus_number FULL
Item	Description
lis_number	This variable is the number of the link interface shelf (LIS). The valid values are 1 to 3.
fbus_number	This variable is the number of the F-bus. The valid values are 0 to 1.
FULL	This parameter gives a complete status description of the LIS, including the card number, location of the card and its paddle board, and the status of the F-bus.

QUERYLS (continued)**Usage examples**

The following table provides examples of the command.

Command example

Example of the QUERYLS command
<pre>>QUERYLS 1 1 FULL where 1 is the lis_number 1 is the fbus_number MAP response: LIM 1 LIS 1 FBus 1 is connected to CARD 26. Location of the Rate Adapter card: Site Flr RPos Bay_id Shf Description Slot EqPEC HOST 03 C03 LIM 500 39 TFI 26 9X73BB FRNT HOST 03 C03 LIM 500 39 TFI 26 9X79BB BACK FBus Status: InSv</pre>
<p>Explanation: This is the standard response to a QUERYLS FULL command.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the QUERYLS command	
MAP output	Meaning and action
The QUERYLS command is not available on a LIM in Single FBus configuration.	<p>Meaning: The posted LIM unit is in single F-bus configuration. The QUERYLS command can only be used if the LIM unit is in triple F-bus configuration.</p> <p>Action: None</p>
LIM <#> LIS <#> FBus <#> : InSv	<p>Meaning: The system displays the LIS F-bus status.</p> <p>Action: None</p>
Undefined command	

QUERYLS (end)

Command responses (Sheet 2 of 2)

Responses for the QUERYLS command	
MAP output	Meaning and action
	<p>Meaning: You entered the command incorrectly. Action: Enter the command again.</p> <p>EITHER incorrect optional parameter(s) OR too many parameters.</p> <p>Meaning: You entered invalid optional parameter or too many parameters. Action: Enter the command again.</p> <p>Next par is: <LIS number> {1 to 3} Enter: <LIS number> <FBus number> [<Full option>]</p> <p>Meaning: You did not enter LIS and F-bus information. Action: Enter LIS number and F-bus number.</p> <p>Out of range: <LIS number> {1 TO 3} Enter: <LIS number> <FBus number> [<Full option>]</p> <p>Meaning: You entered invalid LIS number. Action: Enter valid LIS number (1 to 3).</p> <p>Next par is: <FBus number> {0 TO 1} Enter: <FBus number> [<Full option>]</p> <p>Meaning: You did not enter F-bus information. Action: Enter F-bus number (0 or 1).</p> <p>Out of range: <FBus number> {0 TO 1} Enter: <FBus number> [<Full option>]</p> <p>Meaning: You entered invalid F-bus number. Action: Enter valid F-bus number (0 or 1).</p>

QUERYPM**Command**

QUERYPM

Sublevel

MAPCI;MTC;PM

Function

Use the QUERYPM command to display information about a posted link interface module (LIM).

Usage notes

Use the POST command to post a LIM before using command QUERYPM.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

QUERYPM command parameters and variables	
Command	Parameters and variables
QUERYPM	<u>ALL</u> UNIT unit_no <u>NOFLT</u> FLT <u>ALL</u> SA NSA IDS
Item	Description
<u>ALL</u>	This default parameter indicates one of the following options: <ul style="list-style-type: none"> • If no additional parameters are specified, information for the posted LIM will be displayed, but no fault (FLT) information will be displayed. • If the FLT parameter is specified, all information for the posted LIM and both service affecting and non-service affecting faults will be displayed.
FLT	The parameter causes fault information for the posted LIM to be displayed.
IDS	Do not use this parameter. It causes identifiers of various software node numbers to be displayed. These numbers are not meant for general maintenance use.

QUERYPM (end)

Parameters and variables (Sheet 2 of 2)

QUERYPM command parameters and variables	
Command	Parameters and variables
<u>NOFLT</u>	This default parameter indicates that fault information for the selected LIM will not be displayed.
NSA	This parameter causes only non-service affecting faults to be displayed.
SA	This parameter causes only service affecting faults to be displayed.
UNIT	This parameter indicates that a specific LIM unit will be specified.
unit_no	This variable specifies the specific LIM and has a range of 0 to 17.

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERYPM command
<pre>>QUERYPM</pre> <p><i>MAP response:</i></p> <pre>LIM1: InSv: default load: LPC77CO Unit0: InSv: running LPC77CO since 1997/10/10 15:27:36 Unit1: InSv running LPC77CO since 1997/10/10 15:23:06 LIM 1 is included in the REx schedule Unit0 Base REx has not been run Unit 1 Base REx has not been run Location Site Flr RPos Bay_id Shf Description HOST 01 A02 LIM1 LIM1 slot EqPEC</pre> <p>Explanation: The QUERYPM command was successful. The information about LIM 1 is displayed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUERYPM command	
MAP output	Meaning and action
Undefined command	<p>Meaning: The command was entered incorrectly.</p> <p>Action: Enter the command again.</p>

QUIT

Command

QUIT

Sublevel

MAPCI;MTC;PM

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for the incrname variable are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of levels to exit. The range of levels is 0 to 6. Do not enter a number higher than the number of levels currently open.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<p>>QUIT</p> <p><i>MAP response:</i></p> <p>(The display changes to the display of a higher level menu.)</p> <p>Explanation: The LIM level has changed to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
CI:	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels currently open.</p> <p>Action: Reenter the command using an appropriate level number.</p>
The system replaces the LIM level menu with a menu that is two or more levels higher.	<p>Meaning: You entered the quit command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
The system replaces the display of the LIM level with the display of the next higher MAP level.	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

REX**Command**

REX

Sublevel

MAPCI;MTC;PM

Function

Use the REX command to schedule and perform routine exercise (REx) testing of a posted link interface module (LIM).

Usage notes

Use the POST command to post a LIM before using command REX.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

REX command parameters and variables	
Command	Parameters and variables
REX	ON OFF PM QUERY UNIT unit_no
Item	Description
OFF	This parameter excludes both units of the posted LIM from the testing schedule.
ON	This parameter includes both units of the posted LIM in the testing schedule.
PM	This parameter causes both units of the posted LIM to be exercised immediately, beginning with unit 0.
QUERY	This parameter produces a display indicating if the LIM was included in the REx schedule and if the exercise was successful.

REX (continued)**Parameters and variables (Sheet 2 of 2)**

REX command parameters and variables	
Command	Parameters and variables
UNIT	This parameter indicates that one unit of the posted LIM is to be specified for REX testing.
unit_no	This variable indicates which unit of the posted LIM is specified. It has a range of 0 to 1.

Usage examples

The following table provides examples of the command.

Command example

Example of the REX command
<pre>>REX UNIT 0 where 0 is the unit_no MAP response: LIM 5 UNIT 0 Routine Exercise requires confirmation because high FBus traffic levels on the LIM could cause message loss. Please confirm ('YES', 'Y', 'NO', or 'N'): >Y Confirmed... LIM 5 UNIT 0 Routine Exercise initiated. LIM 5 UNIT 0 Routine Exercise passed.</pre> <p>Explanation: The REX testing executed and passed on LIM 5 UNIT 0.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the REX command	
MAP output	Meaning and action
LIM _number> UNIT _number> Routine Exercise requires confirmation because high FBus traffic levels on the LIM could cause message loss. Please confirm ('YES', 'Y', 'NO', or 'N'):	<p>Meaning: The F-bus traffic on the LIM is above the predetermined threshold.</p> <p>Action: Enter YES or Y to proceed with the REX testing (possible message loss can occur), or enter NO or N to cancel the REX command and wait for lower F-bus traffic levels. If F-bus traffic levels are persistently high, contact your next level of support.</p>

RTS

Command

RTS

Sublevel

MAPCI;MTC;PM

Function

Use the RTS command to return to service a posted link interface module (LIM) or one of its units.

Usage notes

Use the POST command to post a LIM before using command RTS.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

RTS command parameters and variables	
Command	Parameters and variables
RTS	PM <u>TEST</u> <u>NOFORCE</u> <u>WAIT</u> UNIT unit_no NOTEST FORCE NOWAIT LINK
Item	Description
FORCE	This parameter overrides all other commands in effect on a unit. It forces one or both units of the posted LIM to the in-service (InSv) state, even if a test is in effect on one unit. Command TST is overridden and the test aborted. This command requires confirmation before execution.
LINK	This parameter indicates that the links associated with the specified unit of the posted LIM are to be returned to service.
<u>NOFORCE</u>	This default parameter indicates that the RTS command will not be forced if other processes are executing on the LIM.
NOTEST	This parameter causes the RTS command to be executed without testing the unit.
NOWAIT	This parameter enables the MAP display to be used for other entries while the return to service occurs.
PM	This parameter causes both units of the posted LIM to be returned to service.

RTS (continued)**Parameters and variables (Sheet 2 of 2)**

RTS command parameters and variables	
Command	Parameters and variables
<u>TEST</u>	This default parameter indicates that the RTS action will occur only after the unit has passed pre-RTS tests.
UNIT	This parameter indicates that only the specified unit of the posted LIM will be returned to service.
unit_no	The variable specifies the unit of the posted LIM to be returned to service. It has a range of 0 to 1.
<u>WAIT</u>	This default parameter indicates that the user must wait until the RTS FORCE command action is confirmed before entering additional commands.

Usage examples

The following table provides an example of the command.

Command example

Example of the RTS command
<pre>>RTS UNIT 1 where MAP response: LIM 1 Unit 1 Return to service initiated. Explanation: The RTS command executed successfully.</pre>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 3)

Responses for the RTS command	
MAP output	Meaning and action
LIM x UNIT y has maintenance in progress; Return to Service action not taken.	<p>Meaning: The unit cannot be returned to service while other maintenance actions are being performed. Either wait until the current maintenance action is complete, or use the BSY FORCE command to override it.</p> <p>Action: None</p>

RTS (continued)

Command responses (Sheet 2 of 3)

Responses for the RTS command	
MAP output	Meaning and action
LIM x UNIT y is already InSv.	<p>Meaning: The specified LIM unit is already in service.</p> <p>Action: None</p>
LIM x UNIT y is already ISTb	<p>Meaning: The unit is already in the in-service trouble state.</p> <p>Action: None</p>
LIM x UNIT y is not accessible; Return to Service action not taken.	<p>Meaning: This indicates that software in the DMS core cannot communicate with the unit because of link failures or other reasons. The unit cannot return to service while it is isolated.</p> <p>Action: None</p>
LIM x UNIT y is Offl; Return to Service action not taken.	<p>Meaning: A LIM unit must be manually busy or system busy before it can be returned to service.</p> <p>Action: None</p>
LIM x UNIT y LINK n is a HOST link and may only be manipulated from the MS MAP level; RTS link action not taken.	<p>Meaning: Host links connect the LIM to its host node, the message switch. These links can only be busied, tested, and returned to service from the MS MAP level.</p> <p>Action: None</p>
LIM x UNIT y Return to Service failed because no HOST links exist.	<p>Meaning: Although the LIM has been datafilled, no links connecting the LIM to the host message switch are datafilled in table LIMPTINV.</p> <p>Action: None</p>
LIM x UNIT y Return to Service failed due to diagnostic failures.	<p>Meaning: The unit failed diagnostic tests.</p> <p>Action: None</p>

Command responses (Sheet 3 of 3)

Responses for the RTS command	
MAP output	Meaning and action
LIM x UNIT y	Return to Service has been aborted by FORCE. Meaning: The BSY FORCE command was used to stop the return to service maintenance action. Action: None
LIM x UNIT y	Return to Service initiated Meaning: The return to service sequence started. Action: None
LIM x UNIT y	RTS link failed because LINK n is unequipped. Meaning: The link specified as a parameter to the RTS command is not datafilled in table LIMPTINV. Action: None

TRNSL

Command

TRNSL

Sublevel

MAPCI;MTC;PM

Function

Use the TRNSL command to provide information about specified links.

Usage notes

Use the POST command to post a LIM before using command TRNSL.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TRNSL command parameters and variables	
Command	Parameters and variables
TRNSL	unit_no <u>EACH</u> <u>BRIEF</u> link_no FULL
Item	Description
<u>BRIEF</u>	This default parameter indicates that only a brief display of information will be provided.
<u>EACH</u>	This default parameter indicates that information for every link in the specified unit will be displayed.
FULL	This parameter causes a full display of information about the link to be displayed.
link_no	This variable specifies the number of the link to be displayed.
unit_no	This variable indicates the number of the unit in which links will be displayed. The valid range is 0 to 1.

TRNSL (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the TRNSL command
<pre>>TRNSL 0</pre> <p><i>where</i></p> <p>0 is the unit_no</p> <p><i>MAP response:</i></p> <pre>LIM 1 UNIT 0 LINK 0 (9:0 - MS 1:20:0) Open-pla_op LIM 1 UNIT 0 LINK 1 (9:1 - MS 0:20:0) OEC-pla_cl LIM 1 UNIT 0 LINK 2 (9:2 - LIM 1:30:2) Open LIM 1 UNIT 0 LINK 3 is unequipped LIM 1 UNIT 0 LINK 4 (10:0 - MS 0:21:1) OEC-pla_cl LIM 1 UNIT 0 LINK 5 (10:2 -MS 1:21:1) Open-pla_cp LIM 1 UNIT 0 LINK 6 (10:2 - LIM 1:29:2) Open LIM 1 UNIT 0 LINK 7 is unequipped.</pre> <p>Explanation: The command was successful. The MAP level displays information for the specified unit.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Response for the TRNSL command	
MAP output	Meaning and action
LINK <link _no> is unequipped.	<p>Meaning: The specified link is not equipped.</p> <p>Action: None</p>

TST

Command

TST

Sublevel

MAPCI;MTC;PM

Function

Use the TST command to test all or part of a posted LIM and to report problems found.

Usage notes

The LIM cannot be tested in the offline state.

Use the POST command to post a LIM before using command TST.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TST command parameters and variables	
Command	Parameters and variables
TST	PM <u>WAIT</u> UNIT unit_no NOWAIT LINK unit_no link_no
Item	Description
LINK	This parameter indicates that a specified link of the specified unit of the posted LIM is to be tested.
link_no	This variable specifies the number of the link to be tested.
NOWAIT	This parameter enables the user to enter other commands while testing occurs.
PM	This parameter causes both units of the posted LIM to be tested.
UNIT	This parameter indicates that only a specified unit of the posted LIM will be tested.
unit_no	This variable specifies the unit of the LIM to be tested (0 or 1).
<u>WAIT</u>	This default parameter indicates that the user must wait until the TST command finishes before entering additional commands.

TST (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the TST command
<pre>>TST UNIT 0</pre> <p><i>where</i></p> <p>0 is the unit_no</p> <p><i>MAP response:</i></p> <pre>LIM 22 UNIT 0 Test passed.</pre> <p>Explanation: Unit 0 of the posted LIM passed all tests.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 3)

Responses for the TST command	
MAP output	Meaning and action
LIM x UNIT y Test initiated	<p>Meaning: The testing is in progress on the specified unit.</p> <p>Action: None</p>
LIM x UNIT y Test passed.	<p>Meaning: The unit passed all tests.</p> <p>Action: None</p>
LIM x UNIT y Test failed.	<p>Meaning: The unit failed all tests. Details of each problem and the faulty components appear on the MAP display.</p> <p>Action: None</p>
LIM x UNIT y is OffL; Test action not taken.	<p>Meaning: Tests cannot be performed on an offline LIM unit.</p> <p>Action: None</p>

TST (continued)

Command responses (Sheet 2 of 3)

Responses for the TST command	
MAP output	Meaning and action
LIM x UNIT y has maintenance in progress; Test action not taken.	<p>Meaning: Other maintenance actions are in process. No unit test can be initiated.</p> <p>Action: None</p>
LIM x UNIT y Test failed because no HOST links exist.	<p>Meaning: Though the LIM has been datafilled, no links connecting the LIM to the host message switch have datafill in table LIMPTINV.</p> <p>Action: None</p>
LIM x UNIT y is not accessible; Test action not taken.	<p>Meaning: The state of the LIM unit is qualified as RU, which means that messages cannot be sent to it. No tests can be performed.</p> <p>Action: None</p>
LIM x UNIT y is not responding; Test failed.	<p>Meaning: Although the LIM unit is accessible, it is not responding to the test request. The LIM might be experiencing hardware or software problems, or it might not be loaded.</p> <p>Action: None</p>
LIM x UNIT y Test has been aborted by FORCE.	<p>Meaning: The BSY FORCE command terminated the test request.</p> <p>Action: None</p>
LIM x UNIT y link Test failed because the LINK n is unequipped.	<p>Meaning: The link specified as a parameter to the test command is not equipped because it is not datafilled in table LIMPTINV.</p> <p>Action: None</p>

TST (end)

Command responses (Sheet 3 of 3)

Responses for the TST command	
MAP output	Meaning and action
	<p>LIM x UNIT y LINK n is a HOST link and may only be manipulated from the MS MAP level; link Test action not taken.</p> <p>Meaning: Host links are those which connect the LIM to its host node, the message switch. These links can only be busied, tested, and returned to service from the MS MAP level.</p> <p>Action: None</p>

15 LIS level commands

LIS menu

Use the LIS level of the MAP display to access the F-bus maintenance system when the link interface module (LIM) is housed in an enhanced link peripheral processor (ELPP) with triple F-bus configuration.

The following figure shows the link interface shelf (LIS) menu and status display.

Figure 15-1 LIS MAP level menu

CM	MS	IOD	Net	PM	CCS	Trks	Ext	APPL	
.	
LIS				SysB	ManB	OffL	CBsy	ISTb	InSv
0	Quit	PM		0	0	0	0	0	55
2		LIM		0	0	0	0	0	2
3									
4		LIM	0 InSv	OOS	OOS_Taps				
5	Trnsl_			Links LIS1 LIS2 LIS3					
6	Tst_	Unit0:	InSv	.	.	.	.
7	Bsy_	Unit1:	InSv	.	.	.	.
8	RTS								
9	Offl	LIS 1		Tap:	0	4	8		
10		FBus0:	InSv		..--	-.--	--..		
11		FBus1:	InSv		..--	-.--	--..		
12	Next								
13		LIS:							
14									
15									
16	QueryFB_								
17	LIS_								
18									

Accessing the LIS level

To access the LIS level, enter the following command from the CI (command interpreter) MAP level:

```
>MAPCI;MTC;PM;POST LIM lim_number; LIS lis_number
```

and press the Enter key.

where

lim_number is the number of the LIM to be posted

lis_number is the number of the LIS (1, 2, or 3)

LIS commands

This chapter describes commands available at the LIS level of the MAP display. The commands are arranged in alphabetical order. The following commands are described in this chapter:

- BSY
- LIS
- NEXT
- OFFL
- QUERYFB
- QUIT
- RTS
- TRNSL
- TST

BSY**Command**

BSY

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;LIS lis_number

Function

Use the BSY command to busy a particular F-bus or a tap on a particular link interface shelf (LIS) when in triple F-bus configuration.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

BSY command parameters and variables	
Command	Parameters and variables
BSY	UNIT unit_no <u>NOFORCE</u> <u>WAIT</u> LINK unit_no link_no FORCE NOWAIT FBUS unit_no tap_no
Item	Description
FBUS	This parameter indicates that an F-bus will be busied.
FORCE	This parameter causes an override of any maintenance action currently in progress.
LINK	This parameter indicates that a link will be busied.
link_no	This variable is the number of the link and has a range 0 to1.
<u>NOFORCE</u>	This default parameter, which is never entered, indicates that maintenance action currently in progress is not overridden because the force parameter is not entered.
NOWAIT	This parameter allows additional commands to be entered at the MAP without waiting for the BSY command to finish executing.

BSY (continued)

Parameters and variables (Sheet 2 of 2)

BSY command parameters and variables	
Command	Parameters and variables
tap_no	This variable is the number of the F-bus tap that will be busied and has a range of 0 to 11.
UNIT	This parameter indicates that a LIM will be busied.
unit_no	This is the number of the LIM unit that will busied and has a range of 0 to 1.
<u>WAIT</u>	This default parameter, which is never entered, indicates that commands cannot be entered at the MAP without waiting for the BSY command to finish executing, because the nowait parameter was not entered.

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<p>>BSY FBUS 0 5</p> <p><i>where</i></p> <p>0 is the unit_no</p> <p>5 is the tap_no</p> <p><i>MAP response:</i></p> <p>LIM 0 LIS 1 FBus 0 Tap 5 Busy initiated.</p> <p>LIM 0 LIS 1 FBus 0 Tap 5 Busy passed.</p> <p>Explanation: Standard response to BSY command.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the BSY command	
MAP output	Meaning and action
LIM x LIS v FBus y [tap z] is already busy. Busy action not taken.	Meaning: The LIM F-bus or tap is already ManB. Action: None
LIM x LIS v FBus y [tap z] Busy passed.	Meaning: The busy for the LIM F-bus or tap passed and its state is now ManB. Action: None
LIM x LIS v FBus y [tap z] local maintenance not accessible LIM x LIS v FBus y [tap z] Busy passed.	Meaning: The local maintenance for the F-bus or tap is not accessible, but the BSY command is allowed. This warns that future commands can fail. Action: None
LIM x LIS v FBus y [tap z] maintenance in progress. Busy action not taken.	Meaning: Other maintenance actions are currently under way so the BSY cannot be performed until they have been completed. Action: None
This action will take n LIU7s out of service. Please confirm, "Yes" or "No".	Meaning: By busying the LIM F-bus or tap a number of LIU7s will be isolated. The system requires the user to confirm this result is desired. Action: None
Undefined command <command>	Meaning: You entered the command incorrectly. Action: Enter the command again.

LIS

Command

LIS

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;LIS lis_number

Function

Use the LIS command to access the link interface shelf (LIS) that you want to view when in triple F-bus configuration.

Usage notes

The LIS command allows operating company personnel to perform separate maintenance on the independent F-buses in triple F-bus configuration.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

LIS command parameters and variables	
Command	Parameters and variables
LIS	lis_number
Item	Description
lis_number	The number of the LIS (1, 2, or 3).

Usage examples

The following table provides an example of the command.

Command example

Example of the LIS command
<pre>>LIS 3 where 3 is the lis_number MAP response: LIM 3 InSvOOSOOS_Taps Links LIS1 LIS2 LIS3 Unit0: InSv Unit1: InSv . . . LIS3Tap:0 48 FBus0: InSv..-----.. FBus1: InSv..-----..</pre> <p>Explanation: Standard MAP response to LIS command.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the LIS command	
MAP output	Meaning and action
<pre>LIS 4 Out of range: <LIS number {1 to 3}> ENTER <LIS number></pre>	<p>Meaning: You entered the wrong LIS number.</p> <p>Action: Enter the command again with the LIS number 1, 2, or 3.</p>
<pre>No command in line</pre>	<p>Meaning: Wrong spelling of the command.</p> <p>Action: Enter the command again.</p>

NEXT

Command

NEXT

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;LIS lis_number

Function

Use the NEXT command to move between MAP displays for each link interface shelf (LIS) on a link interface module (LIM) unit when in triple F-bus configuration.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the NEXT command						
>NEXT						
<i>MAP response:</i>						
	SysB	ManB	OffL	CBsy	ISTb	InSv
PM	0	0	0	0	0	243
LIM	0	0	0	0	0	5
LIM 0	ISTb			OOS	OOS_taps	
				Links	LIS1	LIS2 LIS3
Unit0:	InSv			.	.	. .
Unit1:	ISTb			.	.	12 .
	LIS2	Tap:		0	4	8
FBus0:	InSv			....	....	....
FBus1:	ManB			BBBB	BBBB	BBBB
Explanation: Standard response to NEXT command.						

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the NEXT command	
MAP output	Meaning and action
EITHER incorrect optional parameter(s) or too many parameters	<p>Meaning: Incorrect information has been entered.</p> <p>Action: Enter the command again.</p>
Undefined command <command>	<p>Meaning: You entered the command incorrectly.</p> <p>Action: Enter the command again.</p>

OFFFL

Command

OFFFL

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;LIS lis_number

Function

Use the OFFFL command to put both sides of the F-bus on a specified link interface shelf (LIS) in the offline state.

Usage notes

Both units of the F-bus must be manual busy.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFFL command
<pre>>OFFFL</pre> <p><i>MAP response:</i></p> <pre>Offline passed.</pre> <p>Explanation: Both sides of the F-bus are offline.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the OFFFL command	
MAP output	Meaning and action
LIM x LIS y has maintenance in progress;	Offline action not taken.
	<p>Meaning: The OFFLINE command cannot be performed if maintenance is under way on either unit.</p> <p>Action: None</p>

OFFL (end)**Command responses (Sheet 2 of 2)**

Responses for the OFFL command	
MAP output	Meaning and action
LIM x LIS y FBus z is already OffL.	<p>Meaning: The LIM, LIS, and F-bus are already offline.</p> <p>Action: None</p>
LIM x LIS y FBus z - must be busy.	<p>Meaning: The LIM is not in manual busy (ManB) state. The LIM must in ManB state before it is placed offline.</p> <p>Action: None</p>
Too many parameters.	<p>Meaning: You entered too many parameters.</p> <p>Action: Enter the command again.</p>
Undefined command <command>	<p>Meaning: You entered the command incorrectly.</p> <p>Action: Enter the command again.</p>

QUERYFB

Command

QUERYFB

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;LIS lis_number

Function

Use the QUERYFB command to display information about a particular link interface shelf (LIS) F-bus or LIS tap.

Usage notes

Actual display data depends on current activity and includes fault conditions and F-bus or tap status.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYFB command parameters and variables	
Command	Parameters and variables
QUERYFB	FBUS unit_no tap_no
Item	Description
FBUS	This parameter indicates that the F-bus is queried.
unit_no	This parameter specifies the number of the F-bus to be queried (0 or 1)
tap_no	This parameter specifies the number of the F-bus tap to be queried (0 to 11).

QUERYFB (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the QUERYFB command
<pre>>QUERYFB FBUS 0</pre> <p><i>where</i></p> <p>0 is the unit_no</p> <p><i>MAP response:</i></p> <pre>Information for LIM 0 LIS 1 FBus 0 State transition: NOV-25 11:35:59 (SysB TO InSv) Current faults: 0000 0000 0000 0000 0000 0000 0000 No faults found.</pre> <p>Explanation: Current information about the posted F-bus is displayed.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the QUERYFB command	
MAP output	Meaning and action
<pre>Information for LIM 1 LIS 1 FBus 0 Tap 0 State transition: NOV-20 10:08:37 (I (NA) TO .) Current faults: 0000 0000 0000 0000 0000 0000 0000 No faults found.</pre>	<p>Meaning: Tap 0 on F-bus 0 on LIS 1 is currently active. No fault conditions were found.</p> <p>Action: None</p>
<pre>Information for LIM 1 LIS 1 FBus 0 State transition: NOV-18 10:08:37 (ISTb TO InSv) Current faults: 0000 0000 0000 0000 0000 0000 0000 No faults found.</pre>	<p>Meaning: F-bus 0 on LIS 1 is currently active. No fault conditions were found.</p> <p>Action: None</p>

QUERYFB (end)**Command responses (Sheet 2 of 2)**

Responses for the QUERYFB command	
MAP output	Meaning and action
<p>Next par is: <Device> {FBUS <Unit number> {0 TO 1} [<Tap number> {0 TO 11}]}</p> <p>Enter: <Device></p>	<p>Meaning: You did not enter enough information.</p> <p>Action: Enter the required information.</p>
<p>Next par is: <Unit number> {0 TO 1} Enter: <Unit number> [<Tap number>]</p>	<p>Meaning: You did not enter enough information.</p> <p>Action: Enter the valid unit number (0 or 1).</p>
<p>Invalid symbol: <Device> {FBUS <Unit number> {0 TO 1} [<Tap number> {0 TO 11}]}</p> <p>Enter: <Device></p>	<p>Meaning: You entered wrong device.</p> <p>Action: Enter FBUS and the correct unit number (0 or 1).</p>
<p>Out of range: <Unit number> {0 TO 1} Enter: <Unit number> [<Tap number>]</p>	<p>Meaning: You entered an invalid unit number.</p> <p>Action: Enter the correct F-bus number (0 or 1).</p>
<p>EITHER incorrect optional parameter(s) OR too many parameters.</p> <p>Problems getting the tap number</p>	<p>Meaning: Incorrect information was entered.</p> <p>Action: Enter the command again.</p>
<p>Undefined command <"COMMAND"></p>	<p>Meaning: The command was entered incorrectly.</p> <p>Action: Enter the command again.</p>

QUIT**Command**

QUIT

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;LIS lis_number

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for the incrname variable are menu level names, such as MTC or MAPCI.
n	This variable identifies a specified number of levels that you can go to from the current level. The range of levels is 0 to 6. However, the system cannot accept a level number higher than the number of the current level.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p><i>MAP response:</i></p> <pre>POST:</pre> <p>Explanation: The LIS sublevel has changed to the previous LIM sublevel.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
<pre>CI:</pre>	<p>Meaning: The system quit all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
<pre>QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1</pre>	<p>Meaning: You entered an invalid level number. The entered number exceeds the number of MAP levels you can quit from.</p> <p>Action: Enter the command again using an appropriate level number.</p> <p>The system replaces the LIS level menu with a menu that is two or more levels higher.</p>
<pre>The system replaces the display of the LIS level with the display of the next higher MAP level.</pre>	<p>Meaning: You entered the QUIT command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
<pre>The system replaces the display of the LIS level with the display of the next higher MAP level.</pre>	<p>Meaning: The system quit to the next higher MAP level.</p> <p>Action: None</p>

RTS**Command**

RTS

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;LIS lis_number

Function

Use the RTS command to return to service a particular F-bus or a tap on a particular link interface shelf (LIS) when in triple F-bus configuration.

Usage notes

The F-bus or tap must be in the manual busy (ManB), system busy (SysB), or in-service trouble (ISTb) state.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

RTS command parameters and variables	
Command	Parameters and variables
RTS	UNIT unit_no <u>TEST WAIT</u> LINK unit_no link_no NOTEST NOWAIT FBUS unit_no tap_no
Item	Description
FBUS	This parameter indicates that an F-bus element is to be returned to service.
LINK	This parameter indicates that a link element is to be returned to service.
link_no	This variable is the number of the link and has a range 0 to 7.
NOTEST	This parameter causes the RTS to be executed without testing the unit or element.
NOWAIT	This parameter allows addition commands to be entered at the MAP without waiting for the RTS command to finish executing.
tap_no	This variable is the number of the F-bus tap to be returned to service and has a range of 0 to 11.

RTS (continued)

Parameters and variables (Sheet 2 of 2)

RTS command parameters and variables	
Command	Parameters and variables
<u>TEST</u>	This default parameter, which is never entered, indicates that the RTS action will only occur after the unit or element has passed pre-RTS tests because the NOTEST parameter was not entered.
UNIT	This parameter indicates that it is a LIM element that is to be returned to service.
unit_no	This is the number of the LIM unit to be returned to service and has a range of 0 to 1.
<u>WAIT</u>	This default parameter, which is never entered, indicates that commands cannot be entered at the MAP without waiting for the RTS command to finish executing, because the NOWAIT parameter was not entered.

Usage examples

The following table provides an example of the command.

Command example

Example of the RTS command
<pre>>RTS FBUS 0</pre> <p><i>where</i></p> <p>0 is the unit_no</p> <p><i>MAP response:</i></p> <pre>LIM 0 LIS 1 FBus 0 Return to Service initiated.</pre> <pre>LIM 0 LIS 1 FBus 0 Return to Service passed.</pre> <p>Explanation: Standard response for this command.</p>

RTS (continued)**MAP responses**

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the RTS command	
MAP output	Meaning and action
LIM x LIS v FBUS y [tap z] Return to Service initiated.	<p>Meaning: The return to service has been initiated on the LIM F-bus or tap.</p> <p>Action: None</p>
LIM x LIS v FBUS y [tap z] already in service Return to Service action not taken.	<p>Meaning: The return to service did not take place because the element was already in service.</p> <p>Action: None</p>
LIM x LIS v FBUS y [tap z] RTS passed	<p>Meaning: The LIM F-bus or tap has been returned to service.</p> <p>Action: None</p>
LIM x LIS v FBUS y [tap z] RTS test failed	<p>Meaning: The pre-RTS tests failed and results are displayed.</p> <p>Action: Go to the appropriate alarm clearing or card replacement procedure to fix the problem and attempt to return the circuit to service again.</p>
LIM x LIS v FBUS y [tap z] RTS failed; check for LOGs.	<p>Meaning: This message may occur when the NOTEST parameter is entered and the RTS fails.</p> <p>Action: None</p>
LIM x LIS v FBUS y [tap z] is <status>. Return to Service action not taken.	<p>Meaning: The LIM F-bus or a tap is not manual busy or system busy, but in some other state though not in service.</p> <p>Action: Place element in the ManB state and enter the command again.</p>

RTS (end)

Command responses (Sheet 2 of 2)

Responses for the RTS command	
MAP output	Meaning and action
	<p>Local maintenance not accessible.</p> <p>If manual intervention is desired, RTS host links if they are Manb. Otherwise, try Bsy, Tst, and RTS the LIM unit. Also, consult NTP for further manual intervention actions.</p> <p>Meaning: There is no communication path to local F-bus or tap software. The LIM unit could be in a system busy (SysB) or manual busy (ManB) state. If you tried to test the tap, this message also can indicate that there is no application specific unit (ASU) hardware equipped.</p> <p>Action: Follow the displayed instructions. If necessary, contact the next level of support.</p> <p>Either incorrect optional parameter or too many parameters.</p> <p>Meaning: Incorrect information has been entered.</p> <p>Action: Enter the command with the correct information.</p> <p>Undefined command <command></p> <p>Meaning: You entered the command incorrectly.</p> <p>Action: Enter the command again.</p>

TRNSL**Command**

TRNSL

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;LIS lis_number

Function

Use the TRNSL command to display information about the taps on a particular link interface shelf (LIS) when in triple F-bus configuration.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TRNSL command parameters and variables	
Command	Parameters and variables
TRNSL	<u>BOTH</u> <u>ALL</u> unit_no tap_no
Item	Description
<u>ALL</u>	This default parameter, which is never entered, indicates that information for all taps will be displayed because no tap_no is specified.
<u>BOTH</u>	This default parameter, which is never entered, indicates that information for taps on both F-bus units will be displayed because no unit_no is specified.
tap_no	This variable is the number of the tap and has a range of 0 to 11.
unit_no	This variable is the number of the F-bus unit and has a range of 0 to 1.

TRNSL (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the TRNSL command
<pre>>TRNSL 0 where 0 is the unit_no MAP response: LIM 8 LIS 2 FBus 0 Tap 0 is unequipped. LIM 8 LIS 2 FBus 0 Tap 1 is unequipped. LIM 8 LIS 2 FBus 0 Tap 2 is on HLIU 1. LIM 8 LIS 2 FBus 0 Tap 3 is on HSLR 1. LIM 8 LIS 2 FBus 0 Tap 4 is unequipped. LIM 8 LIS 2 FBus 0 Tap 5 is unequipped. LIM 8 LIS 2 FBus 0 Tap 6 is on HLIU 2. LIM 8 LIS 2 FBus 0 Tap 7 is on HSLR 2. LIM 8 LIS 2 FBus 0 Tap 8 is unequipped. LIM 8 LIS 2 FBus 0 Tap 9 is unequipped. LIM 8 LIS 2 FBus 0 Tap 10 is unequipped. LIM 8 LIS 2 FBus 0 Tap 11 is unequipped. Explanation: Standard response to a TRNSL command at the LIS sublevel. This MAP response displays information about all the taps on FBus 0.</pre>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the TRNSL command	
MAP output	Meaning and action
Either incorrect optional parameters or too many parameters.	<p>Meaning: Incorrect information has been entered.</p> <p>Action: Enter the command with the correct information.</p>

TRNSL (end)**Command responses (Sheet 2 of 2)**

Responses for the TRNSL command	
MAP output	Meaning and action
LIM <#> LIS <#> FBus <#> Tap <#> is on HLIU0.	<p>Meaning: The system displays information about what type of application specific unit (ASU) is connected to the tap.</p> <p>Action: None</p>
Out of range: <Unit number> {0 TO 1} Enter: <Unit number> [<Tap number>]	<p>Meaning: You entered an invalid unit number.</p> <p>Action: Enter the valid unit number (0 or 1).</p>
Undefined command <command>	<p>Meaning: You entered the command incorrectly.</p> <p>Action: Enter the command again.</p>

TST

Command

TST

Sublevel

MAPCI;MTC;PM;POST LIM lim_number;LIS lis_number

Function

Use the TST command to test an F-bus or a tap when in triple F-bus configuration.

Usage notes

Testing verifies the state of the resource and displays the results. The TST command performs a simulated traffic diagnosis only when F-bus resources are out of service.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TST command parameters and variables	
Command	Parameters and variables
TST	UNIT unit_no LINK unit_no link_no FBUS unit_no tap_no
Item	Description
FBUS	This parameter indicates that an F-bus element is to be tested.
LINK	This parameter indicates that a link element is to be tested.
link_no	This variable is the number of the link and has a range 0 to 7.
tap_no	This variable is the number of the F_bus tap to be tested and has a range of 0 to 11.
UNIT	This parameter indicates that it is a LIM element that is to be tested.
unit_no	This is the number of the LIM unit to be tested and has a range of 0 to 1.

TST (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the TST command
<pre>>TST FBUS where 1 is the unit_no 0 is the tap_no MAP response: LIM 1 LIS 1 FBUS 1 Tap 0 Test initiated. LIM 1 LIS 1 FBUS 1 Tap 0 Test passed. Explanation: F-bus 1 and tap 0 on LIS 1 have been tested and no problems found.</pre>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 3)

Responses for the TST command	
MAP output	Meaning and action
LIM x LIS v FBus y [tap z] Test initiated.	<p>Meaning: Testing has been initiated on the LIM F-bus or tap.</p> <p>Action: None</p>
LIM x LIS v FBus y [tap z] Test passed.	<p>Meaning: The test initiated on the LIM F-bus or tap has passed.</p> <p>Action: None</p>
LIM x LIS v FBus y [tap z] Test failed.	<p>Meaning: The test initiated on the LIM F-bus or tap has failed. Test results are given in a standard circuit display.</p> <p>Action: None</p>
LIM x LIS v FBus y [tap z] is <status> Test action not taken.	

