



Maintenance Commands for Avaya Communication Manager, Media Gateways and Servers

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About this Document

This document provides supporting information for the commands used to monitor, test, and maintain hardware components of an Avaya Server or Gateway system. The commands help the user to access Avaya systems' extensive background testing and technician-demanded tests, which allow various problems to be addressed before they severely disrupt call processing.

Document set

Although this maintenance book is published separately, it is part of a set:

- ┆ *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190) (formerly 03-300190, 555-245-102)*
- ┆ *Maintenance Commands for Avaya Communication Manager, Media Gateways and Servers (03-300431) (formerly 03-300191) (formerly 03-300191, 555-245-101)*
- ┆ *Maintenance Procedures for Avaya Communication Manager, Media Gateways and Servers (03-300432) (formerly 03-300192) (formerly 03-300192, 555-245-103)*

Equipment/platforms

This book contains information about the following equipment/platforms

- ┆ Avaya S87xx Servers
- ┆ Avaya S8500 Servers
- ┆ Avaya S8300 Servers
- ┆ Avaya G700/G650/G600 Media Gateways
- ┆ Avaya G150/G250/G350/G450 Media Gateways

Audience

This document is for use by field technicians, remote service personnel, and user-assigned maintenance personnel, as a command reference to help diagnose and repair Avaya Servers and Media Gateways.

This document may also be used as a training aid for teaching technicians how to maintain the system.

This document assumes that the technician has a working knowledge of telecommunications fundamentals and PBX maintenance practices. This document also assumes that the system was initially installed and tested properly and brought into service with every fault cleared. Adjuncts and other devices external to the switch are covered by their own service documentation.

Note:

This document is designed to be read online and in paper format. Because of the large volume of information, cross-references have been added to make it easier to locate information when using the manual online.

Organization

- | [Chapter 1: Maintenance SAT Commands](#), describes existing and modified Communication Manager SAT interface commands. Introductory sections explain the command entries, common command results, and error codes for busyout, release, and reset commands.
- | [Chapter 2: Linux Bash Commands](#), describes Linux platform commands, executed from the bash shell. These commands are useful for providing server information, or to troubleshoot problems in the switch and other components.
- | [Chapter 3: IPSI Commands](#), describes the command functionality available to users of the TN2312 IPSI (IP Server Interface) circuit pack. IPSI commands are grouped into functional categories of user access, ipadmin, diagnostics, Control Network Interface Configuration, and Ethernet Services Port Configuration.
- | [Chapter 4: SAT Command Parameters](#), lists command parameters associated with Communication Manager SAT interface administration screens.

Conventions

Table 1: Explanation of typefaces 1 of 2

To represent...	This typeface and syntax are shown as...	For example...
Specific component information	- Avaya component model number - Indented lines set apart extended information intended for a specific system component.	S8700 series: Ensure that the duplication link is securely connected. G700 Ensure that Media Module is securely seated and latched in the carrier.
SAT commands	- Bold for commands - Bold italic for <i>variables</i> - Square brackets [] around optional parameters " " between exclusive choices	refresh ip-route [all location]
SAT screen input and output	- Bold for input - Constant width for output (screens and messages)	Set the Save Translation field to daily . The message Command successfully completed should appear.
Linux commands	- Constant-width bold for literals - Constant-width bold italics for <i>variables</i> - Square brackets [] around optional arguments "Or" sign between exclusive choices	testmodem [-s] [-t arg]
Linux output	Constant width	Linux returns the message almdisplay 4: Unable to connect to MultiVantage.

1 of 2

Table 1: Explanation of typefaces 2 of 2

To represent...	This typeface and syntax are shown as...	For example...
Web interface	1 Bold for menu selections, tabs, buttons, and field names 1 Right arrow > to separate a sequence of menu selections	Select Alarms and Notification, the appropriate alarm, and then click Clear. Select Diagnostics > View System Logs, then click Watchdog Logs.
Keys	Special font for keyboard keys and SAT screen clickable buttons	Press Tab. Click Next Page.

2 of 2

Other conventions used in this book:

- 1 Physical dimensions are in English units [Foot Pound Second (FPS)], followed by metric units [Centimeter Gram Second (CGS)] in parentheses.

Wire-gauge measurements are in AWG, followed by the diameter in millimeters in parentheses.

- 1 Circuit-pack codes (such as TN790B or TN2182B) are shown with the minimum acceptable alphabetic suffix (like the “B” in the code TN2182B).

Generally, an alphabetic suffix higher than that shown is also acceptable. However, not every vintage of either the minimum suffix or a higher suffix code is necessarily acceptable. The *Hardware Description and Reference for Avaya Communication Manager (555-245-207)*, contains current information on circuit pack codes and functionality.

Safety labels and security alert labels

Observe all caution, warning, and danger statements to help prevent loss of service, equipment damage, personal injury, and security problems. This book uses the following safety labels and security alert labels:

CAUTION:

A caution statement calls attention to a situation that can result in harm to software, loss of data, or an interruption in service.

WARNING:

A warning statement calls attention to a situation that can result in harm to hardware or equipment.

**DANGER:**

A danger statement calls attention to a situation that can result in harm to personnel.

**SECURITY ALERT:**

A security alert calls attention to a situation that can increase the potential for unauthorized use of a telecommunications system.

Useful Terms

Present Terminology	Former Terminology
Communication Manager	MultiVantage, Avaya Call Processing
S8300 Server	ICC, Internal Call Controller
S87xx Server (could also be a non-co-resident S8300)	ECC, External Call Controller
MGP, Media Gateway Processor	860T Processor
Layer 2 Switching Processor	P330 Stack Processor, Cajun Stack Processor, i960 Processor

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Related resources

[Table 2: Additional document resources](#) on page 18 lists additional documentation that is available for you, some of which is referenced within this document.

Table 2: Additional document resources

Document	Number
<i>Administrator Guide for Avaya Communication Manager (03-300509)</i>	03-300509
<i>Administration for the Avaya 250 and Avaya 350 Media Gateways (03-300436)</i>	03-300436
<i>Administration for Network Connectivity for Avaya Communication Manager, (555-233-504)</i>	555-233-504
<i>Avaya Communication Manager Call Center Software Basic Call Management System (BCMS) Operations (07-300061)</i>	07-300061
<i>Avaya Call Center Release 4.01 Call Vectoring and Expert Agent Selection (EAS) Guide, 07-600780 