TST (continued)

Command responses (Sheet 2 of 3)

Responses for the TST command	
MAP output	Meaning and action
	<p>Meaning: The LIM F-bus or tap is not manual busy (ManB), system busy (SysB), in service (InSv), or in-service trouble (ISTb), which are the only valid states for testing.</p> <p>Action: None</p> <p>LIM x LIS v FBus y [tap z] maintenance in progress. Test action not taken</p>
	<p>Meaning: Other maintenance actions are currently active and therefore the test cannot be initiated.</p> <p>Action: None</p> <p>LIM x LIS v FBus y [tap z] test resources in use. TEst action not taken.</p>
	<p>Meaning: The resource needed for testing are being used for other maintenance purposes.</p> <p>Action: None</p> <p>Local maintenance not accessible. If manual intervention is desired, RTS host links if they are Manb. Otherwise, try Bsy, Tst, and RTS the LIM unit. Also, consult NTP for further manual intervention actions.</p>
	<p>Meaning: There is no communication path to local F-bus or tap software. The LIM unit could be in a system busy (SysB) or manual busy (ManB) state. If you tried to test the tap, this message also can indicate that there is no application specific unit (ASU) hardware equipped.</p> <p>Action: Follow the displayed instructions. If necessary, contact the next level of support.</p> <p>LIM x FBus y tap z Test failed, local maintenace not accessible.</p>
	<p>Meaning: The application specific unit (ASU) may be offline (OffL) or this message also can indicate that there is no ASU hardware equipped. You cannot test a tap on this ASU.</p> <p>Action: None</p> <p>Either incorrect optional parameters or too many parameters</p>

Command responses (Sheet 3 of 3)

Responses for the TST command	
MAP output	Meaning and action
	<p>Meaning: Incorrect information has been entered. Action: Enter the command with the correct information.</p>
Undefined command <command>	<p>Meaning: You entered the command incorrectly. Action: Enter the command again.</p>

16 LIU7 level commands

LIU7 menu

Use the LIU7 level of the MAP display to perform maintenance activities on the Common Channel Signaling 7 (CCS7) link interface unit (LIU7).

The following figure shows the LIU7 menu and status display.

Figure 16-1 LIU7 MAP level menu

	CM	MS	IOD	Net	PM	CCS	LNS	Trks	Ext	APPL

LIU7										
0 Quit										
1				PM	0	0	1	1	0	2
2 Post				LIU7	0	0	0	0	0	1
3 ListSet										
4										
5				LIU7	'no'	'state'	RSVD			
6 Tst_										
7 Bsy_										
8 RTS_										
9 Offl										
10 LoadPM_										
11 Disp_										
12 Next										
13										
14 QueryPM_										
15 Loopbk_										
16										
17										
18										

Accessing the LIU7 level

To access the LIU7 level, enter the following command from the CI (command interpreter) MAP level:

```
>MAPCI;MTC;PM;POST LIU7 liu_number
```

and press the Enter key.

where

liu_number is the number of the LIU7 to be posted

LIU7 commands

This chapter describes commands available at the LIU7 level of the MAP display. The commands are arranged in alphabetical order. The following commands are described in this chapter:

- BSY
- DISP
- LISTSET
- LOADPM
- LOOPBK
- NEXT
- OFFL
- POST
- QUERYPM
- QUIT
- RTS
- TST

BSY**Command**

BSY

Sublevel

MAPCI;MTC;PM;POST LIU7 liu7_number

Function

Use the BSY command to place the posted CCS7 link interface unit (LIU7) or all LIU7s in the manual busy (ManB) state.

Usage notes

Use the POST command to post the LIU7s before using the BSY command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

BSY command parameters and variables	
Command	Parameters and variables
BSY	<u>POSTED</u> <u>NOFORCE</u> <u>WAIT</u> ALL FORCE NOWAIT
Item	Description
ALL	This parameter causes all posted LIU7s to be busied.
FORCE	This parameter causes LIU7 inaccessibility to be ignored.
<u>NOFORCE</u>	This default parameter indicates that LIU7s that are not accessible will not be busied.
NOWAIT	This parameter allows other commands to be entered before the BSY command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted LIU7 in the control position will be busied.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the BSY command finishes executing.

BSY (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY</pre> <p><i>MAP response:</i></p> <pre>LIU18 BSY Passed</pre> <p>Explanation: The posted LIU7 currently in the control position is LIU18. It has been busied.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the BSY command	
MAP output	Meaning and action
<pre>Request Invalid - LIU7 liu# is <state></pre> <pre>No Action Taken</pre>	<p>Meaning: The LIU is in the incorrect state for the BSY command to execute. It must be in one of the following states:</p> <ul style="list-style-type: none"> • offline (OffL) • system busy (SysB) • in service (InSv) • in-service trouble (ISTb) <p>Explanation: None</p>
<pre>Busy LIU7 liu# will take a link out of service</pre> <pre>PLEASE CONFIRM (YES or NO).</pre>	<p>Meaning: The command requires confirmation because linkset management has reserved the LIU.</p> <p>Action: To confirm the command enter YES. To abort the command enter NO.</p>
<pre>LIU7# BSY Passed</pre>	

BSY (end)

Command responses (Sheet 2 of 2)

Responses for the BSY command	
MAP output	Meaning and action
	<p>Meaning: The command passed.</p> <p>Action: None</p>
LIU7 liu# BSY Rejected	<p>Meaning: The command was rejected by LIU7 resident maintenance. A serious problem exists.</p> <p>Action: Contact your next level of support.</p>

DISP

Command

DISP

Sublevel

MAPCI;MTC;PM;POST LIU7 liu7_number

Function

Use the DISP command to display a list of all Common Channel Signaling 7 (CCS7) link interface units (LIU7) in a specified peripheral module (PM) state.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

DISP command parameters and variables	
Command	Parameters and variables
DISP	STATE pm_state LIU7
Item	Description
LIU7	This parameter indicates the PM node-type.

DISP (continued)**Parameters and variables (Sheet 2 of 2)**

DISP command parameters and variables	
Command	Parameters and variables
pm_state	This variable specifies the state of the PM to be displayed. The valid entries are the following PM states: CBsy central-side-busy Idl idle InSv in service ISTb in-service trouble ManB manual busy NEQ not equipped OffL offline SysB system busy
STATE	Enter this parameter before the PM state code.

Usage examples

The following table provides an example of the command.

Command example

Example of the DISP command
<p>>DISP STATE ISTB LIU7</p> <p><i>where</i></p> <p>ISTB is the pm_state</p> <p><i>MAP response:</i></p> <p>ISTb LIU7: NONE</p> <p>Explanation: There are no LIU7s in the in-service trouble state.</p>

DISP (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the DISP command	
MAP output	Meaning and action
<code><pm_state> LIU7: NONE</code>	<p>Meaning: There are no LIU7s in the specified PM state.</p> <p>Action: None</p>
<code><pm_state> LIU7: liu7#, liu7#</code>	<p>Meaning: The system displays all LIU7s that are in the specified PM state.</p> <p>Action: None</p>

LISTSET

Command

LISTSET

Sublevel

MAPCI;MTC;PM;POST LIU7 liu7_number

Function

Use the LISTSET command to list the contents of the posted set.

Usage notes

Use the POST command to post a set of Common Channel Signaling 7 (CCS7) link interface units (LIU7) before using the LISTSET command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

LISTSET command parameters and variables	
Command	Parameters and variables
LISTSET	ALL pm_type
Item	Description
ALL	This parameter causes all PMs in the posted set to be listed.
pm_type	This variable indicates a type of PM. Only PMs of the specified type will be listed. For an LIU7 enter LIU7.

LISTSET (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the LISTSET command
<pre>>LISTSET LIU7 where LIU7 is the pm_type MAP response: LIU7 0, 6, 12, 18, 24, 30</pre>
Explanation: The system displays a list of all the posted LIU7s.

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the LISTSET command	
MAP output	Meaning and action
No PM posted Post set is empty	Meaning: No LIU7s exist. Action: None

LOADPM**Command**

LOADPM

Sublevel

MAPCI;MTC;PM;POST LIU7 liu7_number

Function

Use the LOADPM command to load the Common Channel Signaling 7 (CCS7) link interface units (LIU7) with the software load specified in either the inventory table or an optional file.

Usage notes

All the LIU7s must have the same loadfile datafiled and must have the same processor or type.

Use the POST command to post a set of CCS7 LIU7s before using the LISTSET command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

LOADPM command parameters and variables	
Command	Parameters and variables
LOADPM	<u>POSTED</u> <u>INVEN</u> <u>WAIT</u> ALL file NOWAIT
Item	Description
ALL	This parameter causes all posted LIU7s to be loaded.
<u>INVEN</u>	This default parameter indicates that the software will be loaded from the load specified in the inventory table.
file	This variable specifies the file from which the software is to be loaded. The valid entry is an alphanumeric string.
NOWAIT	This parameter allows other commands to be entered before the LOADPM command finishes executing.

LOADPM (continued)

Parameters and variables (Sheet 2 of 2)

LOADPM command parameters and variables	
Command	Parameters and variables
<u>POSTED</u>	This default parameter indicates that only the posted LIU7 in the control position will be loaded.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the LOADPM command finishes executing.

Usage examples

The following table provides an example of the command.

Command example

Example of the LOADPM command
<p>>LOADPM</p> <p><i>MAP response:</i></p> <p>LIU7 liu12 LOADPM Passed.</p> <p>Explanation: The LOADPM command executed successfully.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the LOADPM command	
MAP output	Meaning and action
<pre>Request Invalid - LIU7 liu# is <status> No Action Taken</pre>	<p>Meaning: The LIU7 is in the incorrect state. The LIU7 must be in the ManB state.</p> <p>Action: Use the BSY command to busy the LIU7. Enter the command again.</p>
<pre>LIU7 liu# LOADPM Failed</pre>	<p>Meaning: The LOADPM command failed for an unknown reason.</p> <p>Action: Determine the cause of the failure. If necessary, contact your next level of support.</p>

LOADPM (end)

Command responses (Sheet 2 of 2)

Responses for the LOADPM command	
MAP output	Meaning and action
LIU7 liu# LOADPM Passed.	<p>Meaning: The LOADPM command was successful.</p> <p>Action: None</p>

LOOPBK

Command

LOOPBK

Sublevel

MAPCI;MTC;PM;POST LIU7 liu7_number

Function

Use the LOOPBK command to enable, disable, and query the Common Channel Signaling 7 (CCS7) link interface unit (LIU7) loopback mode.

Usage notes

The LOOPBK command is qualified by the following exceptions, restrictions, and limitations:

- The LOOPBK command can only be executed if the LIU7 is idle (not reserved by linkset management) or, if reserved, not currently running traffic.
- Use the POST command to post the LIU7s before using command LOOPBK.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

LOOPBK command parameters and variables	
Command	Parameters and variables
LOOPBK	mode <u>POSTED</u> ALL
Item	Description
ALL	This parameter indicates that the LOOPBK command will affect all LIU7s.

LOOPBK (continued)**Parameters and variables (Sheet 2 of 2)**

LOOPBK command parameters and variables	
Command	Parameters and variables
mode	This variable determines the action of the LOOPBK command. The following values are valid entries: <ul style="list-style-type: none"> • c clear • e enable • l local • r remote • s status
<u>POSTED</u>	This default parameter indicates that the LOOPBK command will affect only the posted LIU7 in the control position.

Usage examples

The following table provides an example of the command.

Command example

Example of the LOOPBK command
<p>>LOOPBK c ALL</p> <p><i>where</i></p> <p>c is the mode</p> <p><i>MAP response:</i></p> <p>LIU7 LIU8 LOOPBK Passed</p> <p>Explanation: The LOOPBK command executed successfully on LIU8.</p>

LOOPBK (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the LOOPBK command	
MAP output	Meaning and action
Request Invlaid - LIU7 liu# is <status>	<p>Meaning: The LIU7 is in the incorrect state for the LOOPBK command to execute. The LIU7 must in in one of the following states:</p> <ul style="list-style-type: none"> • in service (InSv) • in-service trouble (ISTb) <p>Action: None</p>
Request Invalid - LIU7 liu# is allocated to CCS7 traffic	<p>Meaning: Linkset management reserved the LIU7 to run CCS7 traffic. The command failed.</p> <p>Action: None</p>
LIU7 liu# LOOPBK Passed	<p>Meaning: The LOOPBK command executed successfully.</p> <p>Action: None</p>
LIU7 liu# LOOPBK Failed	<p>Meaning: The LOOPBK command failed.</p> <p>Action: None</p>
LIU7 liu# LOOPBK Rejected	<p>Meaning: The command was rejected by LIU resident maintenance.</p> <p>Action: Determine the cause of the command failure. Contact your next level of support.</p>

NEXT**Command**

NEXT

Sublevel

MAPCI;MTC;PM;POST LIU7 liu7_number

Function

Use the NEXT command to place the next higher peripheral module (PM) of the set of posted Common Channel Signaling 7 (CCS7) link interface units (LIU7) into the control position.

Usage notes

Use the POST command to post the LIU7s before using command NEXT.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

NEXT command parameters and variables	
Command	Parameters and variables
NEXT	<u>NEXT</u> pm_type
Item	Description
<u>NEXT</u>	This default parameter indicates that the next posted PM, regardless of PM type, will be placed in the control position.
pm_type	This variable specifies one of the PM types. Use the DISP command to display the list of PM types in the posted set. The system selects the PMs in the sequence displayed in this list.

NEXT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the NEXT command
>NEXT <i>MAP response:</i> (display of MAP screen for next PM) Explanation: The next higher PM of the posted set is in the control position.

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the NEXT command	
MAP output	Meaning and action
END OF POST SET	Meaning: Either the currently displayed PM is the last in the posted set of PMs, or only one PM has been posted. The display returns to the next higher menu level. Action: None

OFFL**Command**

OFFL

Sublevel

MAPCI;MTC;PM;POST LIU7 liu7_number

Function

Use the OFFL command to put the Common Channel Signaling 7 (CCS7) link interface units (LIU7) in the offline state.

Usage notes

The OFFL command is qualified by the following exceptions, restrictions, and limitations:

- The LIU7 must be in the manual busy (ManB) state before the OFFL command can be executed.
- Use the POST command to post the LIU7s before using command OFFL.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

OFFL command parameters and variables	
Command	Parameters and variables
OFFL	<u>POSTED</u> <u>WAIT</u> ALL NOWAIT
Item	Description
ALL	This parameter causes all posted LIU7s to go offline.
NOWAIT	This parameter allows other commands to be entered before the OFFL command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted LIU7 in the control position will be offlined.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the OFFL command finishes executing.

OFFFL (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFFL command
<pre>>OFFFL</pre> <p><i>MAP response:</i></p> <pre>LIU7 12 OFFFL Passed</pre> <p>Explanation: LIU7 12 is now offline.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFFL command	
MAP output	Meaning and action
<pre>Request Invalid - LIU7 liu# is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The LIU7 is in the incorrect state for the OFFFL command to execute. The LIU7 must be in the manual busy (ManB) state.</p> <p>Action: None</p>
<pre>LIU7 liu# OFFFL Passed</pre>	<p>Meaning: The OFFFL command was successful.</p> <p>Action: None</p>
<pre>LIU7 liu# OFFFL Rejected</pre>	<p>Meaning: The command was rejected by LIU resident maintenance.</p> <p>Action: Determine the cause of the command failure. Contact your next level of support.</p>

POST**Command**

POST

Sublevel

MAPCI;MTC;PM

Function

Use the POST command to select a specific Common Channel Signaling 7 (CCS7) link interface unit (LIU7) for maintenance actions.

Usage notes

The POST command is qualified by the following exceptions, restrictions, and limitations.

- Use the POST command before using commands TST, BSY, NEXT, LISTSET, LOOPBK, RTS, OFFL, LOADPM, or QUERYPM.
- When the command string HELP POST is entered to query the parameters of POST, not all of the displayed parameters apply to every office or office network. The applicability of the parameters depends on the types of PMs that are present in the office configuration.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

POST command parameters and variables	
Command	Parameters and variables
POST	pm_type pm_number
Item	Description
pm_number	This variable identifies the discrimination number of the LIU7 to be posted. The range is 0 to 511. To enter more than one LIU7, enter each discrimination number separated by a space as in the following example: ... 8 12 16
pm_type	This variable identifies a PM type. For an LIU7 the correct value is LIU7. If the level of the node-type is already accessed, omit this variable from the command entry. The default value is a PM type of the LIU7 in the control position of the posted set.

POST (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the POST command
<pre>>POST LIU7 8</pre> <p><i>where</i></p> <p>LIU7 is the pm_type</p> <p>8 is the pm_number of the specified PM type</p> <p><i>MAP response:</i></p> <p>OK</p> <p>Explanation: LIU7 is posted.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the POST command	
MAP output	Meaning and action
NO PM POSTED	<p>Meaning: A PM level is accessed without posting a specific PM.</p> <p>Action: None</p>
<pre>pm pm_number n_state LINKS OOS: CSIDE nn PSIDE nn UNIT 0: activity u_state MTCE /LOADING: nnnn UNIT 1: activity u_state MCTE /LOADING: nnnn</pre>	

POST (end)**Command responses (Sheet 2 of 2)**

Responses for the POST command	
MAP output	Meaning and action
	<p>Meaning: The status of the posted PM appears, where:</p> <p>pm is a type of PM.</p> <p>pm_number is the discrimination number of the PM type.</p> <p>n_state is the state of the PM node. The displayed state depends on the state of one or both units. The n_states are the same as the u_states.</p> <p>LINKS_OOS indicates the quantity of equipped C-side and P-side links that are out-of-service because they are either system busy or manually busy.</p> <p>activity indicates which unit is available for call processing and which unit is on standby. ACT means the unit is active and able to handle call processing. INACT means the unit is on standby (inactive).</p> <p>u_state is the status of a unit.</p> <p>MTCE indicates the unit is undergoing maintenance invoked manually or by the system (displayed with u_states ManB and SysB, respectively). MTCE is present only while maintenance is occurring.</p> <p>/LOADING:indicates the unit is being updated with datafill, where nnnn is an increment of the load.</p> <p>Action: None</p>
OK	<p>Meaning: The specified PM is posted.</p> <p>Action: None</p>

QUERYPM

Command

QUERYPM

Sublevel

MAPCI;MTC;PM;POST LIU7 liu7_number

Function

Use the QUERYPM command to display information about the posted Common Channel Signaling 7 (CCS7) link interface unit (LIU7), its host link interface module (LIM), and its two F-bus taps. The displayed information reflects the state of the host local message switches (LMS), message channels, taps, LIU7 locations, in-service trouble (ISTb) conditions, and linkset information.

Usage notes

Use the POST command to post the LIU7s before using command QUERYPM.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYPM command parameters and variables	
Command	Parameters and variables
QUERYPM	<u>DISP</u> FLT
Item	Description
<u>DISP</u>	This default parameter indicates that a normal QUERYPM display is presented.
FLT	This parameter causes fault information for the LIU7 to be displayed.

QUERYPM (continued)

Usage examples

The following table provides an example of the command.

Command example**Example of the QUERYPM command**

>QUERYPM

MAP response:

PM type: LIU7 PM no.: 2 Status: OffL

LIM: 0 Shelf: 1 Slot: 10 LIU FTA: 4244 1000

Default Load: LIU25

Running Load: LIU25RTM

ISTB ...

Explanation: This is the standard response for QUERYPM command for LIU7.

QUERYPM (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUERYPM command	
MAP output	Meaning and action
<pre>PM type: LIU7 PM no.: 2 Status: OffL LIM: 0 Shelf: 1 Slot: 10 LIU FTA: 4244 1000 Default Load: LIU25 Running Load: LIU25RTM Potential service affecting conditions: Config Data Mismatch Msg Channel #0 NA Msg Channel #1 NA TAP #0 00S/NA TAP #1 00S/NA Host Unit 0 is not in service Host Unit 1 is not in service LMS Unit : 0 1 LMS States : OffL OffL Auditing : No No Msg Channels: NA NA Tap 1 : B(NA) B(NA) Reserved LIU7 forms part of CCS7Linkset: SCP_LKS SLC: 0 LIU is not allocated</pre>	<p>Meaning: This is the standard response to QUERYPM command for LIU7.</p> <p>Action: None</p>

QUIT**Command**

QUIT

Sublevel

MAPCI;MTC;PM;POST LIU7 liu7_number

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incrname are menu level names, such as ns, mtc, or mapci.
n	This variable identifies a specified number of levels to exit. The range of levels is 0 to 6. Do not enter a number higher than the number of levels currently open.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p><i>MAP response:</i></p> <p>(the display changes to the display of a higher level menu)</p> <p>Explanation: The LIU7 level changed to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
<pre>CI:</pre>	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
<pre>QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1</pre>	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels currently open.</p> <p>Action: Enter the command again using an appropriate level number.</p>
<pre>The system replaces the LIU7 level menu with a menu that is two or more levels higher.</pre>	<p>Meaning: You entered the QUIT command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
<pre>The system replaces the display of the LIU7 level with the display of the next higher MAP level.</pre>	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

RTS**Command**

RTS

Sublevel

MAPCI;MTC;PM;POST LIU7 liu7_number

Function

Use the RTS command to run diagnostics and return an out-of-service Common Channel Signaling 7 (CCS7) link interface unit (LIU7) to service.

Usage notes

The RTS command is qualified by the following exceptions, restrictions, and limitations:

- Use the POST command to post the LIU7s before using command RTS.
- The LIU7 does not return to service if the out-of-service diagnostics do not pass.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

RTS command parameters and variables	
Command	Parameters and variables
RTS	<u>POSTED</u> <u>NOFORCE</u> <u>WAIT</u> ALL FORCE NOWAIT
Item	Description
ALL	This parameter causes all posted LIU7s to be returned to service.
FORCE	This parameter causes LIU7 inaccessibility to be ignored.
<u>NOFORCE</u>	This default parameter indicates that LIU7s that are not accessible will not be returned to service.
NOWAIT	This parameter allows other commands to be entered before the RTS command finishes executing.

RTS (continued)

Parameters and variables (Sheet 2 of 2)

RTS command parameters and variables	
Command	Parameters and variables
<u>POSTED</u>	This default parameter indicates that only the posted LIU7 in the control position will be returned to service.
WAIT	This default parameter indicates that other commands cannot be entered until the RTS command finishes executing.

Usage examples

The following table provides an example of the command.

Command example

Example of the RTS command
<pre>>RTS</pre> <p><i>MAP response:</i></p> <pre>LIU7 12 RTS passed</pre> <p>Explanation: The LIU7 returns to service.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the RTS command	
MAP output	Meaning and action
<pre>Request Invalid - LIU7 liu# is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The LIU7 is in an incorrect state. The LIU7 must be in one of the following states:</p> <ul style="list-style-type: none"> • manual busy (ManB) • system busy (SysB) <p>Action: None</p>

Command responses (Sheet 2 of 2)

Responses for the RTS command	
MAP output	Meaning and action
LIU7 liu# Failed <failure reason> <circuit location display>	<p>Meaning: The command failed. A card list may be produced.</p> <p>Action: Refer to the appropriate alarm clearing or card replacement procedure.</p>
LIU7 liu# RTS passed	<p>Meaning: The LIU7 returned to service.</p> <p>Action: None</p>
LIU7 liu# RTS Rejected	<p>Meaning: The RTS command was rejected by LIU resident maintenance.</p> <p>Explanation: Determine the cause of the failure. Contact your next level of support.</p>

TST

Command

TST

Sublevel

MAPCI;MTC;PM;POST MLIU liu7_number

Function

Use the TST command to run diagnostics on the posted Common Channel Signaling 7 (CCS7) link interface units (LIU7).

Usage notes

The TST command is qualified by the following exceptions, restrictions, and limitations:.

- Use the POST command to post the LIU7s before using command LOOPBK.
- The specific diagnostics run are determined by the state of the LIU7. The system runs in-service tests on LIU7s that are in-service and out-of-service tests on LIU7s that not in service.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

BSY command parameters and variables	
Command	Parameters and variables
TST	<u>POSTED</u> ALL
Item	Description
ALL	This parameter causes all postedLIU7s to be busied.
<u>POSTED</u>	This default parameter indicates that only the posted LIU7 in the control position will be tested..

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>TST</pre> <p><i>MAP response:</i></p> <pre>LIU7 12 TST passed</pre> <p>Explanation: The test of the posted LIU7 currently in the control position passed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the BSY command	
MAP output	Meaning and action
<pre>Request Invalid - LIU7 liu# is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The LIU7 is in the incorrect state. The LIU7 must be in one of the following states:</p> <ul style="list-style-type: none"> • manual busy (ManB) • in service (InSv) • in-service trouble (ISTb) <p>Action: None</p>
<pre>LIU liu# failed - failure reason - circuit location display</pre>	<p>Meaning: The LIU7 failed the test. Details of the failure display. A card list might display..</p> <p>Action: Refer to the appropriate alarm clearing or card replacement procedure to correct the indicated problem..</p>
<pre>LIU7 liu# TST passed</pre>	<p>Meaning: The LIU7 passed all tests.</p> <p>Action: None</p>

17 MLIU level commands

MLIU menu

Use the MLIU level of the MAP display to perform maintenance activities on the Common Channel Signaling 7 (CCS7) multiple link interface unit (MLIU).

The following figure shows the MLIU menu and status display.

Figure 17-1 MLIU MAP level menu

	CM	MS	IOD	Net	PM	CCS	LNS	Trks	Ext	APPL

MLIU										
0 Quit										
1				PM	0	0	1	1	0	2
2 Post				MLIU	0	0	0	0	0	1
3 ListSet										
4										
5				MLIU	'no'	'state'	RSVD			
6 Tst_										
7 Bsy_										
8 RTS_										
9 Offl										
10 LoadPM_										
11 Disp_										
12 Next										
13										
14 QueryPM_										
15 Loopbk_										
16										
17										
18										

Accessing the MLIU level

To access the MLIU level, enter the following command from the CI (command interpreter) MAP level:

```
>MAPCI;MTC;PM;POST MLIU liu_number
```

and press the Enter key.

where

liu_number is the number of the MLIU to be posted

MLIU commands

This chapter describes commands available at the MLIU level of the MAP display. The commands are arranged in alphabetical order. The following commands are described in this chapter:

- BSY
- DISP
- LISTSET
- LOADPM
- LOOPBK
- NEXT
- OFFL
- POST
- QUERYPM
- QUIT
- RTS
- TST

BSY**Command**

BSY

Sublevel

MAPCI;MTC;PM;POST MLIU mliu_number

Function

Use the BSY command to place the posted CCS7 multiple link interface unit (MLIU) or all MLIUs in the manual busy (ManB) state.

Usage notes

Use the POST command to post the MLIUs before using the BSY command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

BSY command parameters and variables	
Command	Parameters and variables
BSY	<u>POSTED</u> <u>NOFORCE</u> <u>WAIT</u> ALL FORCE NOWAIT
Item	Description
ALL	This parameter causes all posted MLIUs to be busied.
FORCE	This parameter causes MLIU inaccessibility to be ignored.
<u>NOFORCE</u>	This default parameter indicates that MLIUs that are not accessible will not be busied.
NOWAIT	This parameter allows other commands to be entered before the BSY command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted MLIU in the control position will be busied.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the BSY command finishes executing.

BSY (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY</pre> <p><i>MAP response:</i></p> <pre>MLIU 18 BSY Passed</pre> <p>Explanation: The posted MLIU currently in the control position is MLIU 18. It has been busied.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the BSY command	
MAP output	Meaning and action
<pre>Request Invalid - MLIU liu# is <state></pre> <pre>No Action Taken</pre>	<p>Meaning: The LIU is in the incorrect state for the BSY command to execute. It must be in one of the following states:</p> <ul style="list-style-type: none"> • offline (OffL) • system busy (SysB) • in service (InSv) • in-service trouble (ISTb) <p>Action: None</p>
<pre>Busy MLIU liu# will take a link out of service</pre> <pre>PLEASE CONFIRM (YES or NO).</pre>	<p>Meaning: The command requires confirmation because linkset management has reserved the LIU.</p> <p>Explanation: To confirm the command enter YES. To abort the command enter NO.</p>
<pre>MLIU liu# BSY Passed</pre>	

BSY (end)

Command responses (Sheet 2 of 2)

Responses for the BSY command	
MAP output	Meaning and action
	<p>Meaning: The command passed.</p> <p>Action: None</p>
MLIU liu# BSY Rejected	<p>Meaning: The command was rejected by MLIU resident maintenance. A serious problem exists.</p> <p>Action: Contact your next level of support.</p>

DISP

Command

DISP

Sublevel

MAPCI;MTC;PM;POST MLIU mliu_number

Function

Use the DISP command to display a list of all Common Channel Signaling 7 (CCS7) multiple link interface units (MLIU) in a specified peripheral module (PM) state.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

DISP command parameters and variables	
Command	Parameters and variables
DISP	STATE pm_state MLIU
Item	Description
MLIU	This parameter indicates the PM node-type.
pm_state	This variable specifies the state of the PM to be displayed. The valid entries are the following PM states: <ul style="list-style-type: none"> • CBsy central–side–busy • InSv in service • ISTb in–service trouble • ManB manual busy • OffL offline • SysB system busy
STATE	Enter this parameter before the PM state code.

Usage examples

The following table provides an example of the command.

Command example

Example of the DISP command
<pre>>DISP STATE ISTB MLIU</pre> <p><i>where</i></p> <p>ISTB is the pm_state</p> <p><i>MAP response:</i></p> <pre>ISTb MLIU: NONE</pre> <p>Explanation: There are no MLIUs in the in-service trouble state.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the DISP command	
MAP output	Meaning and action
NONE	<p>Meaning: There are no MLIUs in the specified PM state.</p> <p>Action: None</p>
<pm_state> MLIU: mliu#, mliu#	<p>Meaning: The system displays all MLIUs that are in the specified PM state.</p> <p>Action: None</p>

LISTSET

Command

LISTSET

Sublevel

MAPCI;MTC;PM;POST MLIU mliu_number

Function

Use the LISTSET command to list the contents of the posted set.

Usage notes

Use the POST command to post a set of Common Channel Signaling 7 (CCS7) multiple link interface units (MLIU) before using the LISTSET command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

LISTSET command parameters and variables	
Command	Parameters and variables
LISTSET	ALL pm_type
Item	Description
ALL	This parameter causes all PMs in the posted set to be listed.
pm_type	This variable indicates a type of PM. Only PMs of the specified type will be listed. For an MLIU enter MLIU.

LISTSET (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the LISTSET command
<pre>>LISTSET MLIU where MLIU is the pm_type MAP response: MLIU 0, 6, 12, 18, 24, 30</pre> <p>Explanation: The system displays a list of all the posted MLIUs.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the LISTSET command	
MAP output	Meaning and action
<pre>No PM posted Post set is empty</pre>	<p>Meaning: No MLIUs have been posted.</p> <p>Action: None</p>

LOADPM

Command

LOADPM

Sublevel

MAPCI;MTC;PM;POST MLIU mliu_number

Function

Use the LOADPM command to load the Common Channel Signaling 7 (CCS7) multiple link interface units (MLIU) with the software load specified in either the inventory table or an optional file.

Usage notes

All the MLIUs must have the same loadfile datafiled and must have the same processor or type.

Use the POST command to post a set of CCS7 MLIUs before using the LISTSET command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

LOADPM command parameters and variables	
Command	Parameters and variables
LOADPM	<u>POSTED</u> <u>INVEN</u> <u>WAIT</u> ALL file NOWAIT
Item	Description
ALL	This parameter causes all posted MLIUs to be loaded.
<u>INVEN</u>	This default parameter indicates that the software will be loaded from the load specified in the inventory table.
file	This variable specifies the file from which the software is to be loaded. The valid entry is an alphanumeric string.
NOWAIT	This parameter allows other commands to be entered before the LOADPM command finishes executing.

LOADPM (continued)**Parameters and variables (Sheet 2 of 2)**

LOADPM command parameters and variables	
Command	Parameters and variables
<u>POSTED</u>	This default parameter indicates that only the posted MLIU in the control position will be loaded.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the LOADPM command finishes executing.

Usage examples

The following table provides an example of the command.

Command example

Example of the LOADPM command
<p>>LOADPM</p> <p><i>MAP response:</i></p> <p>MLIU 12 LOADPM Passed.</p> <p>Explanation: The LOADPM command executed successfully.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the LOADPM command	
MAP output	Meaning and action
Request Invalid - MLIU liu# is <status> No Action Taken	<p>Meaning: The MLIU is in the incorrect state. The MLIU must be in the ManB state.</p> <p>Action: Use the BSY command to busy the MLIU. Enter the command again.</p>
MLIU liu# LOADPM Failed	<p>Meaning: The LOADPM command failed for an unknown reason.</p> <p>Action: Determine the cause of the failure. If necessary, contact your next level of support.</p>

LOADPM (end)

Command responses (Sheet 2 of 2)

Responses for the LOADPM command	
MAP output	Meaning and action
MLIU liu# LOADPM Passed.	<p>Meaning: The LOADPM command was successful.</p> <p>Action: None</p>

LOOPBK

Command

LOOPBK

Sublevel

MAPCI;MTC;PM;POST MLIU mliu_number

Function

The LOOPBK command is not supported for CCS7 multiple link interface unit (MLIU)-based links.

Usage notes

When you try to use the LOOPBK command for the MLIU-based link, the system displays the following message:

```
PM Level Loopback is not supported for MLIU.
```

Refer to C7BERT level to perform link loopbacks for MLIU-based link.

NEXT

Command

NEXT

Sublevel

MAPCI;MTC;PM;POST MLIU mliu_number

Function

Use the NEXT command to place the next higher peripheral module (PM) of the set of posted Common Channel Signaling 7 (CCS7) multiple link interface units (MLIU) into the control position.

Usage notes

Use the POST command to post the MLIUs before using command NEXT.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

NEXT command parameters and variables	
Command	Parameters and variables
NEXT	<u>NEXT</u> pm_type
Item	Description
<u>NEXT</u>	This default parameter indicates that the next posted PM, regardless of PM type, will be placed in the control position.
pm_type	This variable specifies one of the PM types. Use the DISP command to display the list of PM types in the posted set. The system selects the PMs in the sequence displayed in this list.

Usage examples

The following table provides an example of the command.

Command example

Example of the NEXT command
<p>>NEXT</p> <p><i>MAP response:</i></p> <p>(display of MAP screen for next PM)</p> <p>Explanation: The next higher PM of the posted set is in the control position.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the NEXT command	
MAP output	Meaning and action
END OF POST SET	<p>Meaning: Either the currently displayed PM is the last in the posted set of PMs, or only one PM has been posted. The display returns to the next higher menu level.</p> <p>Action: None</p>

OFFFL

Command

OFFFL

Sublevel

MAPCI;MTC;PM;POST MLIU mliu_number

Function

Use the OFFFL command to put the Common Channel Signaling 7 (CCS7) multiple link interface units (MLIU) in the offline state.

Usage notes

The OFFFL command is qualified by the following exceptions, restrictions, and limitations:

- The MLIU must be in the manual busy (ManB) state before the OFFFL command can be executed.
- Use the POST command to post the MLIUs before using command OFFFL.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

OFFFL command parameters and variables	
Command	Parameters and variables
OFFFL	<u>POSTED</u> <u>WAIT</u> ALL NOWAIT
Item	Description
ALL	This parameter causes all posted MLIUs to go offline.
NOWAIT	This parameter allows other commands to be entered before the OFFFL command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted MLIU in the control position will be offlined.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the OFFFL command finishes executing.

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFFL command
<pre>>OFFFL</pre> <p><i>MAP response:</i></p> <pre>MLIU 12 OFFFL Passed</pre> <p>Explanation: MLIU 12 is now offline.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFFL command	
MAP output	Meaning and action
<pre>Request Invalid - MLIU liu# is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The MLIU is in the incorrect state for the OFFFL command to execute. The MLIU must be in the manual busy (ManB) state.</p> <p>Action: Use the BSY command to busy the MLIU. Enter the command again.</p>
<pre>MLIU liu# OFFFL Passed</pre>	<p>Meaning: The OFFFL command was successful.</p> <p>Action: None</p>
<pre>MLIU liu# OFFFL Rejected</pre>	<p>Meaning: The command was rejected by LIU resident maintenance.</p> <p>Action: Determine the cause of the command failure. Contact your next level of support.</p>

POST

Command

POST

Sublevel

MAPCI;MTC;PM

Function

Use the POST command to select a specific Common Channel Signaling 7 (CCS7) multiple link interface unit (MLIU) for maintenance actions.

Usage notes

The POST command is qualified by the following exceptions, restrictions, and limitations.

- Use the POST command before using commands TST, BSY, NEXT, LISTSET, LOOPBK, RTS, OFFL, LOADPM, or QUERYPM.
- When the command string HELP POST is entered to query the parameters of POST, not all of the displayed parameters apply to every office or office network. The applicability of the parameters depends on the types of PMs that are present in the office configuration.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

POST command parameters and variables	
Command	Parameters and variables
POST	pm_type pm_number
Item	Description
pm_number	This variable identifies the discrimination number of the MLIU to be posted. The range is 0 to 511. To enter more than one MLIU, enter each discrimination number separated by a space as in the following example: ... 8 12 16
pm_type	This variable identifies a PM type. For an MLIU the correct value is MLIU. If the level of the node-type is already accessed, omit this variable from the command entry. The default value is a PM type of the MLIU in the control position of the posted set.

POST (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the POST command
<pre>>POST MLIU 8</pre> <p><i>where</i></p> <p>MLIU is the pm_type</p> <p>8 is the pm_number of the specified PM type</p> <p><i>MAP response:</i></p> <p>OK</p> <p>Explanation: MLIU 8 is posted.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the POST command	
MAP output	Meaning and action
NO PM POSTED	<p>Meaning: A PM level is accessed without posting a specific PM.</p> <p>Action: None</p>
pm pm_number n_state LINKS OOS: CSIDE nn PSIDE nn	
UNIT 0: activity u_state MTCE /LOADING: nnnn	
UNIT 1: activity u_state MCTE /LOADING: nnnn	

POST (end)

Command responses (Sheet 2 of 2)

Responses for the POST command	
MAP output	Meaning and action
	<p>Meaning: The status of the posted PM appears, where:</p> <p>pm is a type of PM.</p> <p>pm_number is the discrimination number of the PM type.</p> <p>n_state is the state of the PM node. The displayed state depends on the state of one or both units. The n_states are the same as the u_states.</p> <p>LINKS_OOS indicates the quantity of equipped C-side and P-side links that are out-of-service because they are either system busy or manually busy.</p> <p>activity indicates which unit is available for call processing and which unit is on standby. ACT means the unit is active and able to handle call processing. INACT means the unit is on standby (inactive).</p> <p>u_state is the status of a unit.</p> <p>MTCE indicates the unit is undergoing maintenance invoked manually or by the system (displayed with u_states ManB and SysB, respectively). MTCE is present only while maintenance is occurring.</p> <p>/LOADING: indicates the unit is being updated with datafill, where nnnn is an increment of the load.</p> <p>Action: None</p>
OK	<p>Meaning: The specified PM is posted.</p> <p>Action: None</p>

QUERYPM**Command**

QUERYPM

Sublevel

MAPCI;MTC;PM;POST MLIU mliu_number

Function

Use the QUERYPM command to display information about the posted Common Channel Signaling 7 (CCS7) multiple link interface unit (MLIU), its host link interface module (LIM), and its two F-bus taps. The displayed information reflects the state of the host local message switches (LMS), message channels, taps, MLIU locations, in-service trouble (ISTb) conditions, and linkset information.

Usage notes

Use the POST command to post the MLIUs before using command QUERYPM.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYPM command parameters and variables	
Command	Parameters and variables
QUERYPM	<u>DISP</u> FLT
Item	Description
<u>DISP</u>	This default parameter indicates that a normal QUERYPM display is presented.
FLT	This parameter causes fault information for the MLIU to be displayed.

QUERYPM (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERYPM command
<pre>>QUERYPM MAP response: PM type: MLIU PM no.: 2 Status: OffL LIM: 0 Shelf: 1 Slot: 10 LIU FTA: 4244 1000 Default Load: LIU25 Running Load: LIU25RTM ISTB ...</pre> <p>Explanation: This is the standard response for QUERYPM command for MLIU.</p>

QUERYPM (end)**MAP responses**

The following table describes the MAP responses.

Command responses

Responses for the QUERYPM command	
MAP output	Meaning and action
<pre> PM type: MLIU PM no.: 2 Status: OffL LIM: 0 Shelf: 1 Slot: 10 LIU FTA: 4244 1000 Default Load: LIU25 Running Load: LIU25RTM Potential service affecting conditions: Config Data Mismatch Msg Channel #0 NA Msg Channel #1 NA TAP #0 00S/NA TAP #1 00S/NA Host Unit 0 is not in service Host Unit 1 is not in service LMS Unit : 0 1 LMS States : OffL OffL Auditing : No No Msg Channels: NA NA Tap 1 : B(NA) B(NA) Reserved MLIU forms part of CCS7 Linkset: SCP_LKS SLC: 0 LIU is not allocated </pre>	<p>Meaning: This is the standard response to QUERYPM command for MLIU.</p> <p>Action: None</p>

QUIT

Command

QUIT

Sublevel

MAPCI;MTC;PM;POST MLIU mliu_number

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incrname are menu level names, such as ns, mtc, or mapci.
n	This variable identifies a specified number of levels to exit. The range of levels is 0 to 6. Do not enter a number higher than the number of levels currently open.

QUIT (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the QUIT command
<p>>QUIT</p> <p><i>MAP response:</i></p> <p>(the display changes to the display of a higher level menu)</p> <p>Explanation: The MLIU level changed to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
CI:	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels currently open.</p> <p>Action: Enter the command again using an appropriate level number.</p>
The system replaces the MLIU level menu with a menu that is two or more levels higher.	<p>Meaning: You entered the QUIT command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
The system replaces the display of the < MLIU level with the display of the next higher MAP level.	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

RTS

Command

RTS

Sublevel

MAPCI;MTC;PM;POST MLIU mliu_number

Function

Use the RTS command to run diagnostics and return an out-of-service Common Channel Signaling 7 (CCS7) multiple link interface unit (MLIU) to service.

Usage notes

The RTS command is qualified by the following exceptions, restrictions, and limitations:

- Use the POST command to post the MLIUs before using command RTS.
- The MLIU does not return to service if the out-of-service diagnostics do not pass.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

RTS command parameters and variables	
Command	Parameters and variables
RTS	<u>POSTED</u> <u>NOFORCE</u> <u>WAIT</u> ALL FORCE NOWAIT incname n
Item	Description
ALL	This parameter causes all posted MLIUs to be returned to service.
FORCE	This parameter causes MLIU inaccessibility to be ignored.
<u>NOFORCE</u>	This default parameter indicates that MLIUs that are not accessible will not be returned to service.
NOWAIT	This parameter allows other commands to be entered before the RTS command finishes executing.

RTS (continued)**Parameters and variables (Sheet 2 of 2)**

RTS command parameters and variables	
Command	Parameters and variables
<u>POSTED</u>	This default parameter indicates that only the posted MLIU in the control position will be returned to service.
WAIT	This default parameter indicates that other commands cannot be entered until the RTS command finishes executing.

Usage examples

The following table provides an example of the command.

Command example

Example of the RTS command
<pre>>RTS MAP response: MLIU 12 RTS passed</pre> <p>Explanation: The MLIU returns to service.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the RTS command	
MAP output	Meaning and action
<pre>Request Invalid - MLIU liu# is <status> No Action Taken</pre>	<p>Meaning: The MLIU is in an incorrect state. The MLIU must be in one of the following states:</p> <ul style="list-style-type: none"> • manual busy (ManB) • system busy (SysB) <p>Action: None</p>

RTS (end)

Command responses (Sheet 2 of 2)

Responses for the RTS command	
MAP output	Meaning and action
MLIU liu# Failed <failure reason> <circuit location display>	Meaning: The command failed. A card list may be produced. Action: Refer to the appropriate alarm clearing or card replacement procedure.
MLIU liu# RTS passed	Meaning: The MLIU returned to service. Action: None
MLIU liu# RTS Rejected	Meaning: The RTS command was rejected by LIU resident maintenance. Action: Determine the cause of the failure. Contact your next level of support.

TST**Command**

TST

Sublevel

MAPCI;MTC;PM;POST MLIU mliu_number

Function

Use the TST command to run diagnostics on the posted Common Channel Signaling 7 (CCS7) multiple link interface units (MLIU).

Usage notes

The TST command is qualified by the following exceptions, restrictions, and limitations:

- Use the POST command to post the MLIUs before using command LOOPBK.
- The specific diagnostics run are determined by the state of the MLIU. The system runs in-service tests on MLIUs that are in-service and out-of-service tests on MLIUs that are not in service.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TST command parameters and variables	
Command	Parameters and variables
TST	<u>POSTED</u> ALL
Item	Description
ALL	This parameter causes all posted MLIUs to be tested.
<u>POSTED</u>	This default parameter indicates that only the posted MLIU in the control position will be tested.

TST (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the TST command
<pre>>TST</pre> <p><i>MAP response:</i></p> <pre>MLIU 12 TST passed</pre> <p>Explanation: The test of the posted MLIU currently in the control position passed.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the TST command	
MAP output	Meaning and action
Request Invalid - MLIU liu# is <status>	<p>Meaning: The MLIU is in the incorrect state. The MLIU must be in one of the following states:</p> <ul style="list-style-type: none"> • manual busy (ManB) • in service (InSv) • in-service trouble (ISTb) <p>Action: None</p>
No Action Taken	
LIU liu# failed - failure reason - circuit location display	<p>Meaning: The MLIU failed the test. Details of the failure display. A card list might display.</p> <p>Action: Refer to the appropriate alarm clearing or card replacement procedure to correct the indicated problem.</p>

TST (end)

Command responses (Sheet 2 of 2)

Responses for the TST command	
MAP output	Meaning and action
MLIU liu# TST passed	<p>Meaning: The MLIU passed all tests.</p> <p>Action: None</p>

18 MRVT level commands

MRVT menu

Use the MRVT level of the MAP to initiate message transfer part (MTP) routing verification test.

Note: The C7OMAP and MRVT levels are available for STP customers only.

The following figure shows the MRVT menu and status display.

Figure 18-1 MRVT MAP level menu

```

          CM      MS      IOD      Net      PM      CCS      Trks      Ext      APPL
          .       .       .       .       .       .       .       .       .

MRVT          CCS7
0  Quit          .
2  Post_        MRVT          InSv
3  Start_      RouteSet
4              Route          Adjacent Node  Test Status  MRVR  State
5
6
7  Bsy
8  RTS
9
10
11          MRVT:
12 Next        Warning: Please turn on DLOG before starting MRVT test.
13
14
15 Setenv_
16 Setparm_
17 Qenv
18 Qparm

```

Accessing the MRVT level

To access the MRVT level, enter the following command from the CI MAP level:

```
>MAPCI;MTC;CCS;CCS7;C7OMAP;MRVT
```

and press the Enter key.

MRVT commands

This chapter describes commands available at the MRVT level of the MAP display. The commands are arranged in alphabetical order. The following MRVT commands are described in this chapter:

- BSY
- NEXT
- POST
- QENV
- QPARAM
- QUIT
- RTS
- SETENV
- SETPARAM
- START

BSY**Command**

BSY

Directory

MAPCI;MTC;CCS;CCS7;C7OMAP;MRVT

Function

Use the BSY command to change the MTP routing verification test (MRVT) state to manual busy (ManB). If the MRVT state is ManB, MRVT tests cannot be initiated on this node. The user can use command RTS to change the MRVT state to in service (InSv).

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY MAP response: Warning: On execution of this command, MRVT test can not be initiated on this node and MRVT tests from network can not be relayed, are you sure you want to do this? Please confirm ("YES", "Y". "NO", or "N"): Y BSY passed. Explanation: This is the standard response for command BSY. The MRVT state changes to ManB.</pre>

BSY (end)

Responses

The following table describes the MAP responses.

Command responses

Responses for the BSY command	
MAP output	Meaning and action
Warning: On execution of this commmand, MRVT test can not be initiated on this node and MRVT tests from network can not be relayed, are you sure you want to do this? Please confirm (Yes, Y, No or N).	<p>Meaning: The command has executed successfully and the MRVT function is now ManB. The BSY command produces the same response if the MRVT function is ManB when the user enters the command. The user receives a warning to verify the use of the BSY command.</p> <p>Action: Enter Y to change to ManB or enter N to abort the command.</p>
Maintenance level already achieved	<p>Meaning: The status of the MRVT function is ManB. It is not necessary to execute this command.</p> <p>Action: None</p>
BSY command is being executed by another user	<p>Meaning: A user at another MAP terminal executed the BSY command.</p> <p>Action: Wait for the other user to finish executing the command. Re-enter the BSY command.</p>

NEXT**Command**

NEXT

Directory

MAPCI;MTC;CCS;CCS7;C7OMAP;MRVT

Function

Use the NEXT command to display the next routeset in a set of routesets posted by routeset state or MRVT state.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the NEXT command					
>NEXT					
<i>MAP response:</i>					
MRVT	InSv				
RouteSet	RS00000	Insv	Test State	idle	
Route	Adjacent Node	Test Status	MRVR Received	0	
0	LS00110	idle			
1	LS00120	idle			
2	LS00130	idle			
3	LS00140	idle			
Explanation: Routeset RS00000 is the next routeset in a set of routesets posted by routeset state InSv.					

NEXT (end)

Responses

The following table describes the MAP responses.

Command responses

Responses for the NEXT command	
MAP output	Meaning and action
Next not valid with posting by NAME.	<p>Meaning: The posted set of routesets were posted by routeset name. Command NEXT cannot be used to display routesets posted by name.</p> <p>Action: Post routesets by routeset state or MRVT state before issuing the NEXT command.</p>
End of posted set.	<p>Meaning: No more routesets are available for display.</p> <p>Action: None</p>
Failed, no routeset posted.	<p>Meaning: No routesets are posted.</p> <p>Action: None</p>

POST**Command**

POST

Directory

MAPCI;MTC;CCS;CCS7;C7OMAP;MRVT

Function

Use the POST command to post a routeset.

Post a routeset by:

- routeset name
- routeset state
- MRVT state

If routesets are posted by routeset state or MRVT state, use the NEXT command to display additional posted routesets.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

POST command parameters and variables	
Command	Parameters and variables
POST	C routeset_name
	S routeset_state
	T test_state
Item	Description
C	This parameter specifies that routesets are posted by routeset name.
S	This parameter specifies that routesets are posted by routeset state.
T	This parameter specifies that routesets are posted by MRVT state.
routeset_name	This variable specifies the routeset name as datafilled in table C7RTESET.

POST (continued)

Parameters and variables (Sheet 2 of 2)

POST command parameters and variables	
Command	Parameters and variables
routeset_state	This variable specifies the routeset state. The values are: <ul style="list-style-type: none"> • InSv (in-service) • ISTb (in-service trouble) • ManB (manually busy) • OffL (offline) • SysB (system busy)
test_state	This variable specifies the test state. The only valid value is running.

Usage examples

The following table provides an example of the command.

Command example

Example of the POST command				
>POST S INSV				
S				
species that routesets are posted by routeset state				
INSV				
INSV is the routeset state				
<i>MAP response:</i>				
MRVT	InSv			
RouteSet	RS00000	Insv	Test State	idle
Route	Adjacent Node	Test Status	MRVR Received	0
0	LS00110	idle		
1	LS00120	idle		
2	LS00130	idle		
3	LS00140	idle		
Explanation: The display shows the InSv linksets to the adjacent node. These linksets are part of the routes that make up routeset RS00000.				

POST (end)**Responses**

The following table describes the MAP responses.

Command responses

Responses for the POST command	
MAP output	Meaning and action
This is not a routeset.	<p>Meaning: The specified routeset name is not correct.</p> <p>Action: Enter a valid routeset name.</p>
Invalid routeset state entered.	<p>Meaning: The specified routeset state is not correct.</p> <p>Action: Enter a valid routeset state.</p>
Invalid test state entered.	<p>Meaning: The specified MRVT state is not correct. The only valid state is running</p> <p>Action: None</p>
End of posted set	<p>Meaning: There are no routesets with the specified routeset state or MRVT state.</p> <p>Action: None</p>

QENV

Command

QENV

Directory

MAPCI;MTC;CCS;CCS7;C7OMAP;MRVT

Function

Use the QENV command to display the state of the message transfer part (MTP) routing verification test (MRVT) environment.

The MRVT environment variables displayed are:

- the D value of the T1 timer
- the maximum number of MRVTs that can run on a node at the same time

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the QENV command
<pre>>QENV MAP response: D value of T1 timer = 8 Maximum number of tests allowed = 2 Explanation: The values for D and maximum number of tests allowed are shown on the MAP display.</pre>

Responses

The following table describes the MAP responses.

Command responses

Responses for the QENV command	
MAP output	Meaning and action
D value of T1 timer = <current value> Maximum number of tests allowed = <current value>	<p>Meaning: The environment variable values are displayed.</p> <p>Action: None</p>

QPARAM

Command

QPARAM

Directory

MAPCI;MTC;CCS;CCS7;C7OMAP;MRVT

Function

Use the QPARAM command to display current values of parameters associated with the MTP routing verification test (MRVT) START command.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the QPARAM command
<pre>>QPARAM MAP response: Allowed number of STPs to traverse = 25 Trace request = YES</pre> <p>Explanation: This is the standard response for command QPARAM.</p>

Responses

The following table describes the MAP responses.

Command responses

Responses for the QPARM command	
MAP output	Meaning and action
Allowed number of STPs to traverse = <stp_trav>. Trace request = <trace_req>.	<p>Meaning: The allowed number of STPs to traverse and the trace request status are displayed where:</p> <ul style="list-style-type: none">• <stp_trav> is the allowed number of STPs to traverse• <trace_req> indicates if tracing has been requested <p>Action: None</p>

QUIT

Command

QUIT

Directory

MAPCI;MTC;CCS;CCS7;C7OMAP;MRVT

Function

Use the QUIT command to exit the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to quit one menu level.
ALL	This parameter causes the system to quit all MAP levels and display the CI level.
incrname	This variable causes the system to exit the specified level and all sublevels below it. The system displays the next higher level. Values for incrname are the names of MAP levels.
n	This variable causes the system to quit a specific number of levels. The range of this variable is 0 to 6. Do not specify a number higher than the number of levels currently open.

QUIT (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the QUIT command
<p>>QUIT ALL</p> <p><i>where</i></p> <p>ALL is the parameter that causes the system to display the CI level</p> <p><i>MAP response:</i></p> <p>The display returns to CI level</p> <p>Explanation: The system quits all open MAP levels and returns to the CI level.</p>

Responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the QUIT command	
MAP output	Meaning and action
CI :	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels currently open.</p> <p>Action: Reenter the command using an appropriate level number.</p>
The system replaces the MRVT level menu with a menu that is two or more levels higher.	<p>Meaning: You entered the quit command with an n variable value of 2 or higher, or you entered an incname variable value corresponding to two or more levels higher than the MRVT level menu.</p> <p>Action: None</p>

QUIT (end)

Command responses (Sheet 2 of 2)

Responses for the QUIT command	
MAP output	Meaning and action
The system replaces the display of the MRVT level with the display of the next higher MAP level.	
Meaning: The system exited to the previous MAP level.	
Action: None	

RTS

Command

RTS

Directory

MAPCI;MTC;CCS;CCS7;C7OMAP;MRVT

Function

Use the RTS command to return the message transfer part routing verification test (MRVT) function to an in-service (InSv) state.

Usage notes

If the MRVT function state is in-service (InSv), the node can initiate an MRVT and relay a MRVT from the network.

If the MRVT function state is manual busy (ManB), the node cannot initiate an MRVT. When the node receives an MRVT from the network it sends a message transfer part (MTP) routing verification acknowledgement (MRVA) or an MRVA and an MTP routing verification result (MRVR) local condition failure message.

If the MRVT function state is system busy (SysB), the node cannot initiate a MRVT and MRVTs received from the network cannot be processed. The SysB state indicates that the OMAP subsystem is out of service. Execute the RTS command at the SCCPLOC MAP level to return the MRVT function state to InSv or ManB.

Command parameters and variables

None

RTS (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the RTS command
<pre>>RTS MAP response: Warning: On execution of this command, MRVT test can be initiated on this node and MRVT tests from network can be relayed, are you sure you want to do this? Please confirm ("YES", "Y", "NO", or "N"): Y RTS passed Explanation: The RTS command executed successfully.</pre>

Responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the RTS command	
MAP output	Meaning and action
<pre>Warning: On execution of this commmand, MRVT test can be initiated on this node and MRVT tests from network can be relayed, are you sure you want to do this? Please confirm ("YES", "Y", "NO", or "N"):</pre>	<p>Meaning: The system prompts for confirmation to execute the RTS command or abort the RTS command.</p> <p>Action: Enter Yes or Y to execute the command. Enter No or N to abort the command.</p>
<pre>RTS passed</pre>	<p>Meaning: The RTS command executed correctly. The MVRT function is in service.</p> <p>Action: None</p>
<pre>Maintenance level already achieved.</pre>	

Command responses (Sheet 2 of 2)

Responses for the RTS command	
MAP output	Meaning and action
	<p>Meaning: The MRVT function state before issuing the RTS command was InSv or SysB.</p> <p>Action: None</p> <p>Command is in use by another user now</p> <p>Meaning: A user at another MAP terminal is executing the RTS command.</p> <p>Action: Execute the RTS command after the other user finishes</p>

SETENV

Command

SETENV

Directory

MAPCI;MTC;CCS;CCS7:C7OMAP;MRVT

Function

Use command SETENV to:

- set the D value of the T1 timer
- set the maximum number of message transfer part (MTP) verification tests (MRVT) that can run on a node at the same time

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

SETENV command parameters and variables	
Command	Parameters and variables
SETENV	DTIMER timer_value MAXTEST maximum_tests
Item	Description
DTIMER	Use this parameter to select the D value of the T1 timer. The D value is the time allowed for an SSP or STP to process an MRVT or MRVA message. A T1 timer starts whenever a node sends an MRVT. The T1 timer value is the maximum time allowed for an adjacent node to respond to an MRVT with an MRVA or MRVR message. The value of the T1 timer is calculated according the following formula: $T1=D*(N+1)$, where N is the number of nodes between the node sending the MRVT and the final destination of the MRVT.
MAXTEST	Use this parameter to select the maximum number of MRVTs that can run on a node at the same time.

SETENV (end)**Parameters and variables (Sheet 2 of 2)**

SETENV command parameters and variables	
Command	Parameters and variables
maximum_tests	This variable specifies the maximum number of MRVTs that can run on a node at the same time. The value ranges from 1 to 4.
timer_value	This variable specifies the value of D for the T1 timer. The value ranges from 1 to 16 seconds.

Usage examples

The following table provides an example of the command.

Command example

Example of the SETENV command
<pre>>SETENV DTIMER 8</pre> <p><i>where</i></p> <p>8 is the timer value</p> <p><i>MAP response:</i></p> <p>SETENV passed</p> <p>Explanation: The SETENV command executed successfully.</p>

Responses

The following table describes the MAP responses.

Command responses

Responses for the SETENV command	
MAP output	Meaning and action
<pre>Invalid symbol: <Selector> (DTIMER <D timer value> (1 TO 16), MAXTEST <maximum tests> (1 TO 4)) Enter: <Selector></pre>	<p>Meaning: The SETENV command parameter or variable is not valid.</p> <p>Action: Enter the SETENV command in the correct format using a valid parameter and variable.</p>

SETPARM

Command

SETPARM

Directory

MAPCI;MTC;CCS;CCS7;C7OMAP;MRVT

Function

Use the SETPARAM command to set parameters associated with the START command.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

SETENV command parameters and variables	
Command	Parameters and variables
SETPARM	maxstp trace
Item	Description
maxstp	Variable maxstp indicates the maximum number of signaling transfer points (STP) that can be traversed during an MTP routing verification test (MRVT). The range is 1 to 16. The default value is 4.
trace	Enter YES or Y to have MRVR messages returned by any intermediate node or destination node that detects an error. Enter NO or N to have MRVR messages returned only by the node that detects an error on an unsuccessful test. The default value is NO.

SETPARM (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the SETPARAM command
<pre>>SETPARM</pre> <p><i>MAP response:</i>SETPARM succeeds.</p> <p>Explanation: This is the standard response for the application.</p>

Responses

The following table describes the MAP responses.

Command responses

Responses for the SETPARAM command	
MAP output	Meaning and action
Warning: The trace request may generate more messages. SETPARAM succeeds.	<p>Meaning: The parameters are set successfully. The trace request parameter is YES. The user is informed that the MRVT generates additional messages.</p> <p>Action: None</p>

START

Command

START

Directory

MAPCI;MTC;CCS;CCS7;C7OMAP;MRVT

Function

Use the START command to initiate a message transfer part routing verification test (MRVT) on a posted routeset.

Usage notes

If the START command uses the NOWAIT option, other MAP commands can execute while the MRVT is running.

Test response messages do not appear on the MAP display if the MRVT level is exited and reentered during the MRVT.

If you exit the MRVT level during the MRVT, return to the MRVT level to see the test status.

Before initiating an MRVT:

- ensure that the network type is CCITT7 CHINA (14-bit point code) or NTC7 (24-bit point code)
- ensure that the OMAP subsystem is in service (InSv). The MRVT function state will be system busy (SysB) if the OMAP subsystem is not InSv.
- ensure that the MRVT function state is (InSv). Use the RTS command to place the MRVT function into the InSv state.
- set all MRVT environment variables using the SETENV command
- set all MRVT parameters using the SETPARAM command
- use the POST or NEXT commands to select the desired routeset

Do not change the datafill of the routeset or linkset tables while the MRVT is running.

START (continued)**Command parameters and variables**

The following table describes the command parameters and variables.

Parameters and variables

START command parameters and variables	
Command	Parameters and variables
START	<u>WAIT</u> NOWAIT
Item	Description
<u>WAIT</u>	The default parameter WAIT prevents the user from exiting the MRVT MAP level before the MRVT ends.
NOWAIT	Parameter NOWAIT allows the user to exit the MRVT MAP level while the MRVT is running. Commands can be issued at any MAP level while the MRVT is running.

Usage examples

The following table provides an example of the command.

Command example

Example of the START command							
>START NOWAIT							
<i>MAP response:</i>							
MRVT	InSvRouteset	RS00001	InSv	Test State			
runningRoute	Adjacent	Node	Test Status	MRVR	Number	0	
0	LS00110	running					
1	LS00120	running					
2	LS00130	running					
3	LS00140	running					
4	LS00150	running					
5	LS00160	running					
MRVT:							
Explanation: The MRVT is running on routeset RS00001.							

START (continued)**Responses**

The following table describes the MAP responses.

Command responses (Sheet 1 of 3)

Responses for the START command	
MAP output	Meaning and action
START passed	<p>Meaning: The MRVT started correctly.</p> <p>Action: None</p>
START Failed, no routeset posted.	<p>Meaning: The command failed because no routesets are posted.</p> <p>Action: Use the POST command to post the desired routesets. Post the desired routeset and reissue the START command.</p>
START Failed, this network type is unsupported yet.	<p>Meaning: The specified network type does not support the MRVT function.</p> <p>Action: Post routesets belonging to a network type that supports the MRVT function. Reenter the START command.</p>
START Failed, MRVT function is ManB now.	<p>Meaning: The MRVT function state is maintenance busy (ManB).</p> <p>Action: Use the RTS command to place the MRVT function into the InSv state.</p>
START Failed, OMAP subsystem is not in service.	<p>Meaning: The operations, maintenance and administration part (OMAP) subsystem is not in service and the MRVT function state is system busy (SysB).</p> <p>Action: From the SCCPLOC MAP level check that the OMAP subsystem state is InSv. Execute the RTS command if the OMAP subsystem state is not InSv. Check the datafill of table C7LOCSSN to ensure that all entries are correct.</p>
START failed, routeset inaccessible.	<p>Meaning: All routesets to the adjacent node of each route are either not in service or are congested.</p> <p>Action: Check the state of all routesets to the far end point code (FEPC) of each route.</p>
START failed, process failure.	

START (continued)**Command responses (Sheet 2 of 3)**

Responses for the START command	
MAP output	Meaning and action
	<p>Meaning: The switch resource is not available.</p> <p>Action: Contact your next level of support.</p> <p>START failed, destination is unknown.</p>
	<p>Meaning: The routeset was deleted by another user after command START executed.</p> <p>Action: Check table C7RTESET for the posted routeset.</p> <p>START failed, an MRVT test is running against this routeset.</p>
	<p>Meaning: An MRVT test is already running on this routeset.</p> <p>Action: Wait for the test results.</p> <p>START failed, the maximum number of MRVT tests is running on this node.</p>
	<p>Meaning: The maximum number of MRVTs are now running.</p> <p>Action: Do one of the following:</p> <ul style="list-style-type: none"> • Use the QENV or SETENV commands to display or change the maximum number of MRVTs that can run on this node at the same time. • Wait for one or more MRVTs to finish. <p>MRVT test is cancelled due to the change of datafill.</p>
	<p>Meaning: The datafill of the posted routeset changed while the MRVT was running. One of the following conditions caused the failure:</p> <ul style="list-style-type: none"> • routes in the posted routeset were added or deleted • the posted routeset was deleted <p>Action: Repeat the command and ensure that routeset information is not modified while the MRVT is running.</p> <p>The MRVT test is successful.</p>
	<p>Meaning: The MRVT was successful.</p> <p>Action: None</p> <p>The MRVT test is partially successful.</p>

START (end)

Command responses (Sheet 3 of 3)

Responses for the START command	
MAP output	Meaning and action
	<p>Meaning: The MRVT ran but was not completely successful. The MRVT message did not pass through all routesets.</p> <p>Action: Refer to the appropriate logs for details.</p> <p>The MRVT test is failed.</p> <p>Meaning: The test was not successful.</p> <p>Action: Refer to the appropriate logs to determine the cause of the failure.</p> <p>The MRVT test is timed out.</p> <p>Meaning: The MRVT test did not receive the required responses within the allocated time.</p> <p>Action: Refer to the appropriate logs to determine the reason for the time out.</p>

19 PM level commands

PM menu

Use the PM level of the MAP display to access the peripheral module (PM) maintenance system.

The PM level of the MAP display shows information about, and provides test access to, the following PMs:

- external node (EXND)
- Ethernet interface unit (EIU)
- CCS7 link interface unit (LIU7)
- CCS7 multiple link interface unit (MLIU)
- high-speed link interface unit (HLIU)
- high-speed link router (HSLR)
- link interface module (LIM)
- CCS7 multiple link interface unit (MLIU)

The following figure shows the PM level menu and status display.

Figure 19-1 PM MAP level menu

```

          CM      MS      IOD      Net      PM      CCS      LNS      Trks      Ext      APPL
          .       .       .       .       .       .       .       .       .       .
          SysB   ManB   OffL   CBSy   ISTb   InSv
PM
0 Quit      9
2 Post_     PM:
3
4
5
6
7
8
9
10
11 Disp_
12
13 Status
14 IPML
15
16
17
18
    
```

PM states

The following table describes the possible states of the PMs.

Table 1 (Sheet 1 of 2)

State	Explanation	Description
SysB	System busy	PMs have been automatically removed from service by system maintenance.
ManB	Manual busy	PMs have been manually removed from service to allow testing and other manual maintenance actions.
OffL	Offline	PMs have been temporarily removed from service.
CBSy	Central side busy	PMs connected to the network are unable to communicate with the central control (CC) because the network or the links used to carry messages between the PM and the P-side of the network are not available.

Table 1 (Sheet 2 of 2)

State	Explanation	Description
ISTb	In-service trouble	PMs are in service but have been flagged by system maintenance because of one of the following conditions: <ul style="list-style-type: none"> • a minor error condition occurred • the PM failed a routine exercise or minor audit test • the load is not listed in the corresponding data tables
InSv	In service	PMs are in service and available to support any intended processes.

Accessing the PM level

To access the PM level, enter the following command from the CI (command interpreter) MAP level:

```
>MAPCI;MTC;PM
```

and press the Enter key.

PM commands

This chapter describes commands available at the PM level of the MAP display. The commands are arranged in alphabetical order. The following commands are described in this chapter:

- DISP
- POST
- QUIT
- STATUS

DISP

Command

DISP

Sublevel

MAPCI;MTC;PM

Function

Use the DISP command to display a list of all peripheral modules (PM) in a specified type and state.

Usage notes

The DISP command is a PM level command that can be entered at any PM sublevel. If a PM type is not specified, all PMs in the same state within the subsystem are displayed.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

DISP command parameters and variables	
Command	Parameters and variables
DISP	STATE pm_state pm_type
Item	Description
pm_state	This variable specifies any of the PM state codes identified in Table NO TAGNO TAG, located on page NO TAG.
pm_type	This variable specifies any of the PM types listed in the PM type status display.
STATE	This parameter indicates that you will specify the PM state. The MAP display will show only PMs in the specified state.

DISP (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the DISP command
<pre>>DISP STATE offl liu7</pre> <p>where</p> <p>offl is the pm_state</p> <p>liu7 is the pm_type</p> <p><i>MAP response:</i> OffL LIU7: 1,12,13 Explanation: LIU7s 1, 12, and 13 are in the offline state.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the DISP command	
MAP output	Meaning and action
<pm_state> <pm_type>: NONE	<p>Meaning: No PMs of the specified state or type exist.</p> <p>Action: None</p>
<pm_state> <pm_type>: <n>, <n>, ...	<p>Meaning: The system displays the numbers of the PMs corresponding to the specified PM state and type.</p> <p>Action: None</p>

POST

Command

POST

Sublevel

MAPCI;MTC;PM

Function

Use the POST command to post a specified peripheral module (PM) for maintenance actions.

Usage notes

The POST command is qualified by the following limitations:

- If variable pm_type or parameter ALLPMS is entered alone, use the POST commands on the sublevel menus to specify a PM number or numbers to post.
- To determine which PMs are configured in an office, use the DISP command to display a list of the PM types and their ranges of discrimination numbers.
- When the command string HELP POST is entered to query the parameters of the POST command, not all of the displayed parameters apply to every office or office network. The applicability of the parameters depends on the types of PMs that are present in the office configuration. Error messages indicate the parameters that do not apply to your office.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

POST command parameters and variables	
Command	Parameters and variables
POST	ALLPMS pm_state pm_type ALL pm state pm_number
Item	Description

POST (continued)**Parameters and variables (Sheet 2 of 2)**

POST command parameters and variables	
Command	Parameters and variables
ALL	This parameter posts all PMs of the specified PM type.
pm_number	This variable is the discrimination number of a PM in the specified PM type. To enter more than one pm_number at a time, separate each pm_number entry by a space as below: 22 32 135 136 ...
pm_state	This variable specifies the state of the PM. See Table NO TAGNO TAG on page NO TAG for valid PM states.
pm_type	This variable specifies the type of PM to be posted. The default value is the PM type of the PM in the control position of the posted set. Use command STATUS to view a list of valid values.

Usage examples

The following table provides an example of the command.

Command example

Example of the POST command						
>POST ALLPMS						
<i>MAP response:</i>						
	SysB	ManB	Offl	CBsy	ISTb	InSv
PM	0	0	70	0	0	2
MTM	0	0	5	0	0	0
MTM	0	OffL				
Explanation: The PM menu changes to the maintenance trunk module (MTM) menu. Of the 70 PMs that are offline, 5 are MTMs.						

POST (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the POST command	
MAP output	Meaning and action
The system displays the menu and display level for the posted PM.	Meaning: The menu and display level for the posted PM is accessed. The POST command displays vary depending on the PM type and the posted PM set. Action: None
INVALID POST SET FAILED TO CREATE NEW POST SET	Meaning: Either you entered an incorrect pm_number, or the office is not configured for the specified pm_type. Action: None
NO PM POSTED	Meaning: The command failed because you did not enter a value for variable pm_number. Action: Enter the command again.

QUIT**Command**

QUIT

Sublevel

MAPCI;MTC;PM

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for variable incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies the number of levels to be exited. The range of levels is 0 to 6. Do not specify a number greater than the number of levels currently open.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p><i>MAP response:</i></p> <p>The display changes to the display of the next higher level.</p> <p>Explanation: The level has changed to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
CI :	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels currently open.</p> <p>Action: Reenter the command using an appropriate level number.</p>
The system replaces the PM level menu with a menu that is two or more levels higher.	<p>Meaning: You entered the QUIT command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>

STATUS**Command**

STATUS

Sublevel

MAPCI;MTC;PM

Function

Use the STATUS command to display the maintenance status of all PM types connected to the DMS-100 Family system.

Usage notes

The STATUS command can be entered at any PM sublevel.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the STATUS command						
>STATUS						
<i>MAP response:</i>						
PM	SysB	ManB	OffL	CBsy	ISTb	InSv
	4	0	10	3	3	130
TM8	0	0	4	1	1	40
LIM	1	0	1	0	0	20
MTM	1	0	0	0	0	10
DCM	1	0	0	1	0	5
OAU	0	0	0	0	0	2
LTC	0	0	0	1	0	40
LCM	1	0	5	0	1	9
MSB	0	0	0	0	1	4
Explanation: PM types are listed vertically below the header PM. The PM types in this example are unique to the office being represented. The order of listing may vary from office to office. PM-state headers are displayed as a horizontal row to the right of the menu area. The PM subsystem status is displayed by numbers at the intersection of the PM type lines and the PM state columns. The numbers give the quantity of each PM type in a state.						

STATUS (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the STATUS command						
MAP output		Meaning and action				
PM	SysB <nnn>	ManB <nnn>	OffL <nnn>	CBsy <nnn>	ISTb <nnn>	InSv <nnn>
<p>Meaning: The PM type menu and status display appears, where PM is the header to the list of displayed PM types, the other headers are the respective PM states, and is the total number of PMs that are in the respective states.</p> <p>Action: None</p>						

20 PVC level commands

PVC menu

Use the permanent virtual circuits (PVC) level of the MAP display to query and change the status of the logical communication links between a signaling transfer point (STP) and the Signaling, Engineering, and Administration System (SEAS).

Note: The PVC level is applicable only to signaling transfer point (STP) nodes.

The following figure shows the PVC menu and status display.

Figure 20-1 PVC MAP level menu

```

      CM      MS      IOD      Net      PM      CCS      LNS      Trks      Ext      APPL
      .       .       .       .       .       .       .       .       .       .

LEVEL      SEAS      History      Vol
0 Quit     Offl      D000SEASHIST .
2 POST
3
4          PVCs      Offl      ManB      RMB      SysB      InSv      INI
5          6         2         1         0         0         3         0
6          PVC      STATE      MPC      LINK      LC      PVC_TYPE      PVC_USAGE
7 BSY_     0      state      m         1         c      pvc_type      pvc_usage
8 RTS_
9 OFFL_
10
11 NEXT
12
13
14 QueryFlt
15
16
17
18

```

Accessing the PVC level

To access the PVC level, enter the following command from the CI (command interpreter) MAP level:

```
>MAPCI ;MTC ;CCS ;CCS7 ;SEAS ;PVC
```

and press the Enter key.

PVC commands

This chapter describes commands available at the PVC level of the MAP display. The commands are arranged in alphabetical order. The following commands are described in this chapter:

- BSY
- NEXT
- OFFL
- POST
- QUERYFLT
- QUIT
- RTS

BSY**Command**

BSY

Sublevel

MAPCI;MTC;CCS;CCS7;SEAS;PVC

Function

Use the BSY command to remove posted permanent virtual circuits (PVC) from service. The BSY command functions when posted PVCs are in one of the following states:

- INI (initializing)
- InSv (in service)
- OffL (offline)
- RMB (remote manual busy)
- SysB (system busy)

Usage notes

The BSY command fails when applied to the last in-service PVC. If the NOWAIT parameter was not specified in the command string, an error message appears at the MAP terminal. The PVC remains in service.

The BSY command causes a transition into the manual busy (ManB) state for all specified PVCs in the posted set.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

BSY command parameters and variables	
Command	Parameters and variables
BSY	ALL <u>WAIT</u> pvc_number NOWAIT
Item	Description
ALL	This parameter specifies all posted PVCs.

BSY (continued)

Parameters and variables (Sheet 2 of 2)

BSY command parameters and variables	
Command	Parameters and variables
NOWAIT	This parameter allows other commands to be entered at a MAP display before the BSY command finishes executing. Responses to the BSY command are bypassed, but the status in the PVC display in the control position of the posted set changes to ManB.
pvc_number	This variable identifies the number of the PVC to be busied. The range is 0 to 7.
<u>WAIT</u>	This default parameter indicates that commands cannot be entered at the MAP before the BSY command finishes executing.

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY 2 where 2 is the pvc_number MAP response: PVC: 2 -- Busy passed.</pre> <p>Explanation: PVC 2 has been placed in the manual busy state.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the BSY command	
MAP output	Meaning and action
PVC <pvc_number> -- BUSY FAILED	<p>Meaning: The posted PVC cannot enter the manual busy state. The status display of the posted PVCs does not change.</p> <p>Action: None</p>

BSY (end)**Command responses (Sheet 2 of 2)**

Responses for the BSY command	
MAP output	Meaning and action
PVC <pvc_number> -- BUSY PASSED	<p>Meaning: The posted PVC is removed from service and placed in the manual busy state. The status display of the posted PVC changes to ManB.</p> <p>Action: None</p>
PVC <pvc_number> -- CANNOT BUSY LAST INSV PVC	<p>Meaning: The system cannot busy the last remaining in-service PVC.</p> <p>Action: Return another PVC to service and enter the command on the original PVC.</p>
PVC <pvc_number> -- INVALID STATE	<p>Meaning: The command failed because the posted PVC was not in a valid state.</p> <p>Action: Verify that the PVC is in one of the following states and enter the command again:</p> <ul style="list-style-type: none"> • in service (InSv) • initializing (INI) • offline (OffL) • remote manual busy (RMB) • system busy (SysB)

NEXT

Command

NEXT

Sublevel

MAPCI;MTC;CCS;CCS7;SEAS;PVC

Function

Use the NEXT command to display the next four posted permanent virtual circuits (PVC). Since the POST command lists only the first four PVCs in a posted set, the NEXT command displays the remainder of the set.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the NEXT command
<pre>>NEXT MAP response: End of posted set. Explanation: No more posted PVCs exist.</pre>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the NEXT command						
MAP output	Meaning and action					
PVC	STATE	MPC	LINK	LC	PVC_TYPE	PVC_USAGE
<n>	<state>	<m>	<l>	<c>	<pvc_type>	<pvc_usage>
<p>Meaning: The status of the remaining posted PVCs displays.</p> <p>Action: None</p>						

OFFL

Command

OFFL

Sublevel

MAPCI;MTC;CCS;CCS7;SEAS;PVC

Function

Use the OFFL command to remove a manually busied (ManB) permanent virtual circuit (PVC) from system maintenance. Office data modifications (ODM) can be done to PVCs in the offline (OffL) state.

Usage notes

PVC must be in the ManB state before you enter the OFFL command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

OFFL command parameters and variables	
Command	Parameters and variables
OFFL	ALL <u>WAIT</u> pvc_number NOWAIT
Item	Description
ALL	This parameter causes all posted PVCs to go offline.
NOWAIT	This parameter specifies that other commands can be entered before command OFFL finishes executing. Responses to the OFFL command are bypassed, but the status in the PVC display in the control position of the posted set changes to OffL.
pvc_number	This variable identifies the discrimination number of the PVC to be offlined. The range is 0 to 7.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered until the OFFL command finishes executing.

OFFFL (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the OFFFL command
<pre>>OFFFL 2</pre> <p><i>MAP response:</i></p> <pre>PVC: 2 -- Offl passed</pre> <p>Explanation: PVC 2 is now offline.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFFL command	
MAP output	Meaning and action
PVC <pvc_number> -- INVALID STATE	<p>Meaning: The PVC could not be put into the offline state because it was in an invalid state. The PVC might already be offline.</p> <p>Action: Verify that the PVC is in the manual busy state and enter the command again.</p>
PVC <pvc_number> -- OFFFL FAILED	<p>Meaning: The system cannot put the PVC in an offline state. The status display of the PVC does not change.</p> <p>Action: None</p>

POST

Command

POST

Sublevel

MAPCI;MTC;CCS;CCS7;SEAS;PVC

Function

Use the POST command to select permanent virtual circuits (PVC) for maintenance actions. Posting a PVC does not affect its operation. If more than four PVCs exist in the posted set, only the first four PVCs display.

Usage notes

Only PVCs datafilled in table SEASMPC can be posted.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

POST command parameters and variables	
Command	Parameters and variables
POST	ALL pvc_number state
Item	Description
ALL	The parameter specifies that all PVCs in the office are to be posted.

POST (continued)**Parameters and variables (Sheet 2 of 2)**

POST command parameters and variables	
Command	Parameters and variables
pvc_number	This variable identifies the discrimination number of the PVC to be posted. The range is 0 to 7. To specify more than one PVC, enter each pvc_number separated with a space.
state	<p>This variable specifies that only those PVCs in the specified state or states will be posted. The range of values for this variable is:</p> <ul style="list-style-type: none"> • OffL (offline) • OffL (offline) • RMB (remote manual busy) • SysB (system busy) • InSv (in service) • INI (initializing) <p>To specify more than one state, enter each state separated with a space.</p>

Usage examples

The following table provides an example of the command.

Command example

Example of the POST command						
>POST ALL						
<i>MAP response:</i>						
SEAS	History Vol					
Offl	D010SEASHIST .					
PVCs	Offl	ManB	RMB	SysB	InSv	INI
6	2	1	0	0	3	0
PVC	STATE	MPC	LINK	LC	PVC_TYPE	PVC_USAGE
0	InSv	0	3	1	Timecrt	Commands
1	InSv	0	3	2	Timecrt	All
2	InSv	0	3	3	Ntimecrt	All
3	ManB	0	3	4	Ntimecrt	All
Explanation: All the PVCs and their states display.						

POST (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the POST command	
MAP output	Meaning and action
NO PVC POSTED	<p>Meaning: No PVC datafill exists in table SEASMP.</p> <p>Action: None</p>
PVC: <pvc_number> -- NOT DATAFILLED	<p>Meaning: The specified PVC cannot be posted because it is not in table SEASMP.</p> <p>Action: None</p>

QUERYFLT

Command

QUERYFLT

Sublevel

MAPCI;MTC;CCS;CCS7;SEAS;PVC

Function

Use the QUERYFLT command to display information about the faults of a posted permanent virtual circuit (PVC).

Usage notes

Although the command can be entered when the PVC is in any state, the display of the information varies depending on the current maintenance action.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the QRYFLT command
<pre>>QRYFLT MAP response: PVC: 0 -- PVC is in the INSV state, no errors detected PVC: 1 -- PVC is in the INSV state, no errors detected PVC: 2 -- PVC is in the INSV state, no errors detected Explanation: PVCs 0, 1, and 2 are in service and have no errors.</pre>

QUERYFLT (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QRYFLT command	
MAP output	Meaning and action
PVC: <pvc_number> -- MPC NOT AVAILABLE	<p>Meaning: The multi protocol controller (MPC) is not available for the posted PVC.</p> <p>Action: Check the status of the MPC. Use the IOC/IOD MAP level.</p>
PVC: <pvc_number> -- SYNCHRONIZATION IN PROGRESS	<p>Meaning: The PVC faults cannot be queried because the PVC is currently undergoing synchronization.</p> <p>Action: Repeat the command later.</p>
NO PVCs ARE POSTED.	<p>Meaning: No PVCs are posted.</p> <p>Action: Use the POST ALL command to post the PVCs.</p>

QUIT**Command**

QUIT

Sublevel

MAPCI;MTC;CCS;CCS7;SEAS;PVC

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to quit all open MAP levels and display the CI level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of levels from which to quit. The range of levels is 0 to 6. Do not enter a number higher than the number of levels currently open.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p><i>MAP response:</i> (The display changes to the display of a higher level menu.)</p> <p>Explanation: The PVC level changed to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
CI:	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels currently open.</p> <p>Action: Enter the command using an appropriate level number.</p> <p>The system replaces the PVC level menu with a menu that is two or more levels higher.</p> <p>Meaning: You entered the QUIT command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
The system replaces the display of the PVC level with the display of the next higher MAP level.	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

RTS**Command**

RTS

Sublevel

MAPCI;MTC;CCS;CCS7;SEAS;PVC

Function

Use the RTS command to return permanent virtual circuit (PVC) to service from the manual busy (ManB) state. The system attempts to communicate with the Signaling, Engineering, and Administration Center (SEAC) by placing the PVC in the initializing (INI) state.

Usage notes

If there are insufficient resources to return the PVC to service (displayed as InSv), the PVC is made system busy (SysB).

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

RTS command parameters and variables	
Command	Parameters and variables
RTS	pvc_number <u>WAIT</u> ALL NOWAIT
Item	Description
ALL	This parameter specifies that all posted PVCs are to be returned to service.
NOWAIT	This parameter specifies that additional commands can be entered before command RTS finishes executing. If the NOWAIT parameter is specified, no responses from the command are displayed. Responses to the RTS command are bypassed, but the status in the PVC display in the control position of the posted set changes to in service (InSv) or in-service trouble (ISTb) if the tests pass.
pvc_number	This variable specifies the discrimination number of the posted PVC to be returned to service. The range is 0 to 7.
<u>WAIT</u>	This default parameter indicates that additional commands cannot be entered before the RTS command finishes executing.

RTS (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the RTS command
<pre>>RTS 2</pre> <p><i>MAP response:</i></p> <pre>PVC:2 -- RTS passed.</pre> <p>Explanation: PVC 2 returned to service.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the RTS command	
MAP output	Meaning and action
<pre>PVC: <pvc_number> -- CANNOT BUSY LAST INSV PVC</pre>	<p>Meaning: The PVC cannot be put into the busy state because it is the last remaining PVC in service.</p> <p>Action: Check the status of the PVC.</p>
<pre>PVC: <pvc_number> -- INVALID STATE</pre>	<p>Meaning: Either the specified PVC cannot be returned to service because it is not in the manual busy (ManB) or SysB state, or the PVC is already in service (InSv) or ISTb.</p> <p>Action: Verify that the PVC is in the ManB state and enter the command again.</p>
<pre>PVC: <pvc_number> -- RTS FAILED</pre>	<p>Meaning: The system could not return the specified PVC to service. If insufficient resources are available for the return, the PVC becomes SysB.</p> <p>Action: Try the RTS command again later.</p>
<pre>PVC: <pvc_number> -- RTS PASSED</pre>	<p>Meaning: The specified PVC returns to service</p> <p>Action: None</p>

21 SCCPLOC level commands

SCCPLOC menu

Use the SCCPLOC level of the MAP to query or change the state of one or more signaling connection control part (SCCP) local subsystems.

The following figure shows the SCCP local subsystem menu and status display.

Figure 21-1 SCCPLOC MAP level menu

```

          CM      MS      IOD      Net      PM      CCS      Trks      Ext      APPL
          .       .       .       .       .       .       .       .       .

SCCPLoc          CCS7
0 Quit
2 Post          C7 SCCP LOCAL          1111111111112222 22222233
3              SUBSYSTEM State 01234567 8901234567890123 45678901
4
5
6
7 Bsy
8 RTS
9 Offl          Size of posted set:
10              SCCPLOC:
11
12 Next
13
14 QueryCon
15 TestSS_
16 TranTst_
17 Locate_
18 QuerySS

```

Accessing the SCCPLOC level

To access the SCCPLOC level, enter the following command from the CI MAP level:

```
>MAPCI ;MTC ;CCS ;CCS7 ;SCCPLOC
```

and press the Enter key.

SCCPLOC commands

This chapter describes commands available at the SCCPLOC level of the MAP display. The commands are arranged in alphabetical order. The following SCCPLOC commands are described in this chapter:

- BSY
- LOCATE
- NEXT
- OFFL
- POST
- QUERYCON
- QUERYSS
- QUIT
- RTS
- TESTSS
- TRANTST

BSY**Command**

BSY

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPLOC

Function

Use the BSY command to remove a posted subsystem from service.

Usage notes

The force parameter must be used if there are translations depending on the subsystem, or if the subsystem is in an available state.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

BSY command parameters and variables	
Command	Parameters and variables
BSY	subsystem ALL <u>NOFORCE</u> instance FORCE ALL
Item	Description
ALL	This parameter specifies that all local subsystems or all instances are to be busied.
FORCE	This parameter directs the system to force one or all the subsystems to be busied, even if there is the possibility of losing traffic.
instance	This variable indicates the instance to be busied.
<u>NOFORCE</u>	This default parameter directs the system to refuse the BSY command if there are translations dependent on the subsystem, or if the subsystem is in an available state. The user does not enter this parameter.

BSY (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY</pre> <p><i>MAP response:</i></p> <pre>bsy netrag force</pre> <pre>BUSY Passed</pre> <p>Explanation: The system is in the manually busy state.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 3)

Responses for the BSY command	
MAP output	Meaning and action
<pre>BSY FAILED</pre> <pre>is not a local subsystem</pre>	<p>Meaning: The system entered is not a local subsystem. The subsystem name replaces <subsystem>.</p> <p>Action: None</p>
<pre>BSY FAILED</pre> <pre>WARNING service will be affected if the local is put into a ManB state.</pre>	<p>Meaning: The subsystem specified is in the in-service state and cannot be placed into the manually busy state without losing traffic. The subsystem name replaces .</p> <p>Action: Repeat the command using the FORCE parameter, if the subsystem must be busied. Otherwise, no action is required.</p>
<pre>BSY failed</pre>	

BSY (continued)

Command responses (Sheet 2 of 3)

Responses for the BSY command	
MAP output	Meaning and action
WARNING Global title translations are associated with	<p>Meaning: Busying the subsystem can interfere with global title translations. is the subsystem name.</p> <p>Action: Enter the BSY command with the FORCE parameter, if the subsystem must be busied. Otherwise, no action is required.</p>
BSY FAILED	<p>Failed, more than one subsystem posted. Give subsystem name.</p> <p>Meaning: The BSY command was entered with no variables or parameters to indicate which subsystems are to be busied, or that all are to be busied. Since more than one subsystem is posted, the command has been refused.</p> <p>Action: Enter the bsy command with the all parameter to busy all posted subsystems, or with the name of the subsystem to busy a specific subsystem.</p>
OFFL Failed	<p>Failed, not in a ManB state.</p> <p>Meaning: The subsystem instance is being deloaded and cannot be off lined until it changes state to ManB after it is deloaded.</p> <p>Action: None</p>
RTS Failed	<p>Failed, not in a ManB state.</p> <p>Meaning: The subsystem instance is being deloaded and cannot be returned to service until it changes state to ManB after it is deloaded.</p> <p>Action: None</p>
BSY Failed	<p>Deload of SSI in progress. SSI will go ManB after deload complete.</p> <p>Meaning: The subsystem instance is already in a deload state; therefore, the BSY command is irrelevant.</p> <p>Action: None</p>

BSY (end)

Command responses (Sheet 3 of 3)

Responses for the BSY command	
MAP output	Meaning and action
BSY Passed	<p>Meaning: The subsystem is in the manually busy state. The display changes to show that the state for the subsystem is ManB, and an M appears under the indicated instance. The system initiates a subsystem critical (SSC) alarm and generates a CCS218 report.</p> <p>Action: None</p>
BSY Passed	
Deload of SSI in progress. SSI will go ManB after deload complete.	<p>Meaning: The subsystem is in the manually busy state. After all connections have been released through call completion, the state of the subsystem instance (SSI) changes to D (deload).</p> <p>Action: None</p>
Instance invalid, instance number is not bound	<p>Meaning: The instance indicated by is not bound. The command is aborted.</p> <p>Action: Enter the BSY command with a valid instance or the all parameter.</p>
Nothing posted to perform the action on	<p>Meaning: The action cannot be performed because no subsystem has been posted.</p> <p>Action: Post a subsystem and enter the command again.</p>

LOCATE**Command**

LOCATE

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPLOC

Function

Use the LOCATE command to locate a particular instance on a local subsystem.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

LOCATE command parameters and variables	
Command	Parameters and variables
LOCATE	subsystem instance ALL ALL
Item	Description
ALL	This parameter specifies either that all instances on all subsystems are to be located, or that all instances on the specified subsystem are to be located.
instance	This variable specifies the instance to be located. Valid entries are 0 to 31.
subsystem	This variable specifies the subsystem on which the instance is to be located.

Usage examples

The following table provides an example of the command.

LOCATE (continued)

Command example

Example of the LOCATE command
<pre>>LOCATE E800 ALL</pre> <p><i>where</i></p> <p>E800 is the name of the subsystem</p> <p><i>MAP response:</i></p> <pre>E800 0 resides in the Central Control</pre> <p>Explanation: The location of the instances on the E800 subsystem is displayed.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the LOCATE command	
MAP output	Meaning and action
1 instance must be INSV before subsystem goes INSV	<p>Meaning: At least one instance must be in service before the subsystem is in service.</p> <p>Action: None</p>
Application out of service because of CSC	<p>Meaning: All traffic has been switched over to another network due to a coordinated state change.</p> <p>Action: None</p>
E800 0 resides in the Central Control.	<p>Meaning: The location of the instance on the subsystem is displayed. In this example, E800 is the subsystem, 0 is the number of the instance, and central control is the location of the instance.</p> <p>Action: None</p>

LOCATE (end)**Command responses (Sheet 2 of 2)**

Responses for the LOCATE command	
MAP output	Meaning and action
Invalid input parameter.	<p>Meaning: The command string contained an invalid parameter.</p> <p>Action: Reenter the command with the correct parameter.</p>
Instance invalid, instance number is not bound.	<p>Meaning: The instance specified does not exist.</p> <p>Action: Check table SPCLOCSS for valid instances.</p>
No instance assigned to this subsystem instance	<p>Meaning: There are no instances for the subsystem specified.</p> <p>Action: None</p>
Nothing posted to perform the action on	<p>Meaning: There are no posted subsystems on which to locate instances.</p> <p>Action: Use the POST command to post the subsystem, and retry the LOCATE command.</p>
Subsystem E800TEST not in the posted set.	<p>Meaning: The subsystem specified is not posted. In this example, E800TEST is the name of the subsystem.</p> <p>Action: Use the POST command to post the subsystem, then reenter the LOCATE command.</p>

NEXT

Command

NEXT

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPLOC

Function

Use the NEXT command to display the next seven subsystems associated with the posted point code. The MAP screen displays seven subsystems at a time.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Parameters and variables

NEXT command parameters and variables	
>NEXT	
<i>MAP response:</i>	
SCCP	LOCAL 111111 11112222 22222233
Subsystem State	01234567 09012345 07090123 45670901
E800 InSV .	-----
Size of posted set: 18	
Explanation: The next set of subsystems is displayed.	

MAP responses

The following table describes the MAP responses.

Command responses

Example of the NEXT command	
MAP output	Meaning and action
End of posted set	<p>Meaning: There are no more subsystems posted.</p> <p>Action: None</p>
No posted set	<p>Meaning: Subsystems cannot be displayed because no subsystems are posted.</p> <p>Action: Post more than one subsystem and enter the command again.</p>
<pre> SCCP LOCAL 111111 11112222 22222233 SubSystem State 01234567 89012345 67890123 45678901 E800 InSv . ----- E800TEST ManB M----- PVN InSv . ----- PVNTEST InSv . ----- NETRAG InSv . ----- CLASS InSv . ----- Size of posted set: 18 </pre>	<p>Meaning: The next set of seven posted subsystems is displayed.</p> <p>Action: None</p>

OFFFL

Command

OFFFL

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPLOC

Function

Use the OFFFL command to set a posted subsystem to the offline state.

Usage notes

The subsystem must be in the manually busy state before it can be taken offline.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

OFFFL command parameters and variables	
Command	Parameters and variables
OFFFL	subsystem ALL
Item	Description
ALL	This parameter specifies that all posted subsystems are to be taken offline.
subsystem	This variable specifies the subsystem to be taken offline.

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFFL command
<pre>>OFFFL MAP response: Offline passed.</pre> <p>Explanation: The poste dsystem is offline.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFL command	
MAP output	Meaning and action
Nothing posted to perform the action on	<p>Meaning: There are no subsystems posted.</p> <p>Action: Use the POST command to post the subsystem, then try the OFFL command again.</p>
FAILED, subsystem not in the MANB state.	<p>Meaning: The specified subsystem is not in the manually busy state.</p> <p>Action: Use the BSY command to busy the subsystem, then try the OFFL command again.</p>
OFFLINE Passed	<p>Meaning: The requested subsystem is in the offline state. The system generates a CCS212 log report and removes the subsystem critical (SSC) alarm.</p> <p>Action: None</p>
subsystem is not in the posted set	<p>Meaning: The subsystem entered is valid, but it is not posted.</p> <p>Action: Enter the command again using a posted subsystem. Or use the POST command to post the subsystem, then enter the OFFL command again.</p>

POST

Command

POST

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPLOC

Function

Use the POST command to select a subsystem for maintenance activities.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

POST command parameters and variables	
Command	Parameters and variables
POST	subsystem ALL
Item	Description
ALL	This parameter directs the system to post all local subsystems.
subsystem	This variable specifies the subsystem to be posted.

POST (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the POST command
<p>>POST NETRAG</p> <p><i>where</i></p> <p>NETRAG is the subsystem name</p> <p><i>MAP response:</i></p> <p>Subsystem State</p> <p>NETRAG InSv</p> <p>Explanation: The NETRAG subsystem is posted.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the POST command	
MAP output	Meaning and action
<pre> 111111 11112222 22222233 SUBSYSTEM STATE 01234567 89012345 67890123 45678901 E800 InSv .----- ----- SIZE OF POSTED SET: 1 </pre>	<p>Meaning: The post parameters have been accepted by the system. The system displays the subsystems in the posted set, giving the subsystem name, the state of the subsystem, the status of each instance, and the number of posted subsystems.</p> <p>Action: None</p>
<p>Duplicated subsystem name in command line</p>	<p>Meaning: The command contained the same subsystem name more than once.</p> <p>Action: Reenter the command using only one subsystem name.</p>
<p>Invalid input parameter</p>	

POST (end)

Command responses (Sheet 2 of 2)

Responses for the POST command	
MAP output	Meaning and action
	<p>Meaning: The POST command has been entered with the wrong combination of parameters. If the selector code is missing, this error message is displayed.</p> <p>Action: Reenter the command with the correct combination of parameters.</p>
Invalid subsystem name C7RTESET	<p>Meaning: The subsystem entered is not a valid local subsystem. In this example, C7RTESET is the entered subsystem name.</p> <p>Action: Repeat the command using a valid local subsystem.</p>
NETRAG2 is not a local subsystem	<p>Meaning: The subsystem entered is not a local subsystem. The name of the subsystem entered replaces NETRAG2.</p> <p>Action: Repeat the command using a valid local subsystem.</p>

QUERYCON

Command

QUERYCON

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPLOC

Function

Use the QUERYCON command to list the number of active connections on a local subsystem instance (SSI) which is in an in-service (InSv), in-service (ISTb) trouble or deload state. Use the information to determine the impact of using the BSY command to override deload. Deload is, deferring a manual busy action of an SSI until all SCCP Class 2 connections are released.

Usage notes

Use the QUERYCON command on local SSIs which use Class 2 SCCP messaging.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYCON command parameters and variables	
Command	Parameters and variables
QUERYCON	subsystem subsystem_num ALL
Item	Description
ALL	This parameter directs the system to post all local subsystems.
subsystem	This variable specifies the subsystem to be queried on.
subsystem_num	This variable specifies the subsystem instance number. The range of values is 0 to 31.

QUERYCON (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERYCON command	
<pre>>QUERYCON BSAP</pre>	
<p><i>where</i></p> <p>BSAP is the subsystem name</p> <p><i>MAP response:</i></p>	
<pre>C7 SCCP LOCAL 111111 11112222 22222233 SubSystem State 01234567 89012345 67890123 45678901 BSAP INSV O....D.- -----</pre>	
<pre>BSAP instance: 5 Number of active connections: 16</pre>	
<p>Explanation: The number of active connections is displayed for the entire subsystem.</p>	

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the QUERYCON command	
MAP output	Meaning and action
<pre>BSAP Instance: 5 Number of active connections: 16</pre>	<p>Meaning: The number of active connections for subsystem instance number 5 is 16.</p> <p>Action: None</p>
<pre>Instance 5, QueryCon failed. Instance not in service.</pre>	<p>Meaning: The subsystem instance chosen was not in an in-service, in-service trouble, or deload state.</p> <p>Action: None</p>
<pre>Query connection facility not available for \$ subsystem.</pre>	

QUERYCON (end)**Command responses (Sheet 2 of 2)**

Responses for the QUERYCON command	
MAP output	Meaning and action
	<p>Meaning: The subsystem instance uses connectionless messaging; therefore, this subsystem instance does not support the QUERYCON command.</p> <p>Action: None</p>
No such subsystem.	<p>Meaning: The subsystem instance chosen is not correct.</p> <p>Action: Enter the correct subsystem instance.</p>
Subsystem not in the posted set.	<p>Meaning: The QUERYCON command requires a posted subsystem.</p> <p>Action: Use the POST command to post the subsystem.</p>
Instance <num>: Querycon failed.	
Instance not datafilled.	<p>Meaning: The subsystem instance chosen is not datafilled.</p> <p>Action: Use the QUERYCON command on subsystem instances which are datafilled.</p>
Instance <num>: Querycon failed.	
LIU7 not in service.	<p>Meaning: The subsystem chosen is not on an in-service link interface unit (LIU).</p> <p>Action: Use the QUERYCON command on subsystem instances which are on in-service LIUs.</p>
Instance <num>: Querycom failed.	
Inter-node messaging failed.	<p>Meaning: Communication between the subsystem instance and the LIU failed.</p> <p>Action: None</p>
Instance <num>: Querycon failed.	
Instance number out of range [0-31]	<p>Meaning: The subsystem instance number entered is out of the 0 to 31 range.</p> <p>Action: Enter a subsystem instance number within the 0 to 31 range.</p>

QUERYSS

Command

QUERYSS

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPLOC

Function

Use the QUERYSS command to display a list of local subsystem names.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERYSS command
<pre>>QUERYSS MAP response: E800 E800TEST PVC PVCTEST NETRAG CLASS CMS</pre> <p>Explanation: A list of subsystem names is displayed.</p>

QUERYSS (end)**MAP responses**

The following table describes the MAP responses.

Command responses

Responses for the QUERYSS command	
MAP output	Meaning and action
E800 E800TEST PVC PVCTEST NETRAG CLASS CMS	<p>Meaning: The local subsystems are listed.</p> <p>Action: None</p>
No local subsystems	<p>Meaning: There are no local subsystems.</p> <p>Action: None</p>

QUIT

Command

QUIT

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPLOC

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

Not applicable

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incname n
ITEM	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0 to 6. However, the system cannot accept a level number higher than the number of the current level.

QUIT (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the QUIT command
<p>>QUIT</p> <p><i>MAP response:</i></p> <p>CCS7 :</p> <p>Explanation: The SCCPLOC sublevel has changed to a previous CCS7 sublevel.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the QUIT command	
MAP output	Meaning and action
<p>CI :</p>	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
<p>Nothing posted to perform the action on</p>	<p>Meaning: The command cannot be performed because no subsystems have been posted.</p> <p>Action: Post a subsystem and enter the command again.</p>
<p>QUIT -- Unable to quit requested number of levels</p> <p>Last parameter evaluated was: 1</p>	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.</p> <p>Action: Reenter the command using an appropriate level number.</p>

QUIT (end)

Command responses (Sheet 2 of 2)

Responses for the QUIT command	
MAP output	Meaning and action
	<p>The system replaces the SCCPLOC level menu with a menu that is two or more levels higher.</p> <p>Meaning: You entered the quit command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
	<p>The system replaces the display of the SCCPLOC level with the display of the next higher MAP level.</p> <p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

RTS**Command**

RTS

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPLOC

Function

Use the RTS command to return a subsystem to service.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

RTS command parameters and variables	
Command	Parameters and variables
RTS	subsystem ALL
ITEM	Description
ALL	This parameter specifies that all subsystems are to be returned to service.
subsystem	This variable specifies the subsystem to be returned to service.

Usage examples

The following table provides an example of the command.

Command example (Sheet 1 of 2)

Example of the RTS command
>RTS
<i>MAP response:</i>

RTS (end)

Command example (Sheet 2 of 2)

Example of the RTS command
RTS Passed
Explanation: The subsystem is returned to service.

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the RTS command	
MAP output	Meaning and action
RTS failed	Failed, subsystem is not in the MANB state Meaning: The subsystem is not in the manually busy state. Action: Use the BSY command to put the subsystem in the manually busy state, and enter the RTS command again.
RTS failed	Invalid subsystem name subsystem Meaning: The subsystem name entered is invalid. Action: Reenter the RTS command with a valid subsystem parameter.
RTS Passed	Meaning: The subsystem is returned to service. The subsystem critical (SSC) alarm is removed, and logs CCS219 and CCS220 are generated. Action: None

TESTSS**Command**

TESTSS

Sublevel

MAPCI;MTC;CCS;SCCPLOC

Function

Use the TESTSS command to test the ability of a subsystem to respond to a query message.

Usage notes

The TESTSS command is qualified by the following restriction: the sets of parameters and variables used with this command are application specific. It is likely that not all the parameters and variables explained in this manual are applicable to your system.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

TESTSS command parameters and variables	
Command	Parameters and variables
TESTSS	subsystem cgp_addr lata cdp_addr timeout PVN cgp_addr lata call_type cdp_addr timeout REPLDIGS clg_num cld_num dialed_dig ncos timeout ACCS clg_num cld_num blg_num pin CCV clg_num cld_num pin blg_num BNS clg_num cld_num blg_num
Item	Description
ACCS	This parameter specifies the automatic calling card system (ACCS) for the US market.
blg_num	This variable is the billing number for the dialed call.
BNS	This parameter specifies the billed number screening system for the Canadian market.

TESTSS (continued)**Parameters and variables (Sheet 2 of 2)**

TESTSS command parameters and variables	
Command	Parameters and variables
call_type	This variable is the type of private virtual network (PVN) call to be verified. Valid entries are ext, pvn, and rem. Use ext for extension calls within an area-wide business group; pvn for normal calls from a dedicated PVN line or a business group line; and rem for remote access calls.
CCV	This parameter specifies the calling card validation system.
cdp_addr	This variable is the called party address.
cgp_addr	This variable is the calling party address.
cld_num	This variable is the calling number to which the call is dialed, in the form ONPANXXXXXX.
clg_num	This variable is the calling number from which the call is dialed, in the form NPANXXXXXX.
dialed_dig	This variable is the actual called number digits.
lata	This variable is the calling party local access and transport area (LATA).
ncos	This variable is the network class of service (NCOS).
pin	This variable is the personal identification number (PIN) associated with the calling number, in the form XXXX.
PVN	This parameter specifies the PVN system.
REPLDIGS	This parameter specifies the replication of dialed digits system.
subsystem	This variable identifies the local subsystem.
timeout	This variable is the maximum duration of the test. Note: In most cases, the format for the timeout variable is simply the number of the timeout duration. However, for testing the PVN system the word "timeout" must precede the number, so the format of the timeout variable is: timeout <nn>.

TESTSS (continued)**Usage examples**

The following table provides examples of the command.

Command example

Example of the TESTSS command
<pre>>TESTSS E800 6132301144 123 8002251109 15</pre> <p><i>where</i></p> <p>E800 is the name of the subsystem 6132301144 is the calling party address (cgp_addr) 123 is the calling party LATA 8002251109 is the called party address 15 is the timeout</p> <p><i>MAP response:</i></p> <p>The response from the database took 0 minutes, 0 seconds, 100 milliseconds</p> <p>The following number is the carrier number The number is 488</p> <p>The following number is the routing number The number is 8196211234</p> <p>Billing indicator call type is 141C Billing indicator SFI is 555C</p> <p>The following is the call gapping information The following number is the dialed number or ACG range The number is 800225</p> <p>ACG is due to: Caller out of band ACG should be initiated for 64 seconds ACG should have a length of 11 seconds</p> <p>Note: ACG has not been initiated</p> <p>The following is a request to send termination data Request data is FD000000</p> <p>Note: no termination data will be sent to the database.</p> <p>Explanation: The response to the query is displayed.</p>

TESTSS (continued)

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
ACG is due to: caller out of band	<p>Meaning: This is part of a correct response from the service control point (SCP) database. Automatic call gapping (ACG) has been applied to this called-party address. In this response, caller out-of-band is the reason for ACG. The possible reasons for ACG are</p> <ul style="list-style-type: none"> • caller out of band • database overload • mass calling of destination • sms initiation • vacant code <p>Action: None</p>
ACG is due to: UNKNOWN CAUSE Cause code is: 6	<p>Meaning: This is an error condition. ACG has been applied to this called-party address. The system was unable to determine why ACG was applied. In this example, the SCCP received from the SCP database the error indicator code, 6, which was out-of-range for valid causes. The possible range of codes is 6 to 225.</p> <p>Action: Reenter the command.</p>
ACG is in effect for that number. QUERY BLOCKED	<p>Meaning: Call gapping is in effect for the number or for a range of numbers that includes the queried number.</p> <p>Action: None</p>
ACG is in effect for this calling number. Query not sent.	

TESTSS (continued)**Command responses (Sheet 2 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: Call gapping is in effect for the number or for a range of numbers that includes the queried number.</p> <p>Action: None</p>
ACG should be initiated for 128	<p>Meaning: The system is advising that the ACG should be applied for the time given. The duration for this example is 128. Possible durations are 1, 2, 4, 8, 16, 128, 256, 512, 1024, or 2048 seconds, or indefinitely.</p> <p>Action: None</p>
ACG should be initiated for an unknown duration.	<p>Meaning: The system received an unknown ACG duration code from the SCP database.</p> <p>Action: Try the command again, or check the SCP database.</p>
ACG should have a gap length of 30 seconds	<p>Meaning: This is part of a correct response. An example of gap between calls to the SCP database is shown, where 30 is the duration in seconds. Possible values for the gap length are 0, 3, 4, 6, 8, 11, 16, 22, 30, 42, 58, 81, 112, 156, 217, or 300.</p> <p>Action: None</p>
ACG should have a gap length of unknown length.	<p>Meaning: The SCCP received an unknown ACG duration code from the SCP database.</p> <p>Action: Try the query again.</p>
An error is recognized in the TCAP decoding facilities.	<p>Meaning: The received message contained an error. It was detected by transaction capability application part (TCAP), which rejected the query.</p> <p>Action: Try the query again.</p>
Alternate carrier is: 110	<p>Meaning: The parameter is the carrier type specified.</p> <p>Action: None</p>

TESTSS (continued)

Command responses (Sheet 3 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
An invalid component type has been received. Component type is: 5	<p>Meaning: The valid component types in a response message are: invoke, invoke not last, reject, or error. The system received a component that was not one of these. The system will try to decode this and any other components in the response message, but will no longer attempt to send any response that would normally be sent if the message was valid.</p> <p>Action: None</p>
Announcement index is x x is an integer	<p>Meaning: An unknown announcement was received. This is the numeric value of the announcement code.</p> <p>Action: None</p>
Announcement parameter has illegal length of x x is an integer	<p>Meaning: The announcement parameter should be 1 byte long. In this example, the variable x represents a number of bytes that is not 1 byte. Therefore, this group will not be decoded.</p> <p>Action: None</p>
Another verification process is currently running. Multiple queries are not allowed.	<p>Meaning: Only one verification query is allowed at the office at any one time.</p> <p>Action: Wait until the current query has completed, they retry the command. The maximum wait on a query is 225 s.</p>
An unknown component type. Component type is: 3	<p>Meaning: A component has been received that is either unexpected or of an entirely unknown type.</p> <p>Action: None</p>

TESTSS (continued)**Command responses (Sheet 4 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
Authorization code is: x x is a 7 to 12 digit number.	<p>Meaning: This is the number that the user has entered as an authorization code.</p> <p>Action: None</p>
Automatic call gapping is in effect for that number. Query blocked.	<p>Meaning: Call gapping is in effect for the number or for a range of numbers that includes the number.</p> <p>Action: Wait for a short period, then retry the command.</p>
Billing customer ID is x x is a 10 digit number.	<p>Meaning: The billing customer ID identifies the business customer group that the user is attached to.</p> <p>Action: None</p>
Billing indicator parameter has illegal length of x x is an integer.	<p>Meaning: The billing indicator parameter should be 4 bytes long. In this example, the variable x represents a number of bytes that is not 4 bytes. Therefore, this group will not be decoded.</p> <p>Action: None</p>
Billing number invalid	<p>Meaning: The billing number, entered as a parameter of the command, was not recognized by the system.</p> <p>Action: Reenter the command using a correct billing number.</p>
Billing number is wrong length Need NPANXXXXXXXXX (10 digits)	<p>Meaning: The system only recognizes a billing number of ten digits.</p> <p>Action: Reenter the command using a correct billing number.</p>

TESTSS (continued)

Command responses (Sheet 5 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
Billing number is <nn>	<p>Meaning: The SCP database has replied to the query with the billing number, where <nn> is the billing number.</p> <p>Action: None</p>
Billing number is x x is a 10 digit number.	<p>Meaning: This is the billing number that is placed in the AMA record for billing purposes.</p> <p>Action: None</p>
BSDB has requested termination information.	<p>Meaning: The BSDB has requested termination information about the call. The verification feature will always respond with an answer indication of no.</p> <p>Action: None</p>
BSDB has requested the SSP to play an announcement and collect digits.	<p>Meaning: The BSDB has sent a conversation with permission message. The only allowed component type is an invoke, and the operation should be to play an announcement and collect digits. You will have to enter digits and the SSP will send these back to the BSDB for verification.</p> <p>Action: Enter the digits when requested.</p>
BSDB has sent a play announcement message	<p>Meaning: The call that the verification query simulates would be routed to an announcement.</p> <p>Action: None</p>
BSDB has sent a response message.	<p>Meaning: The BSDB has sent a response to the query from the service switching point (SSP).</p> <p>Action: None</p>
BSDB has sent call gapping information.	

TESTSS (continued)**Command responses (Sheet 6 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: Part of the message from the BSDB informs the SSP that it should initiate call gapping. The system will decode the rest of the ACG message.</p> <p>Action: None</p> <p>BSDB has sent routing information.</p>
	<p>Meaning: In response to the query from the SSP, the BSDB has sent a routing message which tells the SSP where to route the call.</p> <p>Action: None</p> <p>Call will be routed to x</p> <p>x is: resource overflow, unassigned number, call not allowed, disconnected number, vacant code, recall dial tone, collect digits announcement A, collect digits announcement B, collect digits announcement C, collect digits announcement D, collect digits announcement E, collect digits announcement F, reorder tone, dial tone, changed number, or an unknown announcement.</p>
	<p>Meaning: The user will hear what has been datafilled for the given announcement.</p> <p>Action: None</p> <p>Called number invalid</p>
	<p>Meaning: Part of the 800 number used was non-numeric. Either a letter or a control character was included.</p> <p>Action: Verify the number and retry the command using a valid number.</p> <p>Called number is wrong length</p> <p>Need 800NXXXXXX</p>
	<p>Meaning: An 800 number must be ten digits, including 800.</p> <p>Action: Verify the number and retry the command using a valid number.</p> <p>Called number must start with 800</p>
	<p>Meaning: The number entered did not start with 800.</p> <p>Action: Retry the command using a valid number.</p> <p>Caller interaction operation is incorrect.</p> <p>Operation requested is: 5</p>

TESTSS (continued)

Command responses (Sheet 7 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The BSDB has sent a conversation with permission message. The only allowed operation is play announcement and collect digits. This was not the operation.</p> <p>Action: None</p>
Calling number invalid	<p>Meaning: Part of the calling number was non-numeric. Either a letter or a control character was included.</p> <p>Action: Retry the command using a valid number.</p>
Calling number is wrong length Need NPANXXXXXXX (10 digits)	<p>Meaning: The calling number is of incorrect length. It must have ten digits.</p> <p>Action: Retry the command using a valid number.</p>
Call would be routed to disconnected number announcement	<p>Meaning: This is part of a correct response from the SCP database. A correct call, if made with the selected parameters, would be routed to the identified announcement. In this example, the announcement is disconnected number. The possible announcements are</p> <ul style="list-style-type: none"> • busy • disconnected number • no circuit available • out-of-band • reorder • vacant code <p>Action: None</p>
Call would be routed to changed number announcement #1 special announcement	

TESTSS (continued)**Command responses (Sheet 8 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: This is part of a correct response from the SCP database. A correct call, if made with the selected parameters, would be routed to the identified announcement. In this example the announcement is changed number announcement #1. The possible announcements are</p> <ul style="list-style-type: none"> • changed number announcement #1 • changed number announcement #2 <p>Action: None</p> <p>Call would be routed to transition 800 number special route</p>
	<p>Meaning: This is part of a correct response from the SCP database. A correct call, if made with the selected parameters, would be routed to the identified announcement, where the announcement is one of the following:</p> <ul style="list-style-type: none"> • US-assigned number • transition 800 number • valid 800—out-of-zone subscriber <p>Action: None</p> <p>Call would be routed to an unknown announcement</p> <p>Unknown announcement code is 23</p>
	<p>Meaning: This is an error message. The SCP database sent an unidentified announcement code to the SCCP, where the announcement code is a number in the range 8 to 255. The SCCP is unable to display the cause for the call not being completed.</p> <p>Action: Retry the command using the same query data.</p> <p>Call would be routed to an unknown special announcement</p> <p>Special announcement code is 17</p>
	<p>Meaning: This is an error message. The SCP database sent an unidentified special announcement code to the SCCP, where the announcement code is a number in the range 8 to 255. The SCCP is unable to display the cause for the call not being completed.</p> <p>Action: Retry the command using the same query data.</p> <p>Call would be routed to an unknown route</p> <p>Unknown route code is 123</p>

TESTSS (continued)

Command responses (Sheet 9 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: This is an error message. The SCP database sent an unidentified special route code to the SCCP. The special route code is a number in the range 8 to 255. The SCCP is unable to display the cause for the call not being completed.</p> <p>Action: Retry the command using the same query data.</p>
Calling card service denial is no service denial	<p>Meaning: The call would be denied; in this example, no service denial is the reason given. The following are possible reasons for denial:</p> <ul style="list-style-type: none"> • no PINs assigned • no service denial • service denial PIN hunting <p>Action: None</p>
Calling card service denial is of unknown type Unknown calling card service denial is <nn>	<p>Meaning: This is an error message. TCAP was unable to identify the code from the subsystem, where <nn> is the code received.</p> <p>Action: Retry the command.</p>
Calling number (ANI) is: x x is a 3 to 10 digit number	<p>Meaning: This parameter should only be sent when the BSDB is trying to initiate automatic call gapping on a range of numbers.</p> <p>Action: None</p>
Cant allocate mailbox – query aborts	<p>Meaning: The mailbox system in the switch is either fully loaded or has become corrupted.</p> <p>Action: Check logs to determine the cause for the failure.</p>
Cant create mailbox pool – query aborts	<p>Meaning: The mailbox system in the switch is either fully loaded or has become corrupted.</p> <p>Action: Check logs to determine the cause for the failure.</p>

TESTSS (continued)**Command responses (Sheet 10 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
Carriers indicators are no preferred carrier	<p>Meaning: A carrier has not been defined for this call.</p> <p>Action: None</p>
CCAN service denial indication is no PIN assigned	<p>Meaning: The calling card account number (CCAN) is returned for calling card validation (CCV). In this example, the announcement is no PIN assigned. The announcement is one of the following:</p> <ul style="list-style-type: none"> • no PIN assigned • no service denial • service denial on the CCAN <p>Action: None</p>
CCAN is 10	<p>Meaning: The SCP database has identified the CCAN. The switch repeats the number on the MAP display, where the number is in the range of 0-20.</p> <p>Action: None</p>
Collect acceptance indication is accept all collect calls	<p>Meaning: The SCP database has identified the query and is replying with the acceptance status. The acceptance status has one of the following values:</p> <ul style="list-style-type: none"> • accept all collect calls • accept all collect calls; reject inter-LATA • accept all collect calls; ver inter-LATA • allow no collect calls • allow no collect calls at customer request • nil collect acceptance • verify all collect calls <p>Action: None</p>
Component <nn> is of invalid type <xx>	

TESTSS (continued)

Command responses (Sheet 11 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: This is an error message. The SCP database has sent an invalid component code to the SCCP. The SCCP treats this component code as an incomplete message and sends this message to the display. The component code sent by the SCP database is given in the place of <nn>, and the component type code expected by the SCCP is given in place of <xx>.</p> <p>Action: Retry the command.</p>
Destination number is x x is a 7 to 12 digit number.	<p>Meaning: The destination number is used for CCS7 trunks.</p> <p>Action: None</p>
Dialed number is x x is a 7 to 12 digit number.	<p>Meaning: This is the number that the user dialed.</p> <p>Action: None</p>
Did not receive BSDB response after <n> seconds.	<p>Meaning: The system did not receive a response from the database before the timeout duration expired.</p> <p>Action: Specify a longer timeout duration.</p>
Digits not encoded properly. Encoding type is: <nn>	<p>Meaning: This is an error message. The SCP database is unable to decode the message from SCCP, where <nn> is the encoding type received.</p> <p>Action: Retry the command.</p>
Duplicate announcement component received.	<p>Meaning: The feature has already decoded an announcement component in the current message. Only one announcement component should ever appear in a single message.</p> <p>Action: None</p>
Duplicate call gapping component received.	

TESTSS (continued)**Command responses (Sheet 12 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The feature has already decoded a call gapping component in the current message. Only one call gapping component should appear in a a single message.</p> <p>Action: None</p>
Duplicate or invalid announcement parameter	<p>Meaning: The call processing code that checks the parameter has either found something wrong with the parameter or has already decoded the parameter in this component.</p> <p>Action: Check for the cause of the failure.</p>
Duplicate or invalid authorization code parameter	
Nature of number is: A	
Nature of number code is: B *	
Encoding type is: C	
Encoding type is: D *	
Numbering plan is: E	
Numbering plan code is: F *	
The number of digits is invalid.	
There are G digits *	
Authorization code is H	
A is not applicable or invalid.	
B, D, F, G are integers.	
C is BCD or invalid.	
E is not applicable or invalid.	
H should be 15 digits or less.	
	<p>Meaning: The SSP has received an authorization code parameter that is in some way invalid or is a duplicate. The lines marked with an asterisk (*) may or may not be present in the message. They will be printed when the preceding line says that that particular section of the parameter is invalid. The number of digits message and the digit count will appear if there are more than 15 digits in the authorization code.</p> <p>Action: Check for the cause of the failure.</p>

TESTSS (continued)

Command responses (Sheet 13 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Duplicate or invalid billing indicator parameter</p> <p>A billing indicator</p> <p>Call type B</p> <p>Fill characters present in call type *</p> <p>Service feature code C</p> <p>Fill characters present in SFI *</p> <p>A can be: primary, alternate, second alternate, overflow or unknown.</p> <p>B, C are three digit numbers.</p> <p style="padding-left: 40px;">Meaning: A billing indicator that is either a duplicate or is in some way invalid has been received. The lines marked with an asterisk (*) may or not be present. Fill characters indicate that the number in the field is incorrect and that the number is a possible reason to invalidate the parameter.</p> <p style="padding-left: 40px;">Action: None</p> <p>Duplicate or invalid billing number parameter</p> <p>Nature of number is: A</p> <p>Nature of number code is: B *</p> <p>Encoding type is: C</p> <p>Encoding type is: D *</p> <p>Numbering plan is: E</p> <p>Numbering plan code is: F *</p> <p>The number of digits is invalid *</p> <p>There are G digits *</p> <p>Billing number is H</p> <p>A is nil or invalid.</p> <p>B, D, F, G are integers.</p> <p>C is BCD or invalid.</p> <p>E is telephony or invalid.</p> <p>H should be a 10 digit number.</p>

TESTSS (continued)**Command responses (Sheet 14 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The SSP has received a billing number parameter that is in some way invalid or is a duplicate. The lines marked with an asterisk (*) may or may not be present in the message. They will be printed when the preceding line says that that particular section of the parameter is invalid. The number of digits message and the digit count will be printed if there are not 10 digits in the billing number.</p> <p>Action: Check for the cause of the failure.</p> <p>Duplicate or invalid business customer ID parameter</p> <p>Nature of number is: A</p> <p>Nature of number code is: B *</p> <p>Encoding type is: C</p> <p>Encoding type is: D *</p> <p>Numbering plan is: E</p> <p>Numbering plan code is: F *</p> <p>The number of digits is invalid *</p> <p>There are G digits *</p> <p>Business customer ID is H</p> <p>A is nil or invalid.</p> <p>B, D, F, G are integers.</p> <p>C is BCD or invalid.</p> <p>E is nil or invalid.</p> <p>H should be a 10 digit number.</p> <p>Meaning: The SSP has received a business number ID that is in some way invalid or is a duplicate. The lines marked with an asterisk (*) may or may not be present in the message. They will be printed when the preceding line says that that particular section of the parameter is invalid. The number of digits message and the digit count will be printed if there are not 10 digits in the business number ID.</p> <p>Action: Check for the cause of the failure.</p>

TESTSS (continued)

Command responses (Sheet 15 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
Duplicate or invalid calling number (ANI) parameter Nature of number code is: A Code is: B * Encoding type is: C Encoding type is: D * Numbering plan is: E Numbering plan code is: F * Calling number (ANI) is G A is national or invalid. B, D, F are integers. C is BCD or invalid. E is telephony or invalid. G should be a 3 to 10 digit number.	<p>Meaning: The SSP has received a calling number (ANI) parameter that is in some way invalid or is a duplicate. The lines marked with an asterisk (*) may or may not be present in the message. They will be printed when the preceding line says that that particular section of the parameter is invalid.</p> <p>Action: Check for the cause of the failure.</p>
Duplicate or invalid carrier parameter Nature of number is: invalid Nature or number code is: 5 Encoding type is: invalid Encoding type is: invalid Numbering plan is: invalid Numbering plan code is: 7 There are 10 digits Primary carrier is 110	

TESTSS (continued)**Command responses (Sheet 16 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The SSP has received a carrier parameter that is in some way invalid. The nature of the number, the first encoding type, and the numbering plan can have values of invalid or not applicable. The encoding type has a value of invalid or BCD. The third, fifth, and seventh lines will be given only when preceding line says that particular section of the parameter is invalid.</p> <p>Action: Check for cause of failure.</p> <p>Duplicate or invalid destination number Nature of number code is: A Code is: B * Encoding type is: C Encoding type is: D * Numbering plan is: E Numbering plan code is: F * The number of digits is invalid * There are G digits * Destination number is H A is international, national, or network specific, or invalid. B, D, F, G are integers. C is BCD or invalid. E is telephony, private, or invalid. H should be a 7 to 12 digit number.</p> <p>Meaning: The SSP has received a destination number parameter that is in some way invalid. The lines marked with an asterisk (*) may or may not be present in the message. They will be printed when the preceding line says that that particular section of the parameter is invalid. The message containing the number of digits will appear if there are more than 12 digits in the parameter.</p> <p>Action: Check for the cause of the failure.</p>

TESTSS (continued)

Command responses (Sheet 17 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
Duplicate or invalid dialed number parameter Nature of number code is: A Code is: B * Encoding type is: C Encoding type is: D * Numbering plan is: E Numbering plan code is: F * The number of digits is invalid * There are G digits * Destination number is H A is international, national, network specific, or invalid. B, D, F, G are integers. C is BCD or invalid. E is telephony, private, or invalid. H should be 15 digits or less.	<p>Meaning: The SSP has received a dialed number parameter that is in some way invalid. The lines marked with an asterisk (*) may or may not be present in the message. They will be printed when the preceding line says that that particular section of the parameter is invalid. The message containing the number of digits will appear if there are more than 15 digits in the dialed number.</p> <p>Action: Check for the cause of the failure.</p>
Duplicate or invalid echo data parameter Echo data parameter is of incorrect length Length is: x x is an integer	<p>Meaning: An echo data parameter that is either a duplicate or of incorrect length has been received. The second line will not appear if the echo data parameter is a duplicate, but of the correct length. The echo data parameter should be 6 bytes long.</p> <p>Action: None</p>

TESTSS (continued)**Command responses (Sheet 18 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
Duplicate or invalid hop-off office number Nature of number is: A Nature of number code is: B * Encoding type is: C Encoding type is: D * Numbering plan is: E Numbering plan code is F * The number of digits is invalid * There are G digits * Hop-off office is H A is national or invalid. B, D, F, G are integers. C is BCD or invalid E is telephony or invalid. H should be a 6 digit number.	<p>Meaning: The SSP has received a hop-off parameter that is in some way invalid or is a duplicate. The lines marked with an asterisk (*) may or may not be present in the message. They will be printed when the preceding line says that that particular section of the parameter is invalid. The number of digits message will appear if there are not 6 digits in the hop-off office number.</p> <p>Action: Check for the cause of the failure.</p>

TESTSS (continued)

Command responses (Sheet 19 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Duplicate or invalid office route parameter</p> <p>A office route is route B</p> <p>If unable to route, call will C</p> <p>Call treatment code is: D *</p> <p>Call will outpulse the E number</p> <p>Call is a WATS call *</p> <p>A cab be: primary, alternate, second alternate, or unknown or unexpected.</p> <p>B is a six digit number.</p> <p>C can be: not overflow and not return, overflow to the next office route, be placed in an offhook queue, be placed in an offhook queue and overflow, be placed in a ringback queue, be placed in a ringback queue and overflow, return to SCP, be placed in an offhook queue and return, be placed in a ringback queue and return, receive an unknown call treatment indicator.</p> <p>D is an integer.</p> <p>E is routing or outpulse</p> <p>Meaning: This is the message that will be printed if an invalid office route parameter has been received. The lines marked with an asterisk (*) may or may not be present in the message. The call treatment code will only be printed if the call received an unknown call treatment indicator. If the call is a WATS call, then the last line will be printed.</p> <p>Action: None</p>

TESTSS (continued)**Command responses (Sheet 20 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
Duplicate or invalid outpulse number Nature of number is: A Code is: B * Encoding type is: C Encoding type is: D * Numbering plan is: E Numbering plan code is: F * Outpulse number is G A is network specific or invalid. B, D, F, are integers. C is BCD or invalid. E is private or invalid. G should be a 7 to 12 digit number.	<p>Meaning: The SSP has received an outpulse number parameter that is in some way invalid or is a duplicate. The lines marked with an asterisk (*) may or may not be present in the message. They will be printed when the preceding line says that that particular section of the parameter is invalid.</p> <p>Action: Check for the cause of the failure.</p>

TESTSS (continued)**Command responses (Sheet 21 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
Duplicate or invalid PIN parameter	
Nature of number is: A	
Nature of number code is: B *	
Encoding type is: C	
Encoding type is: D *	
Numbering plan is: E	
Numbering plan code is: F *	
The number of digits is invalid	
There are G digits *	
PIN is H	
A is not applicable or invalid.	
B, D, F, G are integers.	
C is BCD or invalid.	
E is nil or invalid.	
H should be 15 digits or less.	
	<p>Meaning: The SSP has received a PIN parameter that is in some way invalid or is a duplicate. The lines marked with an asterisk (*) may or may not be present in the message. They will be printed when the preceding line says that that particular section of the parameter is invalid. The number of digits message and the digit count will appear if there are more than 15 digits in the PIN.</p> <p>Action: Check for the cause of the failure.</p>

TESTSS (continued)**Command responses (Sheet 22 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
Duplicate or invalid routing number Encoding type is: A Encoding type is: B * Numbering plan is: C Numbering plan code is: D * The number is an E routing number Nature of number code is: F * Routing number is: G A is BCD or invalid B, D, F, G are integers. C is telephony or invalid E is international, national or 'invalid nature of number H can be primary, alternate, second alternate, or 'unknown or unexpected'. G is a 7 to 12 digit number.	<p>Meaning: The SSP has received a routing number parameter that is in some way invalid. The lines marked with an asterisk (*) may or may not be present in the message. They will be printed when the preceding line says that that particular section of the parameter is invalid.</p> <p>Action: Check for the cause of the failure.</p>
Duplicate or invalid routing number Encoding type is: invalid Encoding type is: 3 Numbering plan is: invalid Numbering plan code is: 2 The number is an invalid nature of number routing number Nature of number code is: 5 Routing number is: unknown or unexpected Routing number is: 007123456	

TESTSS (continued)

Command responses (Sheet 23 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The SSP has received a routing number parameter that is in some way invalid. The encoding type can be invalid or BCD. The numbering plan can be telephony or invalid. The number can be an international, national, or invalid nature of number routing number. The routing number can be primary, alternate, second alternate, or unknown or unexpected. Lines 3, 5, and 7 of this example response will not appear unless the previous line indicates that a portion of the parameter is invalid.</p> <p>Action: None</p> <p>Duplicate or invalid TCM parameter</p> <p>Encoding type is: A</p> <p>Nature of number code type is: B *</p> <p>Encoding type is: C</p> <p>Encoding type is: D *</p> <p>Numbering plan is: E</p> <p>Numbering plan code is F *</p> <p>The number of digits is invalid *</p> <p>There are G digits *</p> <p>TCM is H</p> <p>A, E are not applicable or invalid</p> <p>B, D, F, G are integers.</p> <p>C is BCD or invalid</p> <p>E is international, national or 'invalid nature of number</p> <p>H should be a 1 or 2 digit number.</p> <p>Meaning: The SSP has received a TCM that is in some way invalid. The lines marked with an asterisk (*) may or may not be present in the message. They will be printed when the preceding line says that that particular section of the parameter is invalid. The number of digits will appear if there are not 1 or 2 digits in the parameter, which should be there.</p> <p>Action: Check for the cause of the failure.</p> <p>Duplicate or unexpected call gapping parameter</p> <p>SCP call gapping parameter has illegal length of 4</p>

TESTSS (continued)**Command responses (Sheet 24 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: A private ACG parameter from the BSDb used in case of database overload has been received. However, it should be three bytes long, and is not. The parameter will not be decoded.</p> <p>Action: None</p>
Duplicate or unexpected number of digits parameter	<p>Meaning: There has already been a number of digits parameter decoded in this component or this parameter type is not allowed in this component type.</p> <p>Action: Check for the cause of the failure.</p>
Duplicate routing component received.	<p>Meaning: The feature has already decoded a routing component in the current message. Only one routing component should appear in a single message.</p> <p>Action: None</p>
Duplicate termination request received.	<p>Meaning: The feature has already decoded a termination request component in the current message. Only one termination request component should appear in a single message.</p> <p>Action: None</p>
Duplicate TCM ignored.	<p>Meaning: You have entered two TCM selectors. Only the first one will be used in formatting the query for the business services database (BSDb).</p> <p>Action: None</p>
Duplicate timeout ignored.	<p>Meaning: You have entered two timeout selectors. Only the first one will be used by the system.</p> <p>Action: None</p>
Echo data x	
x is 6 bytes in hexadecimal form.	

TESTSS (continued)

Command responses (Sheet 25 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The echo data is what the BSBD uses to correlate the termination information received from the SSP back to the original call that it was associated with.</p> <p>Action: None</p>
Enter AUTHCODE	<p>Meaning: The system prompts for an authorization code.</p> <p>Action: Enter the digits of an authorization code, or nil, or abandon.</p>
Enter PIN	<p>Meaning: The system prompts for a PIN.</p> <p>Action: Enter the digits of a PIN, or nil, or abandon.</p>
Error component received. Error is data unavailable	<p>Meaning: The SCP database received enough of the query from the SCCP to respond with an error message. All calls receiving this message are sent to reorder treatment. The error is one of the following:</p> <ul style="list-style-type: none"> • data unavailable • missing customer record • reply overdue • unavailable network resource • unexpected component sequence • unexpected data value <p>Action: None</p>
Error component received. Error is unknown type.	
Error code is <nn>	<p>Meaning: This is an error message. The SCP database received enough of the query from the SCCP to respond with an error message. The SCCP is unable to determine the reason for the error message, and provides a code in place of <nn>.</p> <p>Action: Retry the command.</p>
Error is part of private TCAP	
Byte one of error is <nn>	

TESTSS (continued)**Command responses (Sheet 26 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The SCP database is not allowed to send error components that are part of private TCAP. The SCCP does not try to decode this message.</p> <p>Action: None</p> <p>Error code is: 5</p>
	<p>Meaning: The messages received from the BSDb contained an error component. The code is only displayed when the error is unknown.</p> <p>Action: None</p> <p>Error is: unexpected component sequence</p>
	<p>Meaning: The messages received from the BSDb contained an error component. The possible error values are:</p> <ul style="list-style-type: none"> • data unavailable • missing customer record • reply overdue • unavailable network resource • unexpected component sequence • unexpected data value • unknown <p>Action: None</p> <p>Error subclass: National TCAP</p>
	<p>Meaning: The messages received from the BSDb contained an error component. The subclass can be national or private TCAP.</p> <p>Action: None</p> <p>Excess number of parameters.</p>
	<p>Meaning: This is an error message. More parameters were included in the response from the SCP database than the SCCP designates as correct.</p> <p>Action: Reenter the command.</p> <p>Excess or invalid components are in this message.</p> <p>They are:</p>

TESTSS (continued)

Command responses (Sheet 27 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: Any components that were unexpected or if a duplicate component was found, it will be decoded here.</p> <p>Action: None</p>
Expected an international number Digits will follow anyway	<p>Meaning: The SCP database expected an international dialing number.</p> <p>Action: Verify the calling party number, and reenter the command with any corrections.</p>
Family code: 5 reply required. Operation specifier: 3	<p>Meaning: A national invoke component that is in some way invalid was received. It has a family type that is unknown or was unexpected for the message type, including duplicate components in the message.</p> <p>Action: None</p>
First component is not national TCAP	<p>Meaning: The first component of the response message is part of private TCAP, and the only correct component would be national TCAP.</p> <p>Action: Verify the input parameters and reenter the command.</p>
Hop-off office is: x x is a 6 digit number.	<p>Meaning: This is the NPA-NXX of the office where the call will go from the private network to the public network if CCS7 trunks are used.</p> <p>Action: None</p>
Incorrect component type in conversation message.	<p>Meaning: The BSDB has sent a conversation with permission message. The only allowed component type is invoke, and was not. The component will no be decoded as an invalid component.</p> <p>Action: None</p>

TESTSS (continued)**Command responses (Sheet 28 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
<p>Incorrect operation</p> <p>Operation is: 5 Specifier: 3</p>	<p>Meaning: The operation portion of the termination request component should be send notification. This was not the case.</p> <p>Action: None</p>
<p>Incorrect operation specifier.</p> <p>Operation specifier is: 5</p>	<p>Meaning: The operation specifier should be send termination information, and was not in this message.</p> <p>Action: None</p>
<p>Insufficient number of parameters</p>	<p>Meaning: This is an error message. Less parameters were included in the response from the SCP database than the SCCP designates as correct.</p> <p>Action: Retry the command.</p>
<p>Intercept indication is being changed</p>	

TESTSS (continued)

Command responses (Sheet 29 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: An intercept indication applies to this query. The intercept indication is one of the following:</p> <ul style="list-style-type: none"> • being changed • changed to nonpublished number • changed with referral • disconnected without referral • may not be connected • nil • not in service • not intercepted • special intercept treatment required • temporarily connected • temporarily disconnected by customer • temporarily disconnected with referral • temporarily removed from service • vacant number <p>Action: None</p>
	<p>International digits encoded incorrectly</p> <p>Encoding type code is: <nn></p> <p>Meaning: The digits are not encoded in a format that the SCP database can read, or the encoding message is incorrect, where <nn> is the encoding type code received by the SCP database.</p> <p>Action: Retry the command.</p>
	<p>Invalid combination of PIN and called number.</p> <p>Meaning: In a remote access call, either both the PIN and called number can be entered as nil, to simulate a rotary dialed phone, or both can be valid numbers. You can't enter a nil for one and valid number for the other.</p> <p>Action: Retry the command using either nil or valid numbers for both the PIN and the called number.</p>

TESTSS (continued)**Command responses (Sheet 30 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
Invalid or duplicate originating station type parameter Originating station type is x Station type code is y * x is an extension line, a PVN or invalid. y is an integer.	<p>Meaning: The originating station type parameter is of the correct length but is in some way invalid or is a duplicate. The line marked with an asterisk (*) may or may not appear if the parameter is a duplicate.</p> <p>Action: None</p>
Invalid TCM—must be between 0 and 15.	<p>Meaning: The TCM value entered is outside of the valid range of 0 to 15, or is in some other way incorrect.</p> <p>Action: Reenter the TCM.</p>
Invoke ID: 1, Correlation ID: 0	<p>Meaning: The system responds with the invoke and correlation identification data. The ID numbers will be an integer or nil.</p> <p>Action: None</p>
LATA number invalid	<p>Meaning: The LATA number entered as a parameter was incorrect.</p> <p>Action: Retry the command using a correct LATA number.</p>
Mailbox error after receiving response.	<p>Meaning: The system mailbox that receives the response is experiencing an error condition.</p> <p>Action: Check the error logs to determine the cause of the failure.</p>
Missing mandatory announcement parameter.	<p>Meaning: The customer announcement parameter was not included in the message from the BSDB. This will cause call processing to fail.</p> <p>Action: None</p>

TESTSS (continued)

Command responses (Sheet 31 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
Missing mandatory ACG parameter.	<p>Meaning: The calling number parameter or the auto call gap parameter was not included in the message. This will cause call processing to fail.</p> <p>Action: None</p>
Missing mandatory calling number parameter.	<p>Meaning: The calling number parameter was not included in the message. This will cause call processing to fail.</p> <p>Action: None</p>
Missing mandatory echo data parameter. Termination information will not be sent.	<p>Meaning: The echo data field is what allows the BSDB to correlate the termination information with a previous query. If this is not sent, then there is no way for the BSDB to know what the call termination is about, so the data is not sent.</p> <p>Action: None</p>
Missing mandatory number of digits parameter.	<p>Meaning: The number of digits parameter is mandatory in the play announcement and collect digits message. It was not present in the message.</p> <p>Action: None</p>
Nil parameter set.	<p>Meaning: The current component has no parameters associated with it. The only components that could have a nil parameter set are a reject component and a return error component.</p> <p>Action: None</p>
No response from database within timeout of 15 seconds	<p>Meaning: A response was not received from the SCP database within the timeout period, where the timeout period is given in seconds.</p> <p>Action: Verify that the timeout level is suitable.</p>
No such subsystem	

TESTSS (continued)**Command responses (Sheet 32 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: There is no such subsystem in the list of subsystem names.</p> <p>Action: Enter the command again with a valid subsystem name.</p> <p>Note: ACG has not been initiated</p>
	<p>Meaning: This message reminds the user that the verification query will respond to, but will not initiate or terminate automatic call gapping. There may be some impact on call processing.</p> <p>Action: None</p> <p>Note: No termination data will be sent to the database</p>
	<p>Meaning: This message reminds the user that the verification feature does not send termination data to the database, because it is not a real phone call.</p> <p>Action: None</p>
	<p>Number of digits parameter has invalid length of x x is an integer</p> <p>Meaning: The number of digits parameter should be 1 byte long. In this example, the number was not 1 byte. Therefore, this group will not be decoded.</p> <p>Action: None</p>
	<p>Number requested is x x is an integer</p> <p>Meaning: An invalid number of digits was requested. This message informs the user of the total number of digits that was requested.</p> <p>Action: None</p>
	<p>Numbering plan is incorrect Numbering plan code is: <nn></p> <p>Meaning: All numbers must have the telephony numbering plan, with the exception of the carrier number, which must have an unknown numbering plan. Any other combination results in this message. The code for the numbering plan received by the SCP database replaces .</p> <p>Action: Verify the parameters in the command string, and retry the command.</p>

TESTSS (continued)

Command responses (Sheet 33 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
<p>Operation requested is incorrect. Operation number is: 5</p>	<p>Meaning: The connection operation with the routing message was not connect. This is an incorrect operation and the system aborts the command.</p> <p>Action: Check the routing message operation code.</p>
<p>Operation requested is not call gapping. Operation number is: 5</p>	<p>Meaning: The network management operation within the ACG component was not auto call gap.</p> <p>Action: Check the ACG message operation code.</p>
<p>Operation requested is not play announcement. Operation requested is: 5</p>	<p>Meaning: The interaction operation with a play announcement message should be play announcement. This did not happen.</p> <p>Action: Check announcement message operation code.</p>
<p>Operation subclass: National TCAP</p>	<p>Meaning: The system responds with the operation subclass.</p> <p>Action: None</p>
<p>Operation family is incorrect. Operation family= 3, Specifier 2</p>	<p>Meaning: The BSDB has sent a conversation with permission message. The only allowed component type is an invoke component. The operation family of the invoke component of a play announcement and collect digits message should be caller interaction. This was not the case.</p> <p>Action: None</p>
<p>Originating number invalid.</p>	

TESTSS (continued)**Command responses (Sheet 34 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The originating number was the correct length, but a non-numeric character was entered as part of the string. The system aborts the command.</p> <p>Action: Try the query again with a valid dialed number.</p> <p>Originating number must be 10 digits.</p>
	<p>Meaning: The number that is entered as the originating number or calling number must be 10 digits long. The system aborts the command.</p> <p>Action: Try the query again with the correct number or digits in the originating number.</p> <p>Originating station type is x</p> <p>x is an extension line, a PVN line or invalid.</p> <p>Meaning: The station type is one of the types listed in the response.</p> <p>Action: None</p>
	<p>Originating station type parameter is of invalid length</p> <p>Meaning: The originating station type parameter should be 1 byte long. In this example, the number was not 1 byte. Therefore, this group will not be decoded.</p> <p>Action: None</p>
	<p>Outpulse number is x</p> <p>x is a 7 to 12 digit number.</p> <p>Meaning: The outpulse number is the number that will be outpulsed on the trunk, unless the feature service indicator specifies that the routing number should be outpulsed.</p> <p>Action: None</p>
	<p>Package type is unknown or unexpected.</p> <p>Package code is: 5</p> <p>Meaning: The SSP expects package types of unidirectional, conversation, or response from the BSDB. Another package was received.</p> <p>Action: None</p>

TESTSS (continued)**Command responses (Sheet 35 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
Parameter is of unknown type – unable to decode Parameter code is: <nn>	<p>Meaning: This is an error message. A type of parameter that is unknown to the SCCP has been used, where <nn> is the parameter code received by the SCCP. The response has probably been corrupted in some way.</p> <p>Action: Retry the command.</p>
Parameter should have been ACG	<p>Meaning: The response from the SCP database included an incorrect parameter. The incorrect response is one of the following:</p> <ul style="list-style-type: none"> • ACG • ACG dialed digits • ANI number • announcement • billing number • call interaction digits • carrier number • destination number • dialed number or ACG range • echo data request • international routing number • LATA number • routing number • The verification query continues to decode the remainder of the parameters. <p>Action: None</p>
Parameter should have been of unknown type Digit type code is <nn>	

TESTSS (continued)**Command responses (Sheet 36 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: This is an error message. The SCP database has received an incorrect parameter, where <nn> is the digit type code received. The SCP database did not recognize the parameter.</p> <p>Action: Reenter the command.</p>
Parameter 5	<p>Meaning: The following is the fifth parameter in the current component.</p> <p>Action: None</p>
PIN invalid	<p>Meaning: The PIN was in an invalid format or contained non-numeric characters. The system rejected the command.</p> <p>Action: Repeat the command using a correct PIN.</p>
PIN is restricted or PIN is unrestricted	<p>Meaning: This is the status of the PIN.</p> <p>Action: None</p>
PIN is of unknown type Unknown pin type is <nnn>	<p>Meaning: The PIN entered as part of the command was in the correct format but was not recognizable by the system, where <nnn> echoes the PIN entered.</p> <p>Action: Verify the PIN, and reenter the testss command using a valid PIN.</p>
PIN is x x is a 1 to 15 digit number.	<p>Meaning: The user entered a personal identification number (PIN).</p> <p>Action: None</p>
PIN restriction indication is nil	

TESTSS (continued)

Command responses (Sheet 37 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The PIN cannot be restricted.</p> <p>Action: None</p> <p>PIN service denial is nil</p>
	<p>Meaning: There is no service to this PIN. The reason for the denial is one of the following:</p> <ul style="list-style-type: none"> • nil • no service denial • service denial due to nonpayment • service denial due to threshold exceeded <p>Action: None</p> <p>PIN service denial is of unknown type.</p> <p>Unknown pin service denial is <nnn></p> <p>Meaning: This is an error condition. The PIN service denial code received by the switch does not have a reason attached to it, where <nnn> is the PIN service denial code.</p> <p>Action: Reenter the command.</p> <p>Primary carrier is: 110</p> <p>Meaning: The parameter is the carrier type specified.</p> <p>Action: None</p> <p>Private component <nn> is of unexpected type <yy></p> <p>Meaning: A component has been received that is correct for a private TCAP but not correct for the data input, where <nn> is the private component received, and <yy> is the component type received.</p> <p>Action: Verify that the SCP database is correct, and repeat the query.</p> <p>Private digits parameter, type 3 has invalid length of 2</p> <p>Meaning: A private digits parameter must be at least four bytes long. The fourth byte contains the number of digits in the parameter, so it is not possible to continue to decode the rest of the parameter without it.</p> <p>Action: None</p>

TESTSS (continued)**Command responses (Sheet 38 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
Private digits parameter, type 3 has invalid digit count of 65	<p>Meaning: This parameter has a digit count that is above the maximum that is allowed in a private digits parameter (60). This may cause problems during decoding, so no digits will be decoded.</p> <p>Action: None</p>
Private parameter is of unknown type. Parameter type code is: <nn>	<p>Meaning: A parameter has been received that is part of private TCAP but is not identified by the switch. The parameter type code replaces <nn>.</p> <p>Action: Verify that the SCP database is correct, and repeat the query.</p>
Problem sending query.	<p>Meaning: Something in the query package has not been initialized properly and the system is unable to format the query. The system aborts the command.</p> <p>Action: Check the error logs to determine the cause of the failure.</p>
Problem sending the collected digits.	<p>Meaning: Something in the collected digits message was invalid, and the SSP was unable to format the outgoing digits message. The system aborts the command.</p> <p>Action: Check the error log for the cause of failure.</p>
Problem sending the termination information.	<p>Meaning: Something in the termination message was invalid, and the SSP was unable to format the outgoing message. The system aborts the command.</p> <p>Action: Check the error log for the cause of failure.</p>
Problem specifier: unrecognized component	

TESTSS (continued)

Command responses (Sheet 39 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The message received from the BSDB contains a reject component. The problem specifiers are:</p> <ul style="list-style-type: none"> • bad component structure • bad transaction structure • duplicate invoke ID • incorrect component portion • incorrect parameter • incorrect transaction • unexpected result • unexpected return • unexpected error • unknown • unrecognized component • unrecognized correlation ID • unrecognized error • unrecognized operation • unrecognized package • unrecognized transaction ID <p>Action: None</p> <p>Problem type: general</p> <p>Meaning: The message received from the BSDB contains a reject component. The problem types are:</p> <ul style="list-style-type: none"> • error • general • invoke • result • transaction • unknown <p>Action: None</p>

TESTSS (continued)**Command responses (Sheet 40 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
Problem with mailbox-query aborts	<p>Meaning: The DMS-100 mailbox system is either fully loaded or has been corrupted.</p> <p>Action: Check log reports to determine the cause of the error.</p>
Problem with mutual exclusion semaphore.	
Query aborts	<p>Meaning: The semaphore system has been corrupted.</p> <p>Action: Check log reports to determine the cause of the error.</p>
PVN dialed number invalid.	<p>Meaning: The number entered by the user as the dialed number is invalid. It is either too long (more than 18 characters) or a non-numeric character has been included in the number. The system aborts the command.</p> <p>Action: Retry the command with a valid dialed number.</p>
PVN extension number invalid.	<p>Meaning: The number entered by the user as the extension number is invalid. It is either too long (more than 18 characters) or a non-numeric character has been included in the number. The system aborts the command.</p> <p>Action: Retry the command with a valid extension number.</p>
RAO is <nnn>	<p>Meaning: The code of the revenue accounting office (RAO) is identified, where <nnn> is the RAO identification code. The RAO handles the billing of a call to the calling number.</p> <p>Action: None</p>
Received an unknown national parameter	
Parameter type is: 5	<p>Meaning: An unknown or unexpected national parameter was received by the SSP.</p> <p>Action: Check the parameter type.</p>

TESTSS (continued)

Command responses (Sheet 41 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
Received an unknown private parameter Parameter type is: 5	<p>Meaning: An unknown private parameter was received by the SSP.</p> <p>Action: Check the parameter type.</p>
Received bad parameter	<p>Meaning: The received message contains a parameter that has been assembled incorrectly.</p> <p>Action: Reenter the command.</p>
Record status indicator is stable record	<p>Meaning: A record status indicator is returned for CCV and billed number screening (BNS) queries. The indicator is one of the following:</p> <ul style="list-style-type: none"> • default record • nil status • transitional record • stable record <p>Action: None</p>
Received unknown private digits parameter 3	<p>Meaning: An unknown or unexpected private digits parameter was received from the BSDB.</p> <p>Action: Check to determine what digit type it is.</p>
Received unknown national digits parameter. Digits type is: 4	<p>Meaning: An unknown or unexpected national digits parameter was received from the BSDB. The parameter will not be decoded further.</p> <p>Action: Check to determine what digit type it is.</p>

TESTSS (continued)**Command responses (Sheet 42 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
SCP overload control Duplicate or unexpected call gapping parameter Call gapping is due to database overload Cause code is: 5 Duration of ACG is: 2 seconds Duration code is: 5 ACG gap length 8 Gap length code is: 6 The ACG parameter has failed to decode properly.	<p>Meaning: The SSP has received a private ACG parameter from the BSDB. This should be sent by the BSDB in case of database overload. The second line in this example would only be present if there is a duplicate parameter or a parameter not allowed in the current message. Call gapping can be due to database overload, or unknown or invalid cause. The fourth, sixth, and eighth lines will only be present if the preceding line has invalid cause or code. The duration of ACG can be 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, forever, or unknown—invalid code. The ACG gap length can be 0, 3, 4, 6, 8, 11, 16, 22, 30, 42, 58, 81, 112, 156, 217, 300, indicates ACG should be removed, or unknown—invalid code. The ninth line will not be present if any of the above sections do not meet their expected values</p> <p>Action: None</p>
Second alternate carrier is: 110	<p>Meaning: The parameter is the carrier type specified.</p> <p>Action: None</p>

TESTSS (continued)

Command responses (Sheet 43 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
Selective originating code control	
Duplicate or unexpected call gapping parameter	
Call gapping is due to database overload	
Cause code is: 5	
Duration of ACG is: 2 seconds	
Duration code is: 5	
ACG gap length 8	
Gap length code is: 6	
The ACG parameter has failed to decode properly.	<p>Meaning: The SSP has received a national ACG parameter from the BSDB. The second line in this example would only be present if there is a duplicate parameter or a parameter not allowed in the current message. Call gapping can be due to database overload, or unknown or invalid cause. The fourth, sixth, and eighth lines will only be present if the preceding line has invalid cause or code. The duration of ACG can be 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, forever, or unknown—invalid code. The ACG gap length can be 0, 3, 4, 6, 8, 11, 16, 22, 30, 42, 58, 81, 112, 156, 217, 300, indicates ACG should be removed, or unknown—invalid code. The ninth line will not be present if any of the above sections do not meet their expected values</p> <p>Action: None</p>
Semaphore did not return properly.	
Verification queries may be blocked for 5 minutes.	<p>Meaning: The semaphore system of the DMS-100 switch has failed. The system waits for the semaphore to time out, which can take up to 5 min.</p> <p>Action: Check the log reports to see if the cause of the error has been reported. Wait 5 min, then repeat the command.</p>
Sent collected digits message with caller abandon.	<p>Meaning: In response to the prompt for PIN or authorization code, you have entered abandon. This is sent to the BSDB as a conversation message with a standard user error code of caller abandon.</p> <p>Action: None</p>
Sent termination information to the BSDB.	

TESTSS (continued)

Command responses (Sheet 44 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The SSP has sent termination information to the BSDB as requested, as the BSDB is unable to tell that this is a verification query. This will always have the call marked as unanswered. The system aborts the command.</p> <p>Action: Check the log for the cause of error.</p> <p>Service or equipment is centrex line</p>

TESTSS (continued)**Command responses (Sheet 45 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The type of service or equipment that the billed number is using is identified. The type of service or equipment is one of the following:</p> <ul style="list-style-type: none"> • centrex line • customer card reader 1 • customer card reader 2 • customer coin • customer coinless • dormitory line • hotel/motel guest line • inter-LATA card reader 1 • inter-LATA card reader 2 • inter-LATA public coin • inter-LATA public coin—CCF • inter-LATA public coin—postpay • inter-LATA public coinless • inter-LATA semi public coin—CDF • nil service • other 1 • other 2 • other 3 • other 4 • PBX line with AIOD • PBX line without AIOD • POTS line • prepay—CDF • public coinless • semi-public coin CCF • semi-public coin CDF • semi-public coin postpay

TESTSS (continued)**Command responses (Sheet 46 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
(continued)	<ul style="list-style-type: none"> • operating company card reader 1 • operating company card reader 2 • operating company public coin—CCF • operating company public coin—CDF • operating company public coin—postpay <p>Action: None</p>
TCM is not valid on remote access calls.	<p>Meaning: The traveling class mark (TCM) is used to identify class of service on IBN trunks coming into the end office. With a remote access call, the users' class of service is identified by the PIN, so a TCM is never needed for those calls..</p> <p>Action: Change the type of call in the command or remove the TCM field.</p>
TCM is X	
X is a one or two digit number.	<p>Meaning: TCM is associated with calls that have class of service screening and go out on a private network. ESN has a range of 0-15 and ETN has a range of 0-7.</p> <p>Action: None</p>
The 800 system is not in service.	
Verification queries are not possible.	<p>Meaning: The local 800 system is currently out of service.</p> <p>Action: Return the subsystem to service, then reenter the command.</p>
The BNS system is not in service.	
Local application queries are not possible.	<p>Meaning: The BNS is out-of-service.</p> <p>Action: Return the system to service, then retry the command.</p>
The BSDB response took 0 minutes, 0.14 seconds	<p>Meaning: The system provides the time between the start of encoding the message and the time the response message is received.</p> <p>Action: None</p>

TESTSS (continued)

Command responses (Sheet 47 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>The BSDB response allows the user to launch another query if it is unable to route the call. Do you want to send another query?</p> <p>Meaning: The call treatment indicator field in the trunk group identifier specifies what action the service switching point (SSP) should take if unable to route the call over a particular trunk group. Several of these options specify that the SSP should send a second routing query to the BSDB for further instructions. One of these has been detected in the routing message. It might be possible for the real call to send a second query.</p> <p>Action: Enter yes to simulate the described situation. Enter no if you do not want to send another query.</p>
	<p>The component is not a national TCAP type.</p> <p>Meaning: The component of the received message is not coded as a national type. The message is rejected.</p> <p>Action: None</p>
	<p>The component is not recognized.</p> <p>Meaning: Three types of response messages are valid for GFN validation. These are return result, reject, and error. Any other type of response received for GFN is invalid.</p> <p>Action: None</p>
	<p>The CCV system is not in service.</p> <p>Local application queries are not possible.</p> <p>Meaning: The ACCS subsystem has been removed from service.</p> <p>Action: Return the subsystem to service, then retry the command.</p>
	<p>The digits are <nn></p> <p>Meaning: This message is part of a correct response. The digits received are identified in place of <nn>.</p> <p>Action: None</p>
	<p>The following is call gapping information.</p> <p>Meaning: This message precedes the call-gapping information.</p> <p>Action: None</p>

TESTSS (continued)**Command responses (Sheet 48 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
The GF<n> application subsystem is out of service.	<p>Meaning: The named subsystem is currently out of service. GF<n> is replaced by the GF and the subsystem number.</p> <p>Action: Return the subsystem to service, then reenter the command.</p>
The GF<n> application subsystem does not exist.	<p>Meaning: The TCAP software currently is not supporting the specified GF application subsystem.</p> <p>Action: Check with the switch administrator for a proper software load.</p>
The GFN contains more than 23 digits.	<p>Meaning: The GFN number contains more than 23 digits. Any digit length greater than 23 is considered an error.</p> <p>Action: Retry the command with a valid GFN number.</p>
The number is an international routing number. Routing number is: 06856956644	<p>Meaning: The routing number is given.</p> <p>Action: None</p>
The number is an national routing number. Routing number is: 9196956644	<p>Meaning: The routing number is given.</p> <p>Action: None</p>
The parameter is not a private TCAP type.	<p>Meaning: The parameter of the received message is not coded as private TCAP.</p> <p>Action: Retry the command.</p>
The PVN system is currently not in service. Verification queries are not possible.	<p>Meaning: The PVN system is currently out of service.</p> <p>Action: Return the subsystem to service, then reenter the command.</p>

TESTSS (continued)

Command responses (Sheet 49 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
The PVN tuple in table NSCDEFS has not been datafilled. Timeout defaults to three seconds.	<p>Meaning: The PVN tuple in table NSCDEFS has not been datafilled and the PVN call cannot be identified. The system aborts the command.</p> <p>Action: Datafill table NSCDEFS.</p>
The query could not be sent to the RDB it is bounced back to us by lower level of CCS7.	<p>Meaning: The query was constructed, but it was returned to the system instead of being sent to the remote database.</p> <p>Action: Verify that the MTP linksets and routesets are in service.</p>
The response from the database took 00 minutes, 00 seconds, 35 milliseconds	<p>Meaning: This information is displayed above all messages that are displayed as a result of a response from a database. This is the time from query to response; the figures in this message may be large during heavy traffic periods.</p> <p>Action: None</p>
The TCAP decoder failed to decode the response message. Packaging information is incorrect.	<p>Meaning: The TCAP decoder has failed to decode the received message.</p> <p>Action: None</p>
Third number acceptance indication is allow no 3rd number billing	

TESTSS (continued)**Command responses (Sheet 50 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The SCP database has recognized the query and has responded with the status of the third number acceptance indication. The status of the third number acceptance indication is one of the following:</p> <ul style="list-style-type: none"> • allow inter-LATA third numbers • allow no third numbers at customer request • allow no third number billing • allow third number billing • nil acceptance • verify third number <p>Action: None</p> <p>This call would be routed to reorder treatment.</p> <p>Meaning: This message appears below all database responses where a call that produced the same response is routed to reorder treatment.</p> <p>Action: None</p> <p>Treatment indication is automated tone + answer</p> <p>Meaning: The type of treatment that is available for the query is given and is one of the following:</p> <ul style="list-style-type: none"> • nil • automated—tone • automated—tone + announcement • automated—tone + answer • operator handling—customer request • operator handling—station limitations • special treatment—handicapped 1 • special treatment—handicapped 2 <p>Action: None</p> <p>Trunk group parameter has illegal length of x x is an integer</p>

TESTSS (continued)

Command responses (Sheet 51 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: The trunk group or office route number parameter should be 5 bytes long. In this example, the variable x represents a number of bytes that is not 5 bytes. Therefore, this group will not be decoded.</p> <p>Action: None</p> <p>Unable to allocate mailbox-query aborts.</p>
	<p>Meaning: The system does not have enough free memory to allocate space for the response. The system aborts the command.</p> <p>Action: Check the error logs for the reason for the failure.</p> <p>Unable to allocate mailbox pool-query aborts.</p>
	<p>Meaning: The system does not have enough free memory to allocate space for the response. The system aborts the command.</p> <p>Action: Check the error logs for the reason for the failure.</p> <p>Unable to decode response from database.</p>
	<p>Meaning: This message is displayed when the SCCP is unable to decode any part of the database response.</p> <p>Action: Enter the query again.</p> <p>Unable to decode response the BSDB.</p>
	<p>Meaning: This message from the BSDB was incorrectly formatted in some way. The system aborts the command.</p> <p>Action: Check the error logs to determine the cause of the failure.</p> <p>Unable to format SCP address for SCP query.</p>
	<p>Query aborts</p> <p>Meaning: The query was unable to format the address of the SCP node for the database query.</p> <p>Action: Verify that the datafill or the input data is correct, and reenter the query.</p> <p>Unable to send message through TCAP.</p>
	<p>Meaning: The message was blocked at the TCAP level during encoding.</p> <p>Action: Check the log reports to determine the cause of the error.</p>

TESTSS (continued)**Command responses (Sheet 52 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
Unexpected announcement operation code is <nn>	<p>Meaning: A standard announcement has been received from the database, and the announcement code is given in place of <nn>. The announcements used in 800 service are part of private TCAP only.</p> <p>Action: Check the SCP database.</p>
Unexpected component type is <nn>	<p>Meaning: The component in the SCP database reply is not correct for the SCCP, where <nn> is the component code received from the SCP database.</p> <p>Action: Repeat the command.</p>
Unexpected connection operation code is <nn>	<p>Meaning: The connection code in the invoke component is of an unknown type for the SCCP, where <nn> is the operation code received from the SCP database.</p> <p>Action: Repeat the command.</p>
Unexpected digit type for international number. Digit type code is: <nn>	<p>Meaning: International numbers must be routing number digits only. Any other digit type is rejected by the switch. The call would be routed to reorder treatment. The digit type code received by SCCP replaces <nn>.</p> <p>Action: Repeat the command.</p>
Unexpected invoke family is <nn>	<p>Meaning: The invoke component received from the database is not correct for the SCCP, where <nn> is the invoke family received from the SCP database.</p> <p>Action: Repeat the command.</p>
Unexpected national component is <nn>	<p>Meaning: The component received from the database is part of national TCAP, but it is not correct for the SCCP, where <nn> is the national component received from the SCP database.</p> <p>Action: Repeat the command.</p>
Unexpected network management operation code is <nn>	

TESTSS (continued)

Command responses (Sheet 53 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
	<p>Meaning: Part of the ACG component is invalid, where <nn> is the network operation code received from the SCP database. The only valid network management operation code in an SCP response is connection control. The call would be routed to reorder treatment.</p> <p>Action: Repeat the command.</p> <p>Unexpected or invalid operation received.</p> <p>Operation is: 5</p> <p>Meaning: The invoke component operation is not connection control, caller interaction, or network management. These are the only expected national operation types.</p> <p>Action: Determine the component operation.</p> <p>Unexpected private component is <nn></p> <p>Meaning: The component received from the SCP database is part of private TCAP, but it is not correct for the SCCP, where <nn> is the private component received from the SCP database.</p> <p>Action: None</p> <p>Unexpected return code from ACG check.</p> <p>Meaning: The test for ACG has returned a code that was invalid. The query is aborted.</p> <p>Action: Check log reports to determine the cause of the error.</p> <p>Unknown or unexpected carrier is: 110</p> <p>Meaning: The parameter is the carrier type specified.</p> <p>Action: None</p> <p>WARNING: Bad sequence of carrier parameters.</p> <p>or</p> <p>WARNING: Bad sequence of trunk group parameters.</p> <p>Meaning: The parameters were received out of sequence. For example, a second alternate route was received without an alternate route.</p> <p>Action: None</p>

TESTSS (continued)**Command responses (Sheet 54 of 55)**

Responses for the TESTSS command	
MAP output	Meaning and action
WARNING: Missing mandatory primary carrier parameter	<p>Meaning: The carrier number is a mandatory parameter for the routing message. A missing carrier number causes call processing to fail.</p> <p>Action: None.</p>
WARNING: Parameter length does not match digit count.	<p>Meaning: The length of the parameter does not match the length that the parameter should have for the number of digits that it contains. This error is not detected by the TCAP decoding procedure. Part of the digit parameter may be garbage, or may be omitted.</p> <p>Action: None</p>
***** WARNING *****	
Mutual exclusion semaphore did not return properly. Feature may be unavailable until the next restart.	<p>Meaning: The semaphore is broken or is blocking calls. The semaphore is the device that ensures that only one user can run the verification feature at any one time. The system aborts the command.</p> <p>Action: None</p>
Wrong number of billing indicators.	<p>Meaning: An incorrect number of billing indicators has been received in the response from the SCP database.</p> <p>Action: Reenter the command.</p>
x billing indicator call type y service feature code z x can be: primary, alternate, second alternate, or unknown. y, z are 3 digit numbers	<p>Meaning: These are the billing indicators associated with each trunk group. The call type is the number that would go into the AMA billing record if the call went out on the corresponding trunk group.</p> <p>Action: None</p>

TESTSS (end)

Command responses (Sheet 55 of 55)

Responses for the TESTSS command	
MAP output	Meaning and action
x digits should be collected x is: 1 to 15, 'the normal number of', or 'an invalid number of'.	<p>Meaning: This specifies how many digits the user should enter in response to the collect digits announcement.</p> <p>Action: None</p>

TRANTST

Command

TRANTST

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPLOC

Function

Use the TRANTST command to verify, through a system test, that a global title translates to the correct network address.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TRANTST command parameters and variables	
Command	Parameters and variables
TRANTST	g_title_id g_title
Item	Description
g_title	This variable is the global title.
g_title_id	This variable is the global title identifier listed in system table C7GTTYPE.

TRANTST (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the TRANTST command
<pre>>TRANTST CLASSGT 8002251109</pre> <p><i>where</i></p> <p>CLASSGT is the global title identifier</p> <p>8002251109 is the global title</p> <p><i>MAP response:</i></p> <p>The global title translates to a subsystem only.</p> <p>Subsystem: CLASS</p> <p>Explanation: The global title translates to the identified subsystem.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the TRANTST command	
MAP output	Meaning and action
Invalid translation type for global title translation	<p>Meaning: An invalid translation type has been entered.</p> <p>Action: Enter the command again, using a valid translation type for global title translation.</p>
<pre>Result is point code and subsystem Point code value: <pc_clli> Subsystem: <subsystem></pre>	<p>Meaning: An SCCP remote point code and subsystem are identified in system tables, where <pc_clli> is the point code common language location identifier (CLLI), and <subsystem> is the subsystem name.</p> <p>Action: None</p>
<pre>Result is point code only. Point code only is: <result></pre>	

TRANTST (end)**Command responses (Sheet 2 of 2)**

Responses for the TRANTST command	
MAP output	Meaning and action
	<p>Meaning: The command entered included the subsystem. The subsystem is ignored, and only the SCCP remote point code is identified. The <result> is replaced by point code only, point code and subsystem, point code and new global title type, or an error.</p> <p>Action: None</p> <p>The global title translates to a subsystem only.</p> <p>Subsystem: <subsystem></p> <p>Meaning: Only a subsystem is identified in system tables, where <subsystem> is the subsystem name.</p> <p>Action: None</p>

22 SCCPRPC level commands

SCCPRPS menu

Use the SCCPRPC level of the MAP to query or change the state of a signaling connection control part (SCCP) remote point code.

The following figure shows the SCCP remote point code menu and status display.

Figure 22-1 SCCPRPC MAP level menu

```

      CM      MS      IOD      Net      PM      CCS      Trks      Ext      APPL
      .       .       .       .       .       .       .       .       .

SCCPRPC          CCS7
0 Quit
2 Post_          1 PCC
3              C7  SCCP  REMOTE  PC
4              Point code  State  Number of SS
5              SS1ARS      InSv  2
6
7 Bsy
8 Rts
9 Offl          SCCPRPC:
10
11
12
13 SCCPRSS
14
15
16 TranTst_
17 QueryFlt
18 QuerySS

```

Accessing the SCCPRPC level

To access the SCCPRPC level, enter the following command from the CI MAP level:

```
>MAPCI ;MTC ;CCS ;CCS7 ;SCCPRPC
```

and press the Enter key.

SCCPRPC commands

This chapter describes commands available at the SCCPRPC level of the MAP display. The commands are arranged in alphabetical order. The following SCCPRPC commands are described in this chapter:

- BSY
- OFFL
- POST
- QUERYFLT
- QUERYSS
- QUIT
- RTS
- SCCPRSS
- TRANTST

BSY

Command

BSY

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC

Function

Use the BSY command to stop the routing of data to the posted remote subsystem point code and to set the point code to the manual busy state.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

BSY command parameters and variables	
Command	Parameters and variables
BSY	<u>NOFORCE</u> FORCE
Item	Description
FORCE	This parameter directs the system to force the remote subsystem point code into the manually busy state immediately, even if there is a possibility of losing traffic.
<u>NOFORCE</u>	This default parameter directs the system to refuse the BSY command if busying the remote subsystem point code will disrupt traffic. The user does not enter this parameter.

BSY (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY</pre> <p><i>MAP response:</i></p> <pre>BUSY Passed</pre> <p>Explanation: The posted subsystem is placed in the manual busy state.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the BSY command	
MAP output	Meaning and action
BSY Passed	<p>Meaning: The point code has been placed in the manually busy state. The system changes the status display of the posted point code to ManB, initiates a PCC alarm, and generates log CCS209.</p> <p>Action: None</p>
Failed, no point code posted	<p>Meaning: The command was entered for a point code that is not in the posted set.</p> <p>Action: Post the point code and enter the BSY command again.</p>
The only optional parameter is force	<p>Meaning: The command was entered with an incorrect parameter. The only parameter that can be entered with this command is the FORCE parameter.</p> <p>Action: Enter the bsy command without a parameter or with the FORCE parameter.</p>
WARNING Global title translations are associated with <routeset_name>	

BSY (end)**Command responses (Sheet 2 of 2)**

Responses for the BSY command	
MAP output	Meaning and action
	<p>Meaning: The point code is in the in-service trouble state, and global translations may be transferred to the backup point code, where <routeset_name> is the name of the routeset. The routeset name is synonymous with the point code common language location identifier (CLLI).</p> <p>Action: None</p> <p>WARNING Global title translations are associated with <routeset_name>. No available backup.</p> <p>Meaning: The point code is in the in-service trouble state. There is no backup point code. The routeset name or point code CLLI replaces <routeset_name>.</p> <p>Action: None</p> <p>WARNING There are inservice subsystems at <routeset_name>, service will be affected at these subsystems.</p> <p>Meaning: The command was not completed because there are in-service subsystems at this point code. <routeset_name> is the routeset name or point code CLLI.</p> <p>Action: None</p>

OFFFL

Command

OFFFL

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC

Function

Use the OFFFL command to set a posted remote point code to the offline state.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFFL command
<pre>>OFFFL MAP response: OFFFL Passed Explanation: The posted remote point code is offline.</pre>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFFL command	
MAP output	Meaning and action
All the subsystems must be offlined before <routeset_name> can be offlined.	<p>Meaning: At least one of the subsystems resident at the point code is not in the offline state, where <routeset_name> is the routeset name. The routeset name is synonymous with the point code common language location identifier (CLLI).</p> <p>Action: Access the SCCPRSS level of the MAP, use the OFFFL command at that level to set all subsystems to the offline state, return to the SCCPRPC level, and enter the OFFFL command again.</p>
Failed, no point code posted	<p>Meaning: The command failed because there are no point codes posted.</p> <p>Action: Use the POST command to post the selected point code and reenter the OFFFL command.</p>
Failed, <routeset_name> not in a MANB state.	<p>Meaning: The point code is not in the correct state for the system to complete the command, where <routeset_name> is the routeset name or point code CLLI.</p> <p>Action: Use the BSY command to place the point code in the manually busy state and reenter the OFFFL command.</p>
OFFFL Passed	<p>Meaning: The point code has been placed in the offline state. The system sets the posted point code to the offline state (displayed as SysB), generates log CCS208, and removes the PCC alarm for this point code.</p> <p>Action: None</p>

POST

Command

POST

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC

Function

Use the POST command to select an SCCP routeset for maintenance actions.

Usage notes

The POST command has the following limitations and restrictions:

- Only one routeset can be posted at a time.
- The routeset name is also known as the SCCP remote point code common language location identifier (CLLI). This CLLI is datafilled in table C7NETSS.
- The act of posting a routeset does not affect the system operation on the routeset.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

POST command parameters and variables	
Command	Parameters and variables
POST	routeset_name
Item	Description
routeset_name	This variable is the name of the routeset.

POST (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the POST command			
>POST C7RTESET2			
<i>where</i>			
C7RTESET2			
is the routeset name			
<i>MAP response:</i>			
Point code	State	Number of subsystems C7RTESET2	InSv
1			
Explanation: Routeset C7RTESET2 is posted.			

MAP responses

The following table describes the MAP responses

Command responses

Responses for the POST command	
MAP output	Meaning and action
Invalid CLLI	<p>Meaning: The parameter entered with the command is not a valid routeset.</p> <p>Action: Correct the routeset, then enter the POST command again.</p>
Invalid SCCP point code	<p>Meaning: The parameter entered with the command is a valid message transfer part (MTP) routeset, but not a valid SCCP routeset.</p> <p>Action: Enter the command using a valid routeset.</p>
The display changes to show the status of the posted routeset.	<p>Meaning: The requested routeset is posted.</p> <p>Action: None</p>

QUERYFLT

Command

QUERYFLT

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC

Function

Use command QUERYFLT at the SCCPRPC MAP level to provide operating company personnel with information about remote point codes (PC).

Usage notes

The user must post a point code prior to using this command.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERYFLT command
<pre>>QUERYFLT</pre> <p><i>MAP response:</i></p> <p>The remote point code SCCP is unavailable.</p> <p>Explanation: The remote point code SCCP is unavailable. The PC becomes SysB when it receives a user part unavailable (UPU) message from the remote PC.</p>

QUERYFLT (end)**Responses**

The following table describes the MAP responses.

Command responses

Responses for the QUERYFLT command	
MAP output	Meaning and action
The remote point code is <status>.	<p>Meaning: The response specifies that the remote PC is in one of the following states:</p> <ul style="list-style-type: none"> • in service (InSv) • offline (OffL) • in service trouble (ISTb) • system busy (SysB) <p>Action: None</p>
The remote point code is congested.	<p>Meaning: The remote point code status is ISTb because the remote PC is congested.</p> <p>Action: None</p>
Failed, no point code posted.	<p>Meaning: The command was used before posting a PC.</p> <p>Action: Post a PC and repeat command QUERYFLT.</p>

QUERYSS

Command

QUERYSS

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC

Function

Use the QUERYSS command to display a list of subsystem names associated with the posted SCCP remote point code.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERYSS command
<pre>>QUERYSS MAP response: All subsystems at C7RTESET2 NETRAG</pre> <p>Explanation: The system displays the subsystems for the point code.</p>

QUERYSS (end)**MAP responses**

The following table describes the MAP responses.

Command responses

Responses for the QUERYSS command	
MAP output	Meaning and action
All subsystems at <point_code>. <subsystem>	<p>Meaning: The system displays the subsystems for the point code. The name of the SCCP point code or routeset is displayed in place of <subsystem> and a list of subsystems replaces <point_code>.</p> <p>Action: None</p>
FAILED, No point code posted	<p>Meaning: There is no SCCP remote point code posted.</p> <p>Action: Use the POST command to post the SCCP remote point code, then enter the QUERYSS command again.</p>
No subsystems at pc	<p>Meaning: There are no subsystems associated with this SCCP remote point code.</p> <p>Action: None</p>

QUIT

Command

QUIT

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

Not applicable

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0 to 6. However, the system cannot accept a level number higher than the number of the current level.

QUIT (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p><i>MAP response:</i></p> <pre>CCS7:</pre> <p>Explanation: The SCCPRPC sublevel has changed to a previous CCS7 sublevel.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
<pre>CI:</pre>	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
<pre>QUIT -- Unable to quit requested number of levels Last parameter evaluated was: 1</pre>	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.</p> <p>Action: Reenter the command using an appropriate level number.</p>
<pre>The system replaces the SCCPRSS level menu with a menu that is two or more levels higher.</pre>	<p>Meaning: You entered the quit command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
<pre>The system replaces the display of the SCCPRSS level with the display of the next higher MAP level.</pre>	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

RTS

Command

RTS

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC

Function

Use the RTS command to return a SCCP point code to service.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the RTS command
<pre>>RTS</pre> <p><i>MAP response:</i></p> <pre>RTS passed.</pre> <p>Explanation: The point code is returned to service.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the RTS command	
MAP output	Meaning and action
Failed, C7RTESET2 not in MANB state.	<p>Meaning: The SCCP remote point code must be manually busy before it can be returned to service.</p> <p>Action: Use the BSY command to manually busy the routeset, then retry the RTS command.</p>

Command responses (Sheet 2 of 2)

Responses for the RTS command	
MAP output	Meaning and action
Failed, no point code posted.	<p>Meaning: The command was made for a point code that is not posted.</p> <p>Action: Post the point code and reenter the RTS command.</p>
RTS Passed	<p>Meaning: The system upgrades the point code status to system busy awaiting confirmation from the point code. When confirmation is received, the system changes the routeset status to in service. During this process the system generates logs CCS210 and CCS211, and removes the PCC alarm.</p> <p>Action: None</p>

SCCPRSS

Command

SCCPRSS

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC

Function

Use the SCCPRSS command to access the SCCP remote subsystem level.

Usage notes

The SCCPRSS command has the following limitations and restrictions:

- A SCCP remote point code must be posted before the SCCPRSS level can be accessed. Use the POST command to post the point code.
- All the subsystems of an SCCP routeset must be in the manually busy state before the routeset can be busied.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the SCCPRSS command						
>SCCPRSS						
<i>MAP response:</i>						
C7	SCCP	REMOTE	SS	Subsystem State	NETRAG	ManB
Explanation: The SCCPRSS level is displayed.						

SCCPRSS (end)**MAP responses**

The following table describes the MAP responses.

Command responses

Responses for the SCCPRSS command	
MAP output	Meaning and action
A point code must be posted before entering this level.	
<p>Meaning: There is no SCCP remote point code posted.</p> <p>Action: Use the POST command to post a remote point code, then repeat the SCCPRSS command.</p>	
<pre>C7 SCCP REMOTE SS Subsystem State <subsystem_name> <state></pre>	
<p>Meaning: The SCCPRSS level is accessed. Any posted subsystems are listed under subsystem, and the state of each posted subsystem is listed under state.</p> <p>Action: None</p>	

TRANTST

Command

TRANTST

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC

Function

Use the TRANTST command to verify, through a system test, that a global title translates to the correct network address.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TRANTST command parameters and variables	
Command	Parameters and variables
TRANTST	translation_name G_title
Parameters and variables	Description
g_title	This variable is the global title.
translation_name	This variable is the global title identifier listed in system table C7GTTYPE.

TRANTST (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the TRANTST command
<pre>>TRANTST CLASSGT 8002251109</pre> <p><i>where</i></p> <p>CLASSGT is the global title identifier</p> <p>8002251109 is the global title</p> <p><i>MAP response:</i></p> <p>The global title translates to a subsystem only.</p> <p>Subsystem: CLASS</p> <p>Explanation: The global title translates to the identified subsystem.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the TRANTST command	
MAP output	Meaning and action
Invalid translation type for global title translation	<p>Meaning: An invalid translation type has been entered.</p> <p>Action: Enter the command again, using a valid translation type for global title translation.</p>
Result is point code and subsystem Point code value: <pc_clli> Subsystem: <subsystem>	<p>Meaning: An SCCP remote point code and subsystem are identified in system tables, where <pc_clli> is the point code common language location identifier (CLLI), and <subsystem> is the subsystem name.</p> <p>Action: None</p>
Result is point code only. Point code only is: <result>	

TRANTST (end)

Command responses (Sheet 2 of 2)

Responses for the TRANTST command	
MAP output	Meaning and action
	<p>Meaning: The command entered included the subsystem. The subsystem is ignored, and only the SCCP remote point code is identified. The <result> is replaced by point code only, point code and subsystem, point code and new global title type, or an error.</p> <p>Action: None</p> <p>The global title translates to a subsystem only.</p> <p>Subsystem: <subsystem></p> <p>Meaning: Only a subsystem is identified in system tables, where <subsystem> is the subsystem name.</p> <p>Action: None</p>

23 SCCPRSS level commands

SCCPRSS menu

Use the SCCPRSS level of the MAP to query or change the state of one or more signaling connection control part (SCCP) remote subsystems.

The following figure shows the SCCP remote subsystem menu and status display.

Figure 23-1 SCCPRSS MAP level menu

```

          CM      MS      IOD      Net      PM      CCS      LNS      Trks      Ext      APPL
          .       .       .       .       .       .       .       .       .       .

SCCPRSS      CCS7      V5
0 Quit      24 RSC      .
2 Post_     C7 SCCP REMOTE PC
3           Point Code State Number of SS
4           SSP1ARs      SysB      6
5           C7 SCCP REMOTE SS
6
7 Bsy_
8 Rts_
9 Offl_
10
11
12 Next
13
14
15
16 TranTst_
17 QueryFlt
18 QuerySS

```

Accessing the SCCPRSS level

To access the SCCPRSS level, enter the following command from the CI MAP level:

```
>MAPCI ;MTC ;CCS ;CCS7 ;SCCPRPC ;SCCPRSS
```

and press the Enter key.

SCCPRSS commands

This chapter describes commands available at the SCCPRSS level of the MAP display. The commands are arranged in alphabetical order. The following SCCPRSS commands are described in this chapter:

- BSY
- NEXT
- OFFL
- POST
- QUERYFLT
- QUERYSS
- QUIT
- RTS
- TRANTST

BSY**Command**

BSY

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC;SCCPRSS

Function

Use the BSY command to remove a posted subsystem from service and place it in the manually busy state.

Usage notes

The associated point code must be put in the offline state from the SCCPRPC level before the subsystem can be busied.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

BSY command parameters and variables	
Command	Parameters and variables
BSY	<u>one</u> <u>NOFORCE</u> subsystem FORCE ALL
Item	Description
ALL	This parameter specifies that all posted subsystems are to be busied.
FORCE	This parameter directs the system to force one or all the subsystems to be busied, even if there is the possibility of losing traffic.
NOFORCE	This default parameter directs the system to refuse the bsy command if there are translations dependent on the subsystem, or if the subsystem is in an available state. The user does not enter this parameter.
one	This default parameter directs the system to busy the subsystem posted, if there is only one subsystem posted. The user does not enter this parameter.
subsystem	This variable specifies the subsystem to be busied.

BSY (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY MAP response: bsy netrag force BUSY Passed Explanation: The system is in the manually busy state</pre>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the BSY command	
MAP output	Meaning and action
<pre>BSY failed Failed, point code cannot be offl when busying subsystem</pre>	<p>Meaning: The point code must be in the offline state before a subsystem is busied.</p> <p>Action: Quit to the SCCPRPC level, use the BSY command to busy the point code, return to the SCCPRSS level, and enter the BSY command again.</p>
<pre>BSY Passed</pre>	<p>Meaning: The subsystem is in the manually busy state. The system initiates a subsystem critical (SSC) alarm and generates a CCS213 report.</p> <p>Action: None</p>
<pre>Excess parameters after the optional parameter force</pre>	<p>Meaning: An invalid parameter was entered after the force parameter.</p> <p>Action: Enter the BSY command again using correct parameters.</p>
<pre>Nothing posted to perform action on.</pre>	<p>Meaning: There is no subsystem posted.</p> <p>Action: Post a subsystem and enter the bsy command again.</p>

BSY (end)

Command responses (Sheet 2 of 2)

Responses for the BSY command	
MAP output	Meaning and action
<subsystem> is not in the posted set.	<p>Meaning: The subsystem specified is valid, but it is not associated with the posted point code. <Subsystem> is the name of the subsystem.</p> <p>Action: Post the subsystem and enter the bsy command again.</p>

NEXT

Command

NEXT

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC;SCCPRSS

Function

Use the NEXT command to display the next seven subsystems associated with the posted point code. The MAP screen displays seven subsystems at a time.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the NEXT command			
>NEXT			
<i>MAP response:</i>			
Subsystem	State	INTERWRK	SysB NETRAG InSv Size of posted set: 9
Explanation: The next set of subsystems is displayed.			

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the NEXT command	
MAP output	Meaning and action
End of posted set	<p>Meaning: There are no more subsystems associated with the posted point code.</p> <p>Action: None</p>

NEXT (end)

Command responses (Sheet 2 of 2)

Responses for the NEXT command	
MAP output	Meaning and action
Subsystem set: 9	<p>State INTERWRK SysB NETRAG InSv Size of posted</p> <p>Meaning: The next set of subsystems is displayed. The subsystems are listed under subsystem, the states of the subsystems are listed under state, and the total number of posted subsystems is given.</p> <p>Action: None</p>

OFFL

Command

OFFL

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC;SCCPRSS

Function

Use the OFFL command to set a posted subsystem to the offline state.

Usage notes

The subsystem must be in the manually busy state before it can be taken offline.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

OFFL command parameters and variables	
Command	Parameters and variables
OFFL	<u>ONE</u> subsystem ALL
Item	Description
ALL	This parameter specifies that all posted subsystems are to be taken offline.
<u>ONE</u>	This default parameter directs the system to take the subsystem posted offline, if there is only one subsystem posted. The user does not enter this parameter.
subsystem	This variable specifies the subsystem to be taken offline.

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFFL command
<pre>>OFFFL</pre> <p><i>MAP response:</i></p> <pre>OFFLINE Passed</pre> <p>Explanation: The posted subsystem is offline.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFFL command	
MAP output	Meaning and action
Nothing posted to perform the action on.	<p>Meaning: No subsystem has been posted.</p> <p>Action: Use the POST command to post the subsystem, then enter the OFFFL command again.</p>
OFFFL failed	
Failed, subsystem not in a MANB state.	<p>Meaning: The subsystem is not in the manually busy state.</p> <p>Action: Use the BSY command to put the subsystem in the manually busy state, then enter the OFFFL command again.</p>
OFFLINE Passed	<p>Meaning: The subsystem has been placed in the offline state. The system generates a CCS212 log report and removes the subsystem critical (SSC) alarm for this subsystem.</p> <p>Action: None</p>
<subsystem> not in the posted set.	<p>Meaning: The subsystem entered is not associated with the posted point code.</p> <p>Action: Enter the OFFFL command again using a valid subsystem.</p>

POST

Command

POST

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC;SCCPRSS

Function

Use the POST command to select a subsystem for maintenance activities.

Usage notes

The POST command has the following restrictions and limitations:

- The point code associated with the subsystem must be posted (from the SCCPRPC level) before the subsystems can be posted.
- The act of posting a subsystem does not affect the operation of the subsystem.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

POST command parameters and variables	
Command	Parameters and variables
POST	subsystem ALL
Item	Description
ALL	This parameter specifies that all subsystems are to be posted.
subsystem	This variable specifies the subsystem to be posted.

POST (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the POST command
<pre>>POST NETRAG</pre> <p><i>where</i></p> <p>NETRAG is the subsystem name</p> <p><i>MAP response:</i></p> <pre>Subsystem State NETRAG InSv</pre> <p>Explanation: The NETRAG subsystem is posted.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the POST command	
MAP output	Meaning and action
Duplicated subsystem name in the command line	<p>Meaning: The same subsystem was repeated twice in the command string.</p> <p>Action: Enter the POST command again with valid parameters.</p>
Excess parameters after all	<p>Meaning: An invalid parameter followed the ALL parameter in the command string.</p> <p>Action: Enter the POST command again with valid parameters.</p>
Excess parameters before all	<p>Meaning: An invalid parameter preceded the ALL parameter in the command string.</p> <p>Action: Enter the POST command again with valid parameters.</p>
Force is an invalid parameter in this context	<p>Meaning: An attempt was made to use the FORCE parameter. The FORCE parameter is not a valid parameter for this command.</p> <p>Action: Enter the POST command again with valid parameters.</p>

POST (end)

Command responses (Sheet 2 of 2)

Responses for the POST command	
MAP output	Meaning and action
No subsystems at point code	<p>Meaning: There are no subsystems associated with the posted point code.</p> <p>Action: None</p>
No such subsystems	<p>Meaning: The subsystem name entered is invalid.</p> <p>Action: Enter the POST command again with valid parameters.</p>
subsystem is not a remote subsystem at the posted point code	<p>Meaning: The subsystem is not associated with the posted point code.</p> <p>Action: Enter the POST command again with valid parameters.</p>
Subsystem	State
NETRAG	InSv
	<p>Meaning: The subsystem is posted, and the name and status of the posted subsystem are displayed.</p> <p>Action: None</p>

QUERYFLT

Command

QUERYFLT

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC;SCCPRSS

Function

Command QUERYFLT at the SCCPRSS MAP level provides operating company personnel with information about associated subsystems.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYFLT command parameters and variables	
Command	Parameters and variables
QUERYFLT	ALL subsystem
Item	Description
ALL	This parameter specifies all subsystems to be queried.
subsystem	This variable specifies the name of the remote subsystem to be queried.

QUERYFLT (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERYFLT command
<pre>>QUERYFLT ITEA1</pre> <p><i>where</i></p> <p>ITEA1 is the name of the remote subsystem</p> <p><i>MAP response:</i></p> <p>ITEA1—the subsystem is awaiting SSA acknowledgement</p> <p>Explanation: This response indicates that subsystem ITEA1 waits for an SSA acknowledgement from the remote point code.</p>

Responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the QUERYFLT command	
MAP output	Meaning and action
<SSN name>-subsystem is <state>	<p>Meaning: This response specifies the state of the subsystem. Possible subsystem states are:</p> <ul style="list-style-type: none"> • in service (InSv) • offline (OffL) • manual busy (ManB) • system busy (Sysb) • unequipped (uneq) <p>Action: None</p>
<SSN name>-subsystem is awaiting SSA acknowledgement	<p>Meaning: This response specifies that the subsystem waits for SSA acknowledgement from the remote point code (PC).</p> <p>Action: None</p>

QUERYFLT (end)**Command responses (Sheet 2 of 2)**

Responses for the QUERYFLT command	
MAP output	Meaning and action
<SSN name>-the remote point code SCCP is unavailable	<p>Meaning: The remote PC SCCP is unavailable. The PC becomes SysB when it receives a user part unavailable (UPU) message from the remote PC.</p> <p>Action: None</p>
No such subsystem	<p>Meaning: The specified subsystem does not exist.</p> <p>Action: Specify a valid subsystem name.</p>
Invalid SCCP point code	<p>Meaning: The specified PC does not exist.</p> <p>Action: Go to MAP level SCCPRPC and post a valid PC.</p>
<SSN name>is not a remote subsystem at the posted point code.	<p>Meaning: The table C7NETSSN does not contain the specified subsystem name.</p> <p>Action: None</p>

QUERYSS

Command

QUERYSS

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC;SCCPRSS

Function

Use the QUERYSS command to display a list of subsystem names associated with the posted SCCP remote point code.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the SCCPRSS command
<pre>>QUERYSS MAP response: All subsystems at C7RTESET 2 NETRAG</pre> <p>Explanation: The system displays the subsystems for the point code.</p>

QUERYSS (end)**MAP responses**

The following table describes the MAP responses.

Command responses

Responses for the SCCPRSS command	
MAP output	Meaning and action
All subsystems at C7RTESET2. NETRAG	<p>Meaning: The system displays the subsystems for the point code.</p> <p>Action: None</p>
FAILED, No point code posted	<p>Meaning: There is no SCCP remote point code posted.</p> <p>Action: Use the POST command to post the SCCP remote point code, then enter the QUERYSS command again.</p>
No subsystems at pc	<p>Meaning: There are no subsystems associated with this SCCP remote point code.</p> <p>Action: None</p>

QUIT

Command

QUIT

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC;SCCPRSS

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

Not applicable

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0 to 6. However, the system cannot accept a level number higher than the number of the current level.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<p>>QUIT</p> <p>MAP response:</p> <p>SCCPRPC:</p> <p>Explanation: The SCCPRSS sublevel has changed to a previous SCCPRPC sublevel.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
CI:	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
QUIT – Unable to quit requested number of levels Last parameter evaluated was: 1	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.</p> <p>Action: Reenter the command using an appropriate level number.</p>
The system replaces the SCCPRSS level menu with a menu that is two or more levels higher.	<p>Meaning: You entered the quit command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
The system replaces the display of the SCCPRSS level with the display of the next higher MAP level.	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

RTS

Command

RTS

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC;SCCPRSS

Function

Use the RTS command to return a subsystem to service.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

RTS command parameters and variables	
Command	Parameters and variables
RTS	<u>ONE</u> subsystem ALL
Item	Description
ALL	This parameter specifies that all posted subsystems are to be returned to service.
<u>ONE</u>	This default parameter directs the system to return the posted subsystem to service, if there is only one subsystem posted. The user does not enter this parameter.
subsystem	This variable specifies the subsystem to be returned to service.

RTS (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the RTS command
<p>>RTS</p> <p><i>MAP response:</i></p> <p>RTS Passed</p> <p>Explanation: The subsystem returns to service.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the RTS command	
MAP output	Meaning and action
Force is an invalid parameter in this context	<p>Meaning: An attempt was made to use the FORCE parameter. The FORCE parameter is not a valid parameter for this command.</p> <p>Action: Enter the RTS command again with valid parameters.</p>
Nothing posted to perform the action on	<p>Meaning: There are no subsystems posted.</p> <p>Action: Use the POST command to post the subsystem, then enter the RTS command again.</p>
RTS Passed	<p>Meaning: The system changes the subsystem status to initializing until confirmation is received from the service control point (SCP) database. When confirmation is received, the system changes the subsystem status to in service. During this process, logs CCS214 and CCS216 are generated, and the subsystem critical (SSC) alarm is removed.</p> <p>Action: None</p>

RTS (end)

Command responses (Sheet 2 of 2)

Responses for the RTS command	
MAP output	Meaning and action
<code><subsystem></code>	<code>is not a remote subsystem at the posted point code</code> Meaning: The subsystem is a valid subsystem, but it is not associated with the posted point code, where the entered subsystem replaces . Action: Enter the RTS command again with valid parameters.

TRANTST

Command

TRANTST

Sublevel

MAPCI;MTC;CCS;CCS7;SCCPRPC;SCCPRSS

Function

Use the TRANTST command to verify, through a system test, that a global title translates to the correct network address.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TRANTST command parameters and variables	
Command	Parameters and variables
TRANTST	g_title_id g_title
Item	Description
g_title	This variable is the global title.
g_title_id	This variable is the global title identifier listed in system table C7GTTYPE.

TRANTST (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the TRANTST command
<pre>>TRANTST CLASSGT 8002251109</pre> <p>where</p> <p>CLASSGT is the global title identifier</p> <p>8002251109 is the global title</p> <p><i>MAP response:</i></p> <p>The global title translates to a subsystem only.</p> <p>Subsystem: CLASS</p> <p>Explanation: The global title translates to the identified subsystem.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the TRANTST command	
MAP output	Meaning and action
<pre>Result is point code only.</pre> <pre>Point code only is: <result></pre>	<p>Meaning: The command entered included the subsystem. The subsystem is ignored, and only the SCCP remote point code is identified. The <result> is replaced by point code only, point code and subsystem, point code and new global title type, or an error.</p> <p>Action: None</p>
<pre>Result is point code and subsystem</pre> <pre>Point code value: <pc_clli></pre> <pre>Subsystem: <subsystem></pre>	

TRANTST (end)

Command responses (Sheet 2 of 2)

Responses for the TRANTST command	
MAP output	Meaning and action
	<p>Meaning: An SCCP remote point code and subsystem are identified in system tables, where <pc_cli> is the point code common language location identifier (CLLI), and <subsystem> is the subsystem name.</p> <p>Action: None</p> <p>The global title translates to a subsystem only.</p> <p>Subsystem: <subsystem></p> <p>Meaning: Only a subsystem is identified in system tables, where <subsystem> is the subsystem name.</p> <p>Action: None</p>

24 SEAS level commands

SEAS menu

Use the SEAS level of the MAP display to enable the user to query, test, and change the operating state of the Signaling, Engineering, and Administration System (SEAS) application. This level also has access to the permanent virtual circuits (PVC) level of maintenance.

Note: The SEAS level is available only for signaling transfer point (STP) nodes.

The following figure shows the SEAS menu and status display.

Figure 24-1 SEAS MAP level menu

```

      CM      MS      IOD      Net      PM      CCS      LNS      Trks      Ext      APPL
      .       .       .       .       .       .       .       .       .       .

SEAS
0 Quit          SEAS      History      Vol
                ManB      D010SEASHIST .
1
2
3              PVCs      OffL      ManB      RMB      SysB      InSv      INI
4 PVC          8         7         1         0         0         0         0
5
6
7 Bsy
8 RTS
9 OffL          CCS7:
10             SEAS:
11
12
13
14 QueryFlt
15
16
17
18

```

Accessing the SEAS level

To access the SEAS level, enter the following command from the CI (command interpreter) MAP level:

```
>MAPCI ;MTC ;CCS ;CCS7 ;SEAS
```

and press the Enter key.

SEAS commands

This chapter describes commands available at the SEAS level of the MAP display. The commands are arranged in alphabetical order. The following commands are described in this chapter:

- BSY
- OFFL
- PVC
- QRYFLT
- QUIT
- RTS

BSY**Command**

BSY

Sublevel

MAPCI;MTC;CCS;CCS7;SEAS

Function

Use the BSY command to set the Signaling, Engineering, and Administration System (SEAS) application to the manual busy (ManB) state, to generate a log, and to send a message to the Signaling, Engineering, and Administration Center (SEAC) informing it of the change of state.

Log SEAS500 generates when the SEAS application is in the ManB state.

Note: This command can take up to 5 min to execute.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<p>>BSY</p> <p><i>MAP response:</i></p> <p>BUSY PASSED.</p> <p>Explanation: The command executed successfully.</p>

BSY (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the BSY command	
MAP output	Meaning and action
BSY FAILED	<p>Meaning: The SEAS application cannot enter the ManB state.</p> <p>Action: Verify that SEAS is in one of the following states</p> <ul style="list-style-type: none">• in service (InSv)• in-service trouble (ISTb)• offline (OffL)• system busy (SysB) <p>Enter the command again.</p>

OFFL**Command**

OFFL

Sublevel

MAPCI;MTC;CCS;CCS7;SEAS

Function

Use the OFFL command to remove the Signaling, Engineering, and Administration System (SEAS) application from system maintenance for office data modifications. An offline SEAS application cannot cause an alarm.

Log SEAS500 records that the SEAS application changed to the offline (Offl) state.

Note: This command can take up to 10 min to execute.

Usage notes

The SEAS application must be in the manual busy (ManB) state before you enter the OFFL command.

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFL command									
>OFFL									
<i>MAP response:</i>									
SEAS		History	Vol	Offl		D010SEASHIST	UnAvail	PVCs	Offl
ManB	RMB	SysB	InSv	INI	6	2	1	0	0
3	0								
Explanation: The system puts the SEAS application in the Offl state.									

OFFL (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFL command	
MAP output	Meaning and action
ERROR--INVALID STATE CHANGE REQUESTED	<p>Meaning: The system cannot make the SEAS application offline because the application is in an invalid state. Either the application is already in the OffL state, or the application is not in the ManB state.</p> <p>Action: Verify that SEAS is in the ManB state, then enter the command again. SEAS may already be in the offline state (displayed as OffL).</p>
OFFL FAILED	<p>Meaning: The system cannot make the SEAS application offline.</p> <p>Action: Use the QUERYFLT command to determine the cause of the failure, then contact your next level of support.</p>
OFFL PASSED	<p>Meaning: SEAS is now in the OffL state.</p> <p>Action: None</p>

PVC

Command

PVC

Sublevel

MAPCI;MTC;CCS;CCS7;SEAS

Function

Use the PVC command to

- access the permanent virtual circuits (PVC) level of the MAP display
- display the headings and commands that are available for monitoring and maintaining PVCs.

The PVC level is discussed in chapter "PVC level commands".

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example

Example of the PVC command
<p>>PVC</p> <p><i>MAP response:</i></p> <p>PVC:</p> <p>Explanation: The PVC level appears.</p>

PVC (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the PVC command						
MAP output	Meaning and action					
SEAS	History Vol					
Offl	D010SEASHIST UnAvail					
PVCs	Offl	ManB	RMB	SysB	InSv	INI
8	2	1	0	0	4	1
Meaning: The system responds with a display showing the availability of the history volume and the number of PVCs at this office. The display also lists the states of the PVCs.						
Action: None						

QUERYFLT

Command

QUERYFLT

Sublevel

MAPCI;MTC;CCS;CCS7;SEAS

Function

Use the QUERYFLT command to display information about faults in the Signaling, Engineering, and Administration System (SEAS) application.

Usage notes

None

Command parameters and variables

None

Usage examples

The following table provides an example of the command.

Command example**Example of the QUERYFLT command****>QUERYFLT***MAP response:*

```
SEAS      History Vol
ManB      D010SEASHIST .
PVC      Offl   ManB   RMB   SysB   InSv   INI
3         0       0     0     1     0     0
QueryFlt
SEAS is in the ManB state.
```

Explanation: Information about the SEAS application appears. SEAS is in the ManB state.

QUERYFLT (end)

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QRYFLT command	
MAP output	Meaning and action
No errors have been detected	<p>Meaning: The SEAS application is fully operational.</p> <p>Action: None</p>
History volume not accessible	<p>Meaning: The history volume is not responding to SEAS requests. This message indicates a SEAS system busy (SysB) condition.</p> <p>Action: Check the status of the DDU and the history volume. Contact your next level of support.</p>
History volume NOT available, try OFFLing then BSYing SEAS	<p>Meaning: The history volume files are not available. This message indicates that a SEAS SysB condition exists.</p> <p>Action: Busy, offline, busy, and return the SEAS application to service.</p>
History volume files NOT available, try BSYing SEAS	<p>Meaning: History volume files are not available. This message indicates that a SEAS SysB condition exists.</p> <p>Action: Busy and return the SEAS application to service.</p>

QUIT**Command**

QUIT

Sublevel

MAPCI;MTC;CCS;CCS7;SEAS

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next higher MAP level.
ALL	This parameter causes the system to quit all open MAP levels and display the CI level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for incrname are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of levels from which to quit. The range of levels is 0 to 6. Do not enter a number higher than the number of levels currently open.

QUIT (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUIT command
<pre>>QUIT</pre> <p>(The display changes to the display of a higher level menu.)</p> <p>Explanation: The SEAS level changes to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
CI :	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
QUIT – Unable to quit requested number of levels Last parameter evaluated was: 1	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.</p> <p>Action: Enter the command using an appropriate level number.</p>
The system replaces the SEAS level menu with a menu that is two or more levels higher.	<p>Meaning: You entered the QUIT command with an n variable value of 2 or more or an incname variable value corresponding to two or more levels higher.</p> <p>Action: None</p>
The system replaces the display of the SEAS level with the display of the next higher MAP level.	<p>Meaning: The system exited to the next higher MAP level.</p> <p>Action: None</p>

RTS**Command**

RTS

Sublevel

MAPCI;MTC;CCS;CCS7;SEAS

Function

Use the RTS command to return the Signaling, Engineering, and Administration System (SEAS) application to service. When the application returns to service, the system generates a log and sends a message to the Signaling, Engineering, and Administration Center (SEAC) informing it of the change of state. When you initiate the RTS command, a maximum wait time message appears on the MAP display.

Usage notes

If the NOWAIT parameter is specified, the system does not display responses from the command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

RTS command parameters and variables	
Command	Parameters and variables
RTS	<u>WAIT</u> NOWAIT
Item	Description
NOWAIT	This parameter specifies that other commands can be entered at the MAP terminal before command RTS finishes executing. If you specify the NOWAIT parameter, the system will not display any responses to the command.
<u>WAIT</u>	This default parameter indicates that commands cannot be entered before the RTS command finishes executing.

RTS (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the RTS command
<p>>RTS</p> <p><i>MAP response:</i></p> <p>PASSED</p> <p>Explanation: The command was successful.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the RTS command	
MAP output	Meaning and action
ERROR-INVALID STATE CHANGE REQUESTED	<p>Meaning: The SEAS application cannot be returned to service because it is in an invalid state. SEAS may already be in service.</p> <p>Action: Verify that SEAS is in the manual busy (ManB) state and enter the command again.</p>
RTS FAILED	<p>Meaning: The system failed to place SEAS into the in-service (InSv) or in-service trouble (ISTb) state.</p> <p>Action: Check for alarm states under the IOC and CCS headings. If an alarm is present, clear it and enter the command again. The status display changes to SysB (system busy) or ManB.</p>
RTS PASSED	<p>Meaning: The SEAS application is available for message transfer.</p> <p>Action: The status display changes to InSv or ISTb.</p>

25 SVR7 level commands

SVR7 menu

Use the SVR7 level of the MAP (maintenance and administration position) display to access the manual Common Channel Signaling 7 (CCS7) server (SVR7) maintenance system.

Note: The SVR7 level is not available for signaling transfer point (STP) nodes.

The following figure shows the SVR7 menu and status display.

Figure 25-1 SVR7 MAP level menu

CM	MS	IOD	Net	PM	CCS	Trks	Ext	APPL	
.	.	.	.	1 SVR7	.	.	.	.
				C					
SVR7				SysB	ManB	OffL	CBsy	ISTb	InSv
0	Quit			0	1	0	1	0	123
2	Post_	PM		1	1	0	0	0	5
3	ListSet	SVR7							
4		SVR7	12	ManB		Mtce			/Loading (20%)
5									
6	Tst_								
7	Bsy_								
8	RTS_								
9	OffL_								
10	LoadPM_								
11	Disp_								
12	Next								
13									
14	QueryPM_								
15									
16									
17									
18									

Accessing the SVR7 level

To access the SVR7 level, enter the following command from the CI (command interpreter) MAP level:

```
>MAPCI;MTC;PM;POST SVR7 svr7_number
```

and press the Enter key.

where

svr7_number

is the number of the SVR7 to be posted

SVR7 commands

This chapter describes commands available at the SVR7 level of the MAP display. The commands are arranged in alphabetical order. The following commands are described in this chapter:

- BSY
- DISP
- LISTSET
- LOADPM
- NEXT
- OFFL
- POST
- QUERYPM
- QUIT
- RTS
- TST

BSY**Command**

BSY

Sublevel

MAPCI;MTC;PM;SVR7

Function

Use the BSY command to place a posted set of Common Channel Signaling 7 (CCS7) servers (SVR7) or all SVR7s in the manual busy (ManB) state.

Usage notes

Use the POST command to post a set of SVR7s before using the BSY command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

BSY command parameters and variables	
Command	Parameters and variables
BSY	<u>POSTED</u> <u>NOFORCE</u> <u>WAIT</u> ALL FORCE NOWAIT
Item	Description
ALL	This parameter causes all posted SVR7s to be busied.
FORCE	This parameter causes SVR7 inaccessibility to be ignored.
<u>NOFORCE</u>	This default parameter indicates that SVR7s that are not accessible will not be busied.
NOWAIT	This parameter allows other commands to be entered at the MAP before the BSY command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted SVR7 in the control position will be busied.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered at the MAP until the BSY command finishes executing.

BSY (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the BSY command
<pre>>BSY</pre> <p><i>MAP response:</i></p> <pre>SVR7 3 BSY Passed</pre> <p>Explanation: The posted SVR7 currently in the control position is SVR7 3. SVR7 3 has been busied.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the BSY command	
MAP output	Meaning and action
<pre>Request Invalid - SVR7 <svr7#> is <state></pre> <pre>No Action Taken</pre>	<p>Meaning: The BSY command could not execute because the SVR7 was not in one of the following states:</p> <ul style="list-style-type: none">• offline (OffL)• system busy (SysB)• in service (InSv)• in-service trouble (ISTb) <p>Action: None</p>
<pre>SVR7 <svr#> BSY Passed</pre>	<p>Meaning: The command passed.</p> <p>Action: None</p>
<pre>SVR7 <svr#> BSY Rejected</pre>	<p>Meaning: SVR7 resident maintenance rejected the command. A serious problem exists.</p> <p>Action: Contact your next level of support.</p>

DISP**Command**

DISP

Sublevel

MAPCI;MTC;PM;SVR7

Function

Use the DISP command to display a list of all Common Channel Signaling 7 (CCS7) servers (SVR7) in a specified peripheral module (PM) state.

Usage notes

Use to POST command to post a set of SVR7s before using the DISP command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

DISP command parameters and variables	
Command	Parameters and variables
DISP	STATE pm_state SVR7
Item	Description
SVR7	This parameter specifies that the PM node type is SVR7.
pm_state	This variable specifies the PM state to be displayed. Enter one of the following states: <ul style="list-style-type: none"> • CBsy (central-side-busy) • InSv (in-service) • ISTb (in-service trouble) • ManB (manual busy) • OffL (offline) • SysB (system busy)
STATE	Enter this parameter before specifying the PM state.

DISP (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the DISP command
<pre>>DISP STATE ISTB SVR7</pre> <p><i>where</i></p> <p>ISTB is the pm_state</p> <p><i>MAP response:</i></p> <pre>ISTb SVR7: NONE</pre> <p>Explanation: No SVR7s are in the in-service trouble state.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the DISP command	
MAP output	Meaning and action
<pm_state> SVR7: NONE	<p>Meaning: There are no SVR7s in the specified PM state.</p> <p>Action: None</p>
<pm_state> SVR7: <svr7#>, <svr7#>	<p>Meaning: The system displays all SVR7s that are in the specified PM state.</p> <p>Action: None</p>

LISTSET

Command

LISTSET

Sublevel

MAPCI;MTC;PM;SVR7

Function

Use the LISTSET command to list the contents of the posted set.

Usage notes

Use the POST command to post a set of Common Channel Signaling 7 (CCS7) servers (SVR7) before using the LISTSET command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

LISTSET command parameters and variables	
Command	Parameters and variables
LISTSET	ALL pm_type
Item	Description
ALL	This parameter causes all peripheral modules (PM) in the posted set to be listed.
pm_type	This variable indicates the type of PM. Only PMs of the specified type will be listed. For PM type SVR7 enter SVR7.

LISTSET (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the LISTSET command
<pre>>LISTSET SVR7</pre> <p><i>where</i></p> <p>SVR7 is the pm_type</p> <p><i>MAP response:</i></p> <pre>SVR7 0, 6, 12</pre> <p>Explanation: All the posted SVR7s are listed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the LISTSET command	
MAP output	Meaning and action
<pre>SVR7 0, 6, 12</pre>	<p>Meaning: SVR7s 0, 6, and 12 are posted.</p> <p>Action: None</p>
<pre>No PM posted</pre> <pre>Post set is empty</pre>	<p>Meaning: No SVR7s are posted.</p> <p>Action: None</p>

LOADPM**Command**

LOADPM

Sublevel

MAPCI;MTC;PM;SVR7

Function

Use the LOADPM command to load the Common Channel Signaling 7 (CCS7) server (SVR7) with the software load specified in the inventory table or an optional file.

Usage notes

All the SVR7s must have the same loadfile datafiled and must have the same processor or type.

All SVR7s must be in the manual-busy (ManB) state before using the LOADPM command.

Use the POST command to post a set of SVR7s before using the LOADPM command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables (Sheet 1 of 2)

LOADPM command parameters and variables	
Command	Parameters and variables
LOADPM	<u>POSTED</u> <u>INVEN</u> <u>WAIT</u> ALL file NOWAIT
Item	Description
ALL	This parameter causes all posted SVR7s to be loaded.
<u>INVEN</u>	This default parameter indicates that the software will be loaded from that specified in the inventory table.
file	This variable specifies the file from which the software is loaded.
NOWAIT	This parameter allows other commands to be entered at a MAP terminal before the LOADPM command finishes executing.

LOADPM (continued)

Parameters and variables (Sheet 2 of 2)

LOADPM command parameters and variables	
Command	Parameters and variables
<u>POSTED</u>	This default parameter indicates that only the posted SVR7 in the control position will be loaded.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered at the MAP until the LOADPM command finishes executing.

Usage examples

The following table provides an example of the command.

Command example

Example of the LOADPM command
<p>>LOADPM</p> <p>MAP response:</p> <p>SVR7 12 LOADPM Passed.</p> <p>Explanation: The LOADPM command was successful.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the LOADPM command	
MAP output	Meaning and action
Request Invalid - SVR7 <svr7#> is <status> No Action Taken	<p>Meaning: Command LOADPM did not execute because the SVR7 was not in the manual busy (ManB) state.</p> <p>Action: Use the BSY command to busy the SVR7 and enter the command again.</p>
SVR7 svr7# LOADPM Failed	<p>Meaning: The LOADPM command was not successful.</p> <p>Action: Contact your next level of support to determine the cause of the failure.</p>

LOADPM (end)

Command responses (Sheet 2 of 2)

Responses for the LOADPM command	
MAP output	Meaning and action
SVR7 svr7# LOADPM Passed.	<p>Meaning: The LOADPM command was successful.</p> <p>Action: None</p>

NEXT

Command

NEXT

Sublevel

MAPCI;MTC;PM;SVR7

Function

Use the NEXT command to place the next peripheral module (PM) in a set of posted Common Channel Signaling 7 (CCS7) server (SVR7) into the control position.

Usage notes

Use the POST command to post a set of SVR7s before using the NEXT command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

NEXT command parameters and variables	
Command	Parameters and variables
NEXT	<u>NEXT</u> pm_type
Item	Description
<u>NEXT</u>	This default parameter indicates that the next PM, regardless of PM type, will be placed in the control position.
pm_type	This variable specifies the type of PM to be placed into the control position.

NEXT (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the NEXT command
<p>>NEXT</p> <p><i>MAP response:</i></p> <p>(display of MAP screen for next PM)</p> <p>Explanation: The next PM of the posted set is in the control position.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the NEXT command	
MAP output	Meaning and action
END OF POST SET	<p>Meaning: The currently displayed PM is the last in the posted set of PMs. The MAP display returns to the previous menu level.</p> <p>Action: None</p>

OFFL

Command

OFFL

Sublevel

MAPCI;MTC;PM;SVR7

Function

Use the OFFL command to put a Common Channel Signaling 7 (CCS7) server (SVR7) in the offline (OffL) state.

Usage notes

The SVR7 must be in the manual busy (ManB) state before the OFFL command can be executed.

Use the POST command to post a set of SVR7s before using the OFFL command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

OFFL command parameters and variables	
Command	Parameters and variables
OFFL	<u>POSTED</u> <u>WAIT</u> ALL NOWAIT
Item	Description
ALL	This parameter causes all posted SVR7s to be offlined.
NOWAIT	This parameter allows other commands to be entered at a MAP before the OFFL command finishes executing.
POSTED	This default parameter indicates that only the posted SVR7 in the control position will be offlined.
WAIT	This default parameter indicates that other commands cannot be entered at the MAP until the OFFL command finishes executing.

Usage examples

The following table provides an example of the command.

Command example

Example of the OFFFL command
<pre>>OFFFL</pre> <p><i>MAP response:</i></p> <pre>SVR7 12 OFFFL Passed</pre> <p>Explanation: SVR7 12 is now offline.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the OFFFL command	
MAP output	Meaning and action
<pre>Request Invalid - SVR7 <svr7#> is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The OFFFL command did not execute because the SVR7 is not in the manual busy (ManB) state.</p> <p>Action: None</p>
<pre>SVR7 svr7# OFFFL Passed</pre>	<p>Meaning: The OFFFL command was successful.</p> <p>Action: None</p>
<pre>SVR7 svr7# OFFFL Rejected</pre>	<p>Meaning: The command was rejected by SVR7 resident maintenance.</p> <p>Action: Contact your next level of support to determine the cause of the problem.</p>

POST

Command

POST

Sublevel

MAPCI;MTC;PM

Function

Use the POST command to post a specific Common Channel Signaling 7 (CCS7) server (SVR7).

Usage notes

The POST command is qualified by the following exceptions, restrictions, and limitations.

- The POST command must be used before using commands TST, BSY, RTS, OFFL, LOADPM, or QUERYPM.
- When the command string HELP POST is entered to query the parameters of POST, the displayed parameters do not apply to all offices or office networks. The applicability of the parameters depends on the types of PMs that are present in the office configuration.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

POST command parameters and variables	
Command	Parameters and variables
POST	pm_type pm_no
Item	Description
pm_no	This variable identifies the discrimination number of the SVR7 to be posted. The range is 0 to 24. More than one SVR7 can be specified by entering more than one discrimination number separated by space.
pm_type	This variable identifies a PM type. For an SVR7, enter SVR7. If the MAP level of the node-type is already accessed, do not enter this variable. The default value for this variable is the PM type of the SVR7 in the control position.

POST (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the POST command
<pre>>POST SVR7 8</pre> <p>where</p> <p>SVR7 is the pm_type</p> <p>8 is the pm_no</p> <p>MAP response:</p> <p>OK</p> <p>Explanation: SVR7 8 is posted.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the POST command	
MAP output	Meaning and action
NO PM POSTED	<p>Meaning: The command failed because you did not enter the pm_number for the specified PM.</p> <p>Action: Enter the command again.</p> <pre>pm pm_number n_state LINKS OOS: CSIDE nn PSIDE nn UNIT 0: activity u_state MTCE /LOADING: nnnn UNIT 1: activity u_state MCTE /LOADING: nnnn</pre>

POST (end)

Command responses (Sheet 2 of 2)

Responses for the POST command	
MAP output	Meaning and action
	<p>Meaning: This response shows the status of the posted PM where:</p> <p>pm is the type of the PM.</p> <p>pm_number is the discrimination number of the PM type.</p> <p>n_state is the state of the PM node. The displayed state depends on the state of one or both units. The n_states are the same as the u_states.</p> <p>LINKS_OOS indicates the number of equipped C-side and P-side links that are out-of-service because they are either system busy or manually busy.</p> <p>activity indicates which unit is available for call processing and which unit is on standby. ACT means the unit is active and able to handle call processing, INACT means the unit is on standby (inactive).</p> <p>u_state is the status of a unit.</p> <p>MTCE indicates the unit is undergoing maintenance. ManB indicates that the maintenance was invoked manually. SysB indicates that the maintenance was invoked by the system. MTCE is present only while maintenance is occurring.</p> <p>LOADING: indicates that the unit is being updated with datafill. Variable <nnnn> is the percentage of the PM software that is being loaded.</p> <p>Action: None</p>
OK	<p>Meaning: The specified PM is posted.</p> <p>Action: None</p>

QUERYPM

Command

QUERYPM

Sublevel

MAPCI;MTC;PM;SVR7

Function

Use the QUERYPM command to display information about the posted Common Channel Signaling 7 (CCS7) server (SVR7), its host link interface module (LIM), and the link peripheral processor (LPP) F-bus taps. The displayed information reflects the state of the host local message switches (LMS), message channels, and taps. Information about SVR7s locations, in-service trouble (ISTb) conditions, and linksets is also displayed.

Usage notes

Use the POST command to post a set of SVR7s before using the QUERYPM command.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUERYPM command parameters and variables	
Command	Parameters and variables
QUERYPM	<u>DISP</u> FLT
Item	Description
<u>DISP</u>	This default parameter causes a normal QUERYPM display to be presented.
FLT	This parameter causes fault information for the SVR7 to be displayed.

QUERYPM (continued)

Usage examples

The following table provides an example of the command.

Command example

Example of the QUERYPM command
<pre>>QUERYPM MAP response: PM type: SVR7 PM No.: 2 Status: ISTb LIM: 0 Shelf: 1 Slot: 10 SVR7 FTA: 4244 1000 Default Load: SVR725 Running Load: SVR725RTM ISTB ...</pre>
Explanation Typical response for command QUERYPM for an SVR7 that is in the ISTb state.

QUERYPM (end)**MAP responses**

The following table describes the MAP responses.

Command responses

Responses for the QUERYPM command	
MAP output	Meaning and action
<pre> PM type: SVR7 PM no.: 12 Status: MANB LIM: 2 Shelf: 3 Slot: 24 SVR7 FTA: 426A 1000 Default Load: xxx04BD Running Load: xxx04BD Potential service affecting conditions: Config Data Mismatch Msg Channel #0 NA Msg Channel #1 NA TAP #0 00S/NA TAP #1 00S/NA Host Unit 0 is not in service Host Unit 1 is not in service LMS Unit : 0 1 LMS States : ManB ManB Auditing : No No Msg Channels: NA NA Tap 31 : B(NA) B(NA) </pre>	<p>Meaning: Typical response to QUERYPM command for an SVR7 that is in manual busy (ManB) state.</p> <p>Action: None</p>

QUIT

Command

QUIT

Sublevel

MAPCI;MTC;PM;SVR7

Function

Use the QUIT command to exit from the current menu level and return to a previous menu level.

Usage notes

None

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

QUIT command parameters and variables	
Command	Parameters and variables
QUIT	<u>1</u> ALL incrname n
Item	Description
<u>1</u>	This default parameter causes the system to display the next MAP level.
ALL	This parameter causes the system to exit all MAP levels and display the CI level.
incrname	This variable causes the system to exit the specified level and all sublevels below it. The system displays the next level higher than the one specified. Values for variable incrname are menu level names, such as lns, mtc, or mapci.
n	This variable causes the system to quit a specified number of levels. The range of this variable is 0 to 6. Do not specify a number higher than the number of levels currently open.

QUIT (end)**Usage examples**

The following table provides an example of the command.

Command example

Example of the QUIT command
<p>>QUIT</p> <p><i>MAP response:</i></p> <p>(The display changes to the display of a higher level menu.)</p> <p>Explanation: The SVR7 level has changed to the previous menu level.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the QUIT command	
MAP output	Meaning and action
CI :	<p>Meaning: The system exited all MAP menu levels and returned to the CI level.</p> <p>Action: None</p>
QUIT – Unable to quit requested number of levels	
Last parameter evaluated was: 1	<p>Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels currently open.</p> <p>Action: Reenter the command using an appropriate level number.</p>
The system replaces the SVR7 level menu with a menu that is two or more levels higher.	<p>Meaning: You entered the quit command with an n variable value of 2 or higher, or you entered an incname variable value corresponding to two or more levels higher than the SVR7 level menu.</p> <p>Action: None</p>
The system replaces the display of the SVR7 level with the display of the next higher MAP level.	<p>Meaning: The system exited to the previous MAP level.</p> <p>Action: None</p>

RTS

Command

RTS

Sublevel

MAPCI;MTC;PM;SVR7

Function

Use the RTS command to run diagnostics and return to service an out-of-service Common Channel Signaling 7 (CCS7) server (SVR7).

Usage notes

The SVR7 does not return to service if the out-of-service diagnostics do not pass.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

RTS command parameters and variables	
Command	Parameters and variables
RTS	<u>POSTED</u> <u>NOFORCE</u> <u>WAIT</u> ALL FORCE NOWAIT
Item	Description
ALL	This parameter causes all posted SVR7s to be returned to service.
FORCE	This parameter causes inaccessible SVR7 to be returned to service.
<u>NOFORCE</u>	This default parameter indicates that SVR7s that are not accessible will not be returned to service.
NOWAIT	This parameter allows other commands to be entered at the MAP before the RTS command finishes executing.
<u>POSTED</u>	This default parameter indicates that only the posted SVR7 in the control position will be returned to service.
<u>WAIT</u>	This default parameter indicates that other commands cannot be entered at the MAP until the RTS command finishes executing.

RTS (continued)**Usage examples**

The following table provides an example of the command.

Command example

Example of the RTS command
<pre>>RTS</pre> <p><i>MAP response:</i></p> <pre>SVR7 12 RTS passed</pre> <p>Explanation: The SVR7 has returned to service.</p>

MAP responses

The following table describes the MAP responses.

Command responses (Sheet 1 of 2)

Responses for the RTS command	
MAP output	Meaning and action
<pre>Request Invalid - SVR7 <svr7#> is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The RTS command was not successful because the SVR7 was not in one of the following states:</p> <ul style="list-style-type: none"> • manual busy (ManB) • system busy (SysB) <p>Action: None</p>
<pre>SVR7 <svr7#> Failed</pre> <pre><failure reason></pre> <pre><circuit location display></pre>	<p>Meaning: The command failed. A cardlist may be produced.</p> <p>Action: Refer to the appropriate alarm clearing or card replacement procedure to clear the problem.</p>
<pre>SVR7 <svr7#> RTS passed</pre>	<p>Meaning: The SVR7 has returned to service.</p> <p>Action: None</p>

RTS (end)

Command responses (Sheet 2 of 2)

Responses for the RTS command	
MAP output	Meaning and action
SVR7 <svr7#> RTS Rejected	<p>Meaning: Command RTS was rejected by SVR7 resident maintenance.</p> <p>Action: Contact your next level of support to determine the cause of the failure.</p>

TST**Command**

TST

Sublevel

MAPCI;MTC;PM;SVR7

Function

Use the TST command to run diagnostics on a posted Common Channel Signaling 7 (CCS7) server (SVR7).

Usage notes

The type of diagnostic test initiated by the TST command depends on the state of the SVR7. If the SVR7 is in service (InSv) or in-service trouble (ISTb), the TST command initiates in-service diagnostic tests. If the SVR7 is manually busy, the TST command initiates out-of-service tests.

Command parameters and variables

The following table describes the command parameters and variables.

Parameters and variables

TST command parameters and variables	
Command	Parameters and variables
TST	<u>POSTED</u> ALL
Item	Description
ALL	This parameter causes all posted SVR7s to be tested.
<u>POSTED</u>	This default parameter indicates that only the posted SVR7 in the control position will be tested.

TST (end)

Usage examples

The following table provides an example of the command.

Command example

Example of the TST command
<pre>>TST</pre> <p><i>MAP response:</i></p> <pre>SVR7 12 TST passed</pre> <p>Explanation: The test of the posted SVR7 currently in the control position passed.</p>

MAP responses

The following table describes the MAP responses.

Command responses

Responses for the TST command	
MAP output	Meaning and action
<pre>Request Invalid - SVR7 <svr7#> is <status></pre> <pre>No Action Taken</pre>	<p>Meaning: The TST command was not successful because the SVR7 was not in one of the following states:</p> <ul style="list-style-type: none">• manual busy (ManB)• InSv• ISTb <p>Action: None</p>
<pre>SVR7 svr7# failed - failure reason - circuit location display</pre>	<p>Meaning: The SVR7 failed the test. Details of the failure are displayed.</p> <p>Action: Refer to the appropriate alarm clearing or card replacement procedure to correct the indicated problem.</p>
<pre>SVR7 svr7# TST passed</pre>	<p>Meaning: The SVR7 passed all tests.</p> <p>Action: None</p>

List of terms

800+

See 80D Service.

800+E

See 800 Service.

800 Plus Enhanced Service (800+E)

See 800 Service.

800 Plus Service (800+)

See 800 Service.

800 Service

An intertoll office service in which the called party subscribes to the service and pays for toll calls. Also known as inward wide area telephone service (INWATS).

acknowledgement unit (ACU)

One of the control messages in common channel signaling that, in conjunction with synchronization signal units, is responsible for the synchronization and integrity of the signaling link.

ACU

See acknowledgement unit (ACU).

ACG

See automatic call gapping (ACG).

Advanced Intelligent Network (AIN)

A set of software feature packages that enhances switch call processing capabilities to use centralized databases. These databases determine how AIN calls should proceed for further call processing. AIN also allows operating companies to design and deploy their own features and make these features available across private and public networks.

AIN

See Advanced Intelligent Network (AIN).

A link

A signaling data link that connects signal switching points (SSP) and service control points (SCP) to signaling transfer points (STP). *See also* signaling data link (SDL) and signaling transfer point (STP).

ALT

See Automatic Line Testing (ALT).

AMREP

See Maintenance Manager's Morning Report (AMREP).

application programming interface (API)

A programming interface that converts Compu Call messages into information the call center's business computer can use for communication with its business application software.

application specific unit (ASU)

A combination of hardware and software components that carries out a particular function on the signals carried on the channel buses (C-bus) and frame transport buses (F-bus) in a link peripheral processor (LPP). Examples of ASUs are CCS7 link interface units (LIU7) and network interface units (NIU).

API

See application programming interface (API).

ASU

See application specific unit (ASU).

ATT

See automatic trunk testing (ATT).

automatic call gapping

A component that, when called, allows the advanced intelligent network (AIN) service switching point (SSP) to control calls to the service control point (SCP) database and to protect the SCP from the effects of overload, calls blocked are routed to a no-circuit announcement.

Automatic Line Testing

Testing of both line circuits and the attached loops. In most situations, ALT is run on a large group of lines during a low-traffic period.

automatic trunk testing

A combination of hardware and software that provides automatic testing for outgoing trunks and the outgoing portions of two-way trunks.

Basic 800 Service

See 800 Service.

BERT

See bit error rate test (BERT).

BH

See busy hour (BH).

billed number screening (BNS)

A Common Channel Signaling 7 (CCS7) application process that performs a validation check on the number to which a call is billed. This check is initiated by the operator on operator-assisted and third-number billed calls.

bit error rate test (BERT)

A test that is used to measure the transmission quality of a loop. The BERT transmits a known bit pattern over a line and compares the reflected signal against the initial pattern.

BNS

See billed number screening (BNS).

bootstrap loading

In a DMS switch, a process by which a brief development subroutine reloads software from an external storage device (magnetic tape drive or disk drive unit) into DMS-100DMS-100 Family switches.

Bulk Calling Line Identification (BCLID)

A feature that provides information about calls to members of a BCLID group by allowing data to be collected in one central location for all calls received by lines that are members of the group. The BCLID group is defined through datafill and can have from 1 to 16 data links assigned.

Business Network Management (BNM)

An application of Northern Telecom's Dynamic Network Control products that gives customers direct access to call detail station administration and performance information from one or more Meridian Digital Centrex nodes in their telecommunications network.

busy hour (BH)

- The uninterrupted period of 60 min, not necessarily a clock hour, for which the average intensity of traffic is at the maximum.
- The busiest hour of the busiest day of a normal week, excluding holidays, weekends, and special event days. *See also* erlang.

C7BERT

Common Channel Signaling 7 (CCS7) bit error rate test. *See* bit error rate test (BERT).

Calling Card Validation (CCV)

A Common Channel Signaling 7 (CCS7) feature that allows TOPS operators to validate card numbers in the network service database system. TOPS operators perform this task by entering the special billing class charge and the calling card number.

Calling Name and Number Delivery (CNND)

A feature that allows both number and name information of the calling party to be delivered to the called party set regardless of the permanent number and name suppression status of the subscriber line. CNND is available to subscribers who have the Calling Name Delivery Blocking (CNAB) line or customer group option.

calling name delivery (CNAMD)

See Calling Name Display (CNAMD).

Calling Name Delivery Blocking (CNAB)

CLASS software that allows subscribers to control the delivery of their names to the set of the called party.

Calling Name Display (CNAMD)

A feature that allows the name of the calling party to be delivered to the called subscriber's set when that set is provisioned with a display window capable of receiving calling party identification. Also known as calling name delivery.

Calling Number and Name Blocking (CNNB)

An outgoing call feature that allows a subscriber to block the display of the directory number (DN) and name information on the called subscriber's set.

Calling Number Blocking (CNB)

An outgoing call feature enabling a subscriber to block the display of the directory number (DN) information on the subscriber set of the person being called.

Calling Number Delivery (CND)

CLASS software that shows the ten-digit (three-digit numbering plan area (NPA) code + three-digit central office code + four-digit station number) directory number (DN) of a calling party and the date and time of the call.

Calling Number Delivery Blocking (CNDB)

CLASS software that blocks the display of the calling party's directory number (DN) on a calling number delivery (CND) subscriber's set.

capability code

An address that allows a Common Channel Signaling 7 (CCS7) node to identify itself by more than one point code. For example, each node of a signaling transfer point pair is identified by the same capability code and by individual capability codes. *See also* point code.

C-bus

See channel bus (C-bus).

CCITT

See Consultative Committee on International Telephony and Telegraphy (CCITT).

CCS

- *See* common channel signaling (CCS).
- Hundred (centum) call seconds.

CCS7

See Common Channel Signaling 7 (CCS7).

CCS7 link interface unit (LIU7)

A peripheral module (PM) that processes messages entering and leaving a link peripheral processor (LPP) through an individual signaling data link. Each LIU7 consists of a set of cards and a paddle board provisioned in one of the link interface shelves of the LPP. *See also* link interface unit, link peripheral processor.

CCV

See Calling Card Validation (CCV).

CICS

See Customer Information Control System (CICS).

central processing unit (CPU)

A hardware entity, located in the central control complex frame, that contains the central data processor for the DMS-100 Family system.

central side (C-side)

The side of a node that faces away from the peripheral modules (PM) and toward the central control (CC). Also known as control side. *See also* peripheral side (P-side).

channel bank (CB)

Communication equipment performing the operation of multiplexing. A channel bank is used typically for multiplexing voice grade channels.

channel bus (C-bus)

A proprietary Bell-Northern Research (BNR) duplicated 10-bit time division multiplexed bus running at 4 MHz. The C-bus interconnects network interface units (NIU) with link interface units (LIU).

channel capacity

A measure of the maximum possible information rate through a channel. This measure is subject to specified constraints.

channelized access

A method of providing direct access between a Common Channel Signaling 7 (CCS7) network and the application specific units (ASU) in a link peripheral processor (LPP) without the need for channel banks. A network interface unit (NIU), with either a junctored network (JNET) module or an enhanced network (ENET) module, provides channelized access between the CCS7 network and ASUs. *See also* enhanced network (ENET), junctored network (JNET), network interface unit (NIU).

C-link

The signaling data link (SDL) that connects the mates of a signaling transfer point (STP) pair.

CM

See computing module (CM).

CNAB

See Calling Name Delivery Blocking (CNAB).

CNAMD

See Calling Name Display (CNAMD).

CNB

See Calling Number Blocking (CNB).

CND

See Calling Number Delivery (CND).

CNDB

See Calling Number Delivery Blocking (CNDB).

CNNB

See Calling Number and Name Blocking (CNNB).

CNND

See Calling Name and Number Delivery (CNND).

common channel signaling (CCS)

A signaling method in which information relating to a multiplicity of labeled messages is transmitted over a single channel using time-division multiplex (TDM) digital techniques.

Common Channel Signaling 7 (CCS7)

A digital message-based network signaling standard defined by the CCITT that separates call signaling information from voice channels so that interoffice signaling is exchanged over a separate signaling link.

computing module (CM)

The processor and memory of the dual-plane combined core (DPCC) used by DMS SuperNode. Each CM consists of a pair of CPUs with associated memory that operate in a synchronous matched mode on two separate planes. Only one plane is active; it maintains overall control of the system while the other plane is on standby.

connectionless signaling

A type of signaling in which no fixed end-to-end connection is associated with the call. The route followed by the information and signaling between the originating and terminating subscriber is not fixed and can change from one message to the next. For example, signaling used to access a database for 800-number translations and maintenance signaling messages between signaling points are considered connectionless signaling. Also known as transaction services.

connection-oriented signaling

A signaling process in which a fixed end-to-end path is established for the call. The signaling protocol establishes a fixed path although the signaling itself can travel by way of different paths for the duration of the call. All information associated with the call follows a fixed path even though the signaling itself is not connection-oriented. Also known as trunk signaling.

Consultative Committee on International Telephony and Telegraphy (CCITT)

The CCITT is one of the four permanent groups within the International Telecommunication Union (ITU). The CCITT is responsible for studying technical, operating, and tariff questions. This organization also prepares

recommendations relating to telephony and telegraphy, including data and program services.

CPU

See central processing unit (CPU).

Customer Information Control System (CICS)

A system that permits an operating company to manipulate its own switching system, thus allowing feature applications and class of service.

C-side

See central side (C-side).

DAT

See digital audio tape (DAT).

DDBM

See distributed database maintenance (DDBM)

DDM

See distributed data manager (DDM).

DDU

See disk drive unit (DDU).

destination point code (DPC)

A Common Channel Signaling 7 (CCS7) term defining the termination of a signaling message. *See also* origination point code (OPC).

Device Independent Recording Package (DIRP)

Software that automatically directs data from the various administrative and maintenance facilities to the appropriate recording devices.

digital audio tape (DAT)

A low-cost, high-capacity cassette tape drive that uses helical scan technology and digital data storage format. DAT provides 1.3 Gbytes of storage capacity (1.2 Gbytes for data, 0.1 Gbyte for overhead) on a single cassette. It interfaces with the update processor (UP) of the service control point (SCP) through the ANSI standard small computer system interface (SCSI) bus.

digital carrier equipment (DCE) frame

An equipment frame that houses digital carrier modules (DCM).

digital carrier module (DCM)

A peripheral module (PM), located in a digital carrier equipment (DCE) frame, that provides speech and signaling interfaces between a DS30

network port and digital trunks. A DCM is provisioned with up to five line cards.

digital network interconnecting (DNI) frame

A frame or group of frames housing network junctor connecting panels, which organize the pattern of connections between the junctor faces of network modules (NM).

digital trunk controller

A peripheral module (PM) that connects DS30 links from the network with digital trunk circuits.

digital trunk equipment (DTE) frame

A frame containing up to two dual-shelf digital trunk controllers (DTC).

directory number (DN)

The full complement of digits required to designate a subscriber's station within one numbering plan area (NPA)—usually a three-digit central office (CO) code followed by a four-digit station number.

DIRP

See Device Independent Recording Package (DIRP).

disk drive unit (DDU)

A hardware device that consists of a disk drive and a power converter card installed in an I/O equipment frame.

disk shadowing

The ability to store the same data on two or more disks, for reliability purposes. If one disk in a shadowed set fails, then access to the data is provided by the remaining disks in the shadowed set. There is no data loss or impact on service capacity when a disk in a shadowed set fails.

D-link

A signaling data link that connects a signaling transfer point (STP) of one STP pair to another STP pair in the network.

distributed database manager (DDBM)

Distributed database maintenance (DDBM) controls and monitors the distribution of database updates to QPs.

distributed data manager (DDM)

A utility that manages simultaneous updates of data to several DMS nodes.

DMS-bus

The messaging control component of the DMS SuperNode processor. The DMS-bus components are a pair of message switches (MS).

DMS-core

The call management and system control portion of the DMS SuperNode processor. The DMS-core portion consists of a computing module (CM) and a system load module (SLM).

DMS-INode

A CCS7 integrated node that combines the functionality of a signaling transfer point (STP) and a service switching point (SSP).

DMS-link

The networking software of the DMS SuperNode processor. The DMS-link software consists of open and standard protocols that allow the DMS SuperNode to function in a multivendor environment.

DMS-SCPII

DMS SuperNode Service Control Point II. *See* service control point (SCP).

DMS SP/SSP

DMS SuperNode Signaling Point/Service Switching Point (SP/SSP). *See* signaling point/service switching point (SP/SSP).

DMS-STP

DMS SuperNode Signaling Transfer Point (DMS-STP). *See* DMS SuperNode Signaling Transfer Point (DMS-STP), signaling transfer point (STP).

DMS SuperNode

A central control complex (CCC) for the DMS-100 switch. The two major components of DMS SuperNode are the computing module (CM) and the message switch (MS). Both are compatible with the network module (NM), the I/O controller (IOC), and XMS-based peripheral modules (XPM).

DMS SuperNode SE

DMS SuperNode SE combines the core elements of DMS SuperNode architecture in a single cabinet. It provides the full range of DMS SuperNode features and services for small- and medium-sized standalone network applications. This feature compatibility extends the economic reach of DMS SuperNode features to small standalone applications. DMS SuperNode SE technology transforms a DMS-100 Family switch from an advanced digital central office switch into an integrated network node.

DMS SuperNode Signaling Transfer Point (DMS-STP)

A high-throughput data packet switch providing connectivity between the nodes of a Common Channel Signaling 7 (CCS7) network.

DN

See directory number (DN).

double shelf network equipment (DSNE) frame

A frame that packages one network plane on a single shelf, permitting two complete networks for each plane in a single bay.

DPC

See destination point code (DPC).

DPCC

See dual-plane combined core cabinet (DPCC).

DS-0

A protocol for data transmission that is used to represent one channel in a 24-channel DS trunk.

DS-0A

An asynchronous DS-0. *See* DS-0.

DS

The 8-bit 24-channel 1.544 Mbyte/s digital signaling format as used in the DMS-100 Family. DS-1 is the North American standard for digital trunks. It is a closely specified bipolar pulse stream. The DS-1 signal is the standard signal used to interconnect Northern Telecom digital systems. The DS-1 signal carries 24 information channels of 64 kbit/s each (DS-0s).

DS30

- A 10-bit 32-channel 2.048-Mbyte/s speech-signaling and message-signaling link as used in the DMS-100 Family switches.
- The protocol by which DS30 links communicate.

DS30A

A 32-channel transmission link between the line concentrating module (LCM) and controllers in the DMS-100 Family switches. DS30A is similar to DS30, though intended for use over shorter distances.

DS512 fiber link

The fiber optic transmission link implemented in the DMS SuperNode processor. The DS512 is used for connecting the computing module (CM) to the message switch. One DS512 fiber link is the equivalent of 16 DS30 links.

DSN

See dual shelf network (DSN).

DSNE

See double shelf network equipment (DSNE).

DTC

See digital trunk controller (DTC).

DTE

See digital trunk equipment (DTE) frame.

dual network packaged core (DNPC)

The basic element of the DMS-100 switch. The DNPC is a two-bay unit containing a central control complex (CCC) and two switching network modules (NM).

dual-plane combined core cabinet (DPCC)

One of the three cabinet models for the DMS SuperNode processor. The DPCC contains two message switches and a system load module (SLM).

dual shelf network (DSN)

Also referred to as the junctored network (JNET).

EADAS

See Engineering and Administrative Acquisition System (EADAS).

EDD

See external database dump (EDD).

EIU

See Ethernet interface unit (EIU).

EMC

See enhanced multipurpose cabinet (EMC).

ENET

See enhanced network (ENET).

Engineering and Administrative Acquisition System (EADAS)

An operational measurements support system that collects data from many central offices. It has two components: one for data collection and one for network management.

Enhanced 800 Service (E800 Service)

A Common Channel Signaling 7 (CCS7) feature that allows interexchange carriers equal access to the Basic 800 Service. E800 Service presents network intelligence at an access tandem office or an end office (EO) using an online database query system. Also known as E800. *See also* Basic 800 Service, 800 Plus Service, 800 Service.

enhanced multipurpose cabinet (EMC)

A cabinet containing one or more single shelf link peripheral processors (SSLPP).

enhanced network (ENET)

A channel-matrixed time switch that provides pulse code modulated voice and data connections between peripheral modules (PM). ENET also provides message paths to the DMS-bus components.

Erlang (E)

An international dimensionless unit of the average traffic intensity (occupancy) of a facility during a period of time, usually a busy hour. One erlang equals 3600 call seconds. *See also* busy hour (BH).

Ethernet interface unit (EIU)

The unit that connects the DMS SuperNode to the local area network.

external database dump (EDD)

The dumping of service control point (SCP) service records in an externally readable format. The resulting output is used to verify the SCP database against the Service Management System (SMS) database to ensure database consistency.

fault tolerant file system (FTFS)

An extension to the SuperNode file system. It provides the following benefits:

- higher performance than existing data handler
- caching of frequently accessed data
- high degree of consistency in the presence of faults
- hierarchical file names
- Unix-like file name convention

F-bus

See frame transport bus (F-bus).

F-bus tap

See frame transport bus (F-bus) tap.

fiberized link interface shelf (FLIS)

See single shelf link peripheral processor (SSLPP).

file processor (FP)

A microprocessor with associated memory, disk drives, and tape drives, used for database processing.

fill-in signal units (FISU)

A type of signaling unit sent when the transmit buffer is empty. The FISU fills the gap between useful messages transmitted.

FISU

See fill-in signal units (FISU).

FLIS

See fiberized link interface shelf. Preferred term is single shelf link peripheral processor (SSLPP).

FP

See file processor (FP).

frame supervisory panel (FSP)

A device that accepts the frame battery feed and ground return from the power distribution center (PDC). The FSP distributes the battery feed, by means of subsidiary fuses and feeds, to the shelves of the frame or bay in which it is mounted. The FSP also contains alarm circuits.

frame transport bus (F-bus)

An 8-bit bus that provides data communications between a local message switch (LMS) and the link interface units (LIU) that are provisioned in a link peripheral processor (LPP). To ensure readability, two load-sharing F-buses are provided in an LPP. Each F-bus is dedicated to one of the two LMSs. *See also* link interface module.

frame transport bus (F-bus) tap

A device that provides messaging access to a frame transport bus (F-bus). The tap is either part of the F-bus rate adapter card used by the local message switch or is part of the CCS7 link interface unit (LIU7). *See also* frame transport bus (F-bus).

FSP

See frame supervisory panel (FSP).

FTFS

See fault tolerant file system (FTFS).

global title (GT)

An application address that does not explicitly contain the necessary information that would allow routing by the signaling connection control part (SCCP) of the message transfer part (MTP). The SCCP global title translation (GTT) function is required to translate a GT into a valid network address.

global title translation (GTT)

The process that translates an application-specific address (such as a dialed 800 number) into the Common Channel Signaling 7 (CCS7) network address, usually that of the appropriate service control point (SCP).

GT

See global title (GT).

GTT

See global title translation (GTT).

high day busy hour (HDBH)

The hour, not necessarily a clock-hour, that produces the highest load during busy season.

ILLP

See inter link-to-link protocol (ILLP).

I/O controller (IOC)

An equipment shelf that provides an interface between up to 36 I/O devices and the central message controller (CMC). The IOC contains a peripheral processor that independently performs local tasks, thus relieving the load on the CPU. *See also* IOC shelf.

I/O device (IOD)

A device that allows data to be entered into a data processing system, received from the system, or both entered and received.

I/O equipment (IOE) frame

A frame that houses I/O devices.

integrated services digital network (ISDN)

A set of standards proposed by the CCITT to establish compatibility between the telephone network and various data terminals and devices. ISDN is a communications network that provides access to voice, data, and imaging services from a single type of connector.

integrated services digital network user part (ISUP)

A Common Channel Signaling 7 (CCS7) message-based signaling protocol that acts as a transport carrier for ISDN services. ISUP provides the functionality in a CCS7 network for voice and data services.

inter link-to-link protocol (ILLP)

A level 2 Common Channel Signaling 7 (CCS7) protocol that is used to detect message losses between CCS7 link interface units (LIU7). *See also* Common Channel Signaling 7 (CCS7), CCS7 link interface unit (LIU7).

interperipheral connection (IPC)

A connection in the interperipheral message link (IPML) in common channel interoffice signaling. Two IPCs can share the message handling load.

interperipheral message link (IPML)

The path between the message switch and buffer (MSB) and the digital trunk controller (DTC). An IPML consists of two nailed-up cross-connections called interperipheral connections (IPC), which share the message handling load. Each is capable of handling the full load should the other fail.

inward wide area telephone service (INWATS)

A telephony service that allows a subscriber to receive long distance telephone calls originating within specified service areas without a charge to the originating party. A toll free number is assigned to a certain private branch exchange (PBX) to allow for free calls.

INWATS

See inward wide area telephone service (INWATS).

IOC

See I/O controller (IOC).

IPC

See interperipheral connection (IPC).

IPML

See interperipheral message link (IPML).

ISDN

See integrated services digital network (ISDN).

ISDN user part (ISUP)

See integrated services digital network user part (ISUP).

ISUP

See integrated services digital network user part (ISUP).

JNET

See junctored network (JNET).

junctored network (JNET)

A time-division multiplexed system that allows for switching of 1920 channels per network pair (fully duplicated). Additional channels are established through the use of external junctors, internal junctors, and a digital network interconnecting (DNI) frame. Channels then can be routed

directly, or use alternate routing, through the use of junctors, a DNI frame, and software control. Capacity for a DMS-100 switch is 32 network pairs or 61 440 channels (1920 channels x 32 network pairs).

LIM

See link interface module (LIM).

link

- In a DMS switch, a connection between any two nodes.
- A four-wire group of conductors providing transmit and receive paths for the serial speech or message data between components of DMS-100 Family switches. Speech links connect peripheral modules (PM) to the network modules (NM). Message links connect NM controllers or I/O controllers (IOC) to the central message controller (CMC).

link interface module (LIM)

A peripheral module (PM) that controls messaging between link interface units (LIU) in a link peripheral processor (LPP). The LIM also controls messages between the LPP and the DMS-bus component. A LIM consists of two local message switches (LMS) and two frame transport buses (F-bus). One LMS operates in a load sharing mode with the other LMS. This ensures LIM reliability in the event of an LMS failure because each LMS has adequate capacity to carry the full message load of an LPP. Each LMS uses a dedicated F-bus to communicate with the LIUs in the LPP. *See also* frame transport bus, link peripheral processor.

link interface shelf (LIS)

A shelf in a link peripheral processor (LPP) that houses application specific units (ASU) and associated power converters.

link interface unit (LIU)

A peripheral module (PM) that processes messages entering and leaving a link peripheral processor (LPP) through an individual signaling data link. *See also* CCS7 link interface unit (LIU7).

link peripheral processor (LPP)

A DMS SuperNode equipment frame that contains two types of peripheral modules (PM): a link interface module (LIM) and a link interface unit (LIU). The CCS7 link interface units (LIU7) are used in the LPP. *See also* link interface module (LIM), CCS7 link interface unit (LIU7).

linkset

A collection of links connecting two adjacent signaling points in CCITT No. 6 Signaling (N6), Common Channel Interoffice Signaling No. 6 (CCIS6), and Common Channel Signaling 7 (CCS7).

LIS

See link interface shelf (LIS).

link status signal unit (LSSU)

A type of signal unit that contains information about signaling unit state changes. The LSSU has priority over other types of signal units.

LIU

See link interface unit (LIU).

LIU7

See CCS7 link interface unit (LIU7).

LMS

See local message switch (LMS).

local message switch (LMS)

A high-capacity communications hub that controls messaging between link interface units (LIU) in a link peripheral processor (LPP). An LMS also controls messaging between the LPP and the DMS-bus component. The link interface module (LIM) uses a pair of LMSs to provide dual-plane redundancy.

loopback

The reflection of data signals of known characteristics to their point of origin so that the reflected bit stream can be compared with the transmitted bit stream.

LPP

See link peripheral processor (LPP).

LSS

Local subsystem (LSS).

LSSI

Local subsystem instance (LSSI).

LSSU

See link status signal unit (LSSU).

magnetic tape drive (MTD)

In a DMS switch, a device used to record DMS-100 Family data. An MTD can be mounted on either a magnetic tape center (MTC) frame or an I/O equipment (IOE) frame. Also known as a tape drive.

maintenance and administration position

See MAP.

Maintenance Manager's Morning Report (AMREP)

A feature that provides a 24-h summary of performance, administrative and maintenance information on the DMS switch.

maintenance trunk module (MTM)

In a trunk module equipment (TME) frame, a peripheral module (PM) that is equipped with test and service circuit cards and contains special buses to accommodate test cards for maintenance. The MTM provides an interface between the DMS-100 Family digital network and digital or analog test and service circuits.

MAP

Maintenance and administration position. A group of components that provides a user interface between operating company personnel and the DMS-100 Family switches. The interface consists of a video display unit (VDU) and keyboard, a voice communications module, test facilities, and special furniture.

MAPCI

See MAP command interpreter (MAPCI).

MAP command interpreter (MAPCI)

A MAP level for accessing maintenance and other functional levels.

message signal unit (MSU)

A type of signal unit that contains signaling information. The MSUs are buffered until positive acknowledgement is received.

message transfer part (MTP)

A CCITT No. 7 Signaling (N7) protocol that provides a connectionless transport system for carrying Common Channel Interoffice Signaling No. 6 (CCIS6) and Common Channel Signaling 7 (CCS7) signaling messages between user locations or applications functions. Also known as message transport part.

message transport part (MTP)

See message transfer part (MTP).

MLIU

See multiple link interface unit (MLIU).

MPC

See multiprotocol controller (MPC).

MS

See message switch (MS).

MSU

See message signal unit (MSU).

MTM

See maintenance trunk module (MTM).

MTP

See message transfer part (MTP).

multiple link interface unit (MLIU)

A peripheral module (PM) that processes messages entering and leaving a link peripheral processor (LPP) through multiple signaling data link. Each MLIU consists of a set of cards and a paddle board provisioned in one of the link interface shelves of the LPP. *See also* link interface unit, link peripheral processor.

multiprotocol controller (MPC)

A general-purpose card that allows data communications between a DMS-100 Family switch and an external computer (for example, between a central office (CO) billing computer and a DMS-100 Family switch). The MPC card resides on the I/O controller (IOC) shelf. MPC card protocol software is downloaded from the DMS-100 CPU and then used to support software routines for Data Packet Network (DPN) communications.

N7 signaling network

A number of switching and processing nodes that are connected to each other by signaling links. CCITT No. 7 Signaling (N7) networks can contain the following nodes: signaling point (SP), signaling transfer point (STP), service control point (SCP), and service switching point (SSP).

nailed-up connection (NUC)

A permanently assigned network connection that forms part of the speech path between suitably equipped peripheral modules (PM).

NET

See network (NET).

network (NET)

- An organization of stations capable of intercommunication but not necessarily on the same channel.
- Two or more interrelated circuits.
- A combination of terminals and circuits in which transmission facilities interconnect user stations directly.

- A combination of circuits and terminals serviced by a single switching or processing center.
- An interconnected group of computers or terminals.
- The NET module frame of the DMS-100 switch.

network interface unit (NIU)

A DMS SuperNode application specific unit (ASU) that provides channelized access for F-bus resident link interface units (LIU) using a channel bus (C-bus). The NIU resides in a link peripheral processor (LPP) frame.

network management (NWM)

Operational control of a DMS-100 network that is performed from the network management (NWM) MAP level. The objective of NWM is to optimize available resources during overload or faulty failure.

network module (NM)

The basic building block of the DMS-100 Family switches. The NM accepts incoming calls and uses connection instructions from the central control complex (CCC) to connect the incoming calls to the appropriate outgoing channels. Network module controllers control the activities in the NM.

network module controller (NMC)

A group of circuit cards that communicates with the central message controller (CMC). The NMC is located in the network module (NM). The NMC organizes the flow of internal messages by directing messages to the peripheral modules (PM) or interpreting connection instructions to the crosspoint switches.

network operation protocol (NOP)

An interface between a DMS-100 Family switch and its remote systems.

network operations system (NOS)

A facility that provides the DMS-100 Family of switches with the capability of transferring data over communication links to a telephone network operating system.

NIU

See network interface unit (NIU).

NM

See network module (NM).

NMC

See network module controller (NMC).

node

The terminating point of a link. Node is a relative term in that its meaning depends entirely on the context in which it is used. For example, a circuit can be a node in the context of another circuit within a module; the module itself can be a node in the context of another component of the network, and so forth. Some common applications are

- in network topology, a terminal of any branch of a network or a terminal common to two or more branches of a network
- in a switched communications network, the switching points, including patching and control facilities
- in a data network, the location of a data station that interconnects data transmission lines
- a unit of intelligence within a system; in a DMS switch, it includes the CPU, network module (NM), and peripheral modules (PM)

NOP

See network operation protocol (NOP).

NOS

See network operations system (NOS).

NUC

See nailed-up connection (NUC).

NWM

See network management (NWM).

OM

See operational measurements (OM).

OPC

See origination point code (OPC).

open systems interconnection (OSI) reference model

Open systems interconnection (OSI) reference model for CCITT applications provides a defined structure for modeling the interconnection and exchange of information between users in a communication system. *See also* Consultative Committee on International Telephony and Telegraphy (CCITT).

operational measurements (OM)

The hardware and software resources of the DMS-100 Family switches that control the collection and display of measurements taken on an operating system. The OM subsystem organizes the measurement data and manages

its transfer to displays and records. The OM data is used for maintenance, traffic, accounting, and provisioning decisions.

origination point code (OPC)

A Common Channel Signaling 7 (CCS7) term defining the address of a signaling point that generated the message. *See also* destination point code (DPC).

OSI

See open systems interconnection (OSI) reference model.

paddle board (PB)

A short circuit pack based on the standard circuit pack. The PB carries the cable interfaces and local service functions, such as local clock sources and bus terminations or both, located on the back of a DMS SuperNode shelf.

PB

See paddle board (PB).

P-bus

See processor bus (P-bus).

PC

See point code (PC).

PCM

See pulse code modulation (PCM).

PCM30

- A 32-channel 2.048-Mbyte/s speech-signaling and message-signaling link used in international trunks.
- The protocol by which PCM30 links communicate.

PDC

See power distribution center (PDC).

PEC

See product engineering code (PEC).

peg count

The number of times an event occurs; for example, the number of telephone calls originated during a specified period of time.

peripheral module (PM)

A generic term referring to all hardware modules in the DMS-100 Family switches that provide interfaces with external line, trunk, or service facilities. A PM contains peripheral processors, which perform local routines, thus relieving the load on the CPU.

peripheral processor (PP)

A hardware device in the peripheral module (PM) that performs local processing independent of the CPU. The (PP) is driven by read-only memory (ROM) in the PM, thus releasing CPU run time for higher level activities.

peripheral side (P-side)

The side of a node facing away from the central control (CC) and toward the peripheral modules (PM). *See also* central side (C-side).

per-trunk signaling (PTS)

A conventional telephony method of signaling that multiplexes the control signal of a call with voice or data over the same trunk.

PM

See peripheral module (PM).

point code (PC)

The address of a signaling point. *See also* capability code.

power distribution center (PDC)

The frame containing the components for distributing office battery feeds to equipment frames of the DMS-100 Family switches. The PDC accepts A and B cables from the office battery and provides protected subsidiary feeds to each frame or shelf. It also contains noise suppression and alarm circuits and provides a dedicated feed for the alarm battery supply.

product engineering code (PEC)

An eight-character unique identifier for each marketable hardware item manufactured by Northern Telecom.

P-side

See peripheral side (P-side).

PTS

See per-trunk signaling (PTS).

pulse code modulation (PCM)

- The process used to convert an analog (voice waveform) signal to a digital code.
- A form of modulation in which the modulating signal is sampled and the sample is quantified, coded, and sent as a bit stream.
- The representation of an analog waveform by coding and quantifying periodic samples of the signal such that each element of information consists of a binary number representing the value of the sample.

QP

See query processor (QP).

query

A message containing call information that is sent to a centralized database for call processing instructions.

query processor (QP)

A file processor (FP) that receives and responds to Common Channel Signaling 7 (CCS7) queries in a service control point (SCP). *See also* file processor (FP).

register

- The apparatus in an automatic switching system that receives address signals and controls the subsequent switching operation.
- The first unit in the assembly of common control equipment in an automatic central office (CO). The register receives address information and stores it for possible conversion or translation. A register frequently operates in conjunction with a sender.
- A storage device having a specified storage capacity such as a bit, byte, or computer word, and usually intended for a special purpose.

remote switching center (RSC)

A remote common peripheral module (CPM) that provides an interface with a large number of analog lines, digital trunking or both at a remote location. The RSC also handles remote-off-remote connections from other remote sites.

routaset

A logical group of Common Channel Signaling 7 (CCS7) signaling paths with the same destination point.

routeset management (RSM)

A service that transfers messages over the signaling network and helps to maintain the network by checking for link problems through the use of an integrity source.

routing

A telephony function that selects and connects a path from the originating terminal to a destination based upon an analysis of the digits received and the screening of a line as required.

RSC

See remote switching center (RSC).

RSM

See routeset management (RSM).

SCCP

See signaling connection control part (SCCP).

SCP

See service control point (SCP).

SCPII

An enhancement of the service control point (SCP). *See* service control point (SCP).

SEAS

See Signaling, Engineering, and Administration System (SEAS).

service control point (SCP)

A node in a Common Channel Signaling 7 (CCS7) signaling network that supports application databases. The function of an SCP is to accept a query for information, retrieve the requested information from one of its application databases, and send a response message to the originator of the request.

Service Management System (SMS)

A node that is separate from the DMS-SCPII and that provides various administrative and maintenance functions to support one or more SCPs. The SMS is externally connected to one or more SCPs through Ethernet interface units (EIU).

Service Order System (SERVORD)

A user interface consisting of commands used to change, add, or delete subscriber lines. The format used for commands in the SERVORD comply with the standard telephone industry command format; for example, 3WC

is three-way calling, ADO is add option, DEL is delete, and CWT is call waiting.

service switching point (SSP)

A Common Channel Signaling 7 (CCS7) signaling node that interacts with the service control point (SCP) to implement special service code features.

SERVORD

See Service Order System (SERVORD).

SFP

See store and forward processor (SFP).

shadow disk

See disk shadowing.

shadow set

See disk shadowing.

signaling connection control part (SCCP)

A level of Common Channel Signaling 7 (CCS7) layered protocol. It supports advanced services such as E800 and service switching point (SSP) and the Automatic Calling Card Service (ACCS) feature. The main functions of the SCCP include the transfer of signaling units with or without the use of a logical signaling connection, and the provisioning of flexible global title translations (GTT) for different applications.

Signaling, Engineering, and Administration System (SEAS)

A system that provides a single administrative center that uses network signaling transfer points (STP) to monitor and coordinate the elements of a Common Channel Signaling 7 (CCS7) network. The administration and engineering functions of the SEAS allow the operating company to process, store, and report traffic and performance data on a network-wide basis. This data can be used to evaluate network performance, to balance loads between STP nodes, and to perform other network management tasks.

signaling link (SL)

The term used to describe the first two levels of the Common Channel Signaling 7 (CCS7) protocol: the physical level (level 1) and the link level (level 2). Level 2 functions, combined with a level 1 signaling data link, constitute an SL used for the reliable transfer of signaling messages between two signaling points (SP).

Signaling Link Selection (SLS)

A process used to distribute messages evenly over a linkset. SLS is determined by the SL.

signaling point (SP)

A node in a Common Channel Signaling 7 (CCS7) network that originates, terminates, or transfers signaling messages from one signaling link (SL) to another.

signaling point/service switching point (SP/SSP)

A Common Channel Signaling 7 (CCS7) node that combines the functions of a signaling point and a service switching point.

Signaling System 7 (SS7)

The American National Standards Institute (ANSI) version of the international CCITT Signaling System No. 7 that was developed for North American use.

Signaling System #7 (SS#7)

An international version of Signaling System 7 (SS7) based on the CCITT specification of SS7.

signaling terminal (ST)

The hardware that performs error checking, coding, and decoding of signaling messages. In Common Channel Interoffice Signaling No. 6 (CCIS6) and CCITT No. 6 Signaling (N6), it consists of a signaling terminal controller, a modem, and a modem interface card. In Common Channel Signaling 7 (CCS7), the signaling terminal is a single card.

signaling transfer point (STP)

A node in a Common Channel Signaling 7 (CCS7) network that routes messages between nodes. Signaling transfer points transfer messages between incoming and outgoing signaling links but, with the exception of network management (NWM) information, do not originate or terminate messages. Signaling transfer points are deployed in pairs. If one STP fails, the mate takes over, ensuring that service continues without interruption.

single shelf link peripheral processor (SSLPP)

A shelf provided as an option for DMS switching offices that do not require a large number of link interface units (LIU) or application specific units (ASU). An SSLPP differs from the LPP arrangement in that it eliminates the requirement for a local message switch between an LIU or ASU and the DMS-bus. Instead, each F-bus on each SSLPP shelf is cabled directly to the message switch (MS) with fiber optic cables. Formerly known as fiberized link interface shelf (FLIS).

SL

See signaling link (SL).

SLM

See system load module (SLM).

SLS

See Signaling Link Selection (SLS).

SMS

See Service Management System (SMS), Software Management System (SMS).

Software Management System (SMS)

In a DMS switch, a system that allows tracking and capture of the various activities (for example, testing and problem reporting) in the software product development cycle.

SP

See signaling point (SP).

SPMS

See Switch Performance Monitoring System (SPMS).

SP/SSP

See signaling point/service switching point (SP/SSP).

SR-512-2

The equivalent of eight DS30 links. The SR-512-2 link uses half the transmission capability of a DS512 link. The SR-512-2 link is a fiber optic transmission link implemented in DMS SuperNode, and SR-512-2 is used for connecting the computing module (CM) to the message switch (MS). *See also* DS512 and SR-512-4.

SR-512-4

The equivalent of four DS30 links. The SR-512-4 link uses one quarter of the transmission capability of a DS512 link. The SR-512-4 link is a fiber optic transmission link implemented in DMS SuperNode, and is used for connecting the computing module (CM) to the message switch (MS). *See also* DS512 and SR-512-2.

SS7

See Signaling System 7 (SS7).

SS#7

See Signaling System #7 (SS#7).

SSLPP

See single shelf link peripheral processor (SSLPP).

SSP

See service switching point (SSP).

ST

See signaling terminal (ST).

store and forward processor (SFP)

A computer attached to the node that records the message signaling units (MSU). The SFP is externally connected to the STP through Ethernet interface units (EIU).

STP

See signaling transfer point (STP).

subsystem

An application in a node that uses the routing functions of the signaling connection control part (SCCP). Subsystems are addressable entities.

subsystem number (SSN)

The identification of a subsystem located at a Common Channel Signaling 7 (CCS7) point code that can supply data.

SWACT

See switch of activity (SWACT).

switch of activity (SWACT)

In a DMS fault tolerant system, a switch that changes the states of two identical devices devoted to the same function. A SWACT makes an active device inactive and an inactive device active.

Switch Performance Monitoring System (SPMS)

A system that monitors all areas of switch operations and creates regular reports on performance. The reports are based on a wide range of index values computed from operational measurements (OM) generated by the switch.

system load module (SLM)

A mass storage system in a DMS SuperNode processor that stores office images. From the SLM, new loads or stored images can be booted into the computing module (CM).

T1

The standard 24-channel 1.544-Mbit/s pulse code modulation (PCM) system used in North America. This digital carrier carries a signal whose designation is a DS-1 link.

tape drive

See magnetic tape drive (MTD).

T-bus

Transaction bus. Preferred term is S/T-bus.

TCAP

See transaction capability application part (TCAP).

TL

See transmission link (TL).

T-link

A full-duplex byte-oriented adaptation protocol designed to transfer synchronous or asynchronous data over a digital circuit at digital trunk equipment (DTE) data rates of up to 64 kbit/s.

transaction capability application part (TCAP)

A service that provides a common protocol for remote operations across the Common Channel Signaling 7 (CCS7) network. The protocol consists of message formatting, content rules, and exchange procedures. TCAP provides the ability for the service switching point (SSP) to communicate with a service control point (SCP). TCAP is used by the ISDN layer facility message to transport service information for transaction signaling, not associated with an active call, over primary rate interface (PRI) links.

transaction services

See connectionless signaling.

transmission link (TL)

In a Common Channel Signaling 7 (CCS7) network, a T1 digital carrier terminating on a digital trunk controller (DTC). In the DMS switch, the TL is a single voice carrier on a DS30 link over connections through the network and into the message switch and buffer 7 (MSB7).

TRMS

Transactional record management system.

trunk module (TM)

A peripheral module (PM), in a trunk module equipment (TME) frame, that provides speech and signaling interfaces between a DS30 network port and analog trunks.

trunk module equipment (TME) frame

A frame containing one or more trunk modules (TM), maintenance trunk modules (MTM), or office alarm units (OAU).

update batch handler (UBH)

A component of the UP that receives updates.

update batch handler maintenance (UBHM)

Update batch handler maintenance (UBHM) provides an interface to allow the SMS to update and retrieve database information at a DMS-SCP.

update processor (UP)

A file processor (FP) that performs database update and maintenance functions in a service control point (SCP). Functions provided are:

- local update validation
- update distribution to query processors (QP)
- database backup and restoration from disk or tape
- coordination of local database audits

See also file processor (FP).

update processor instance (UPI)

A component of the UP that updates the master database.

update processor instance maintenance (UPIM)

UPIM maintains the database update processing at the update processor module (UPM). It also provides an interface with the MAP software.

VOL

See volume label (VOL).

volume label (VOL)

A standard label recorded on magnetic tape ahead of the header and user header labels. A VOL identifies the volume by serial number and tape user name.

DMS-100 Family

Common Channel Signaling 7

Maintenance Guide Volume 2 of 2

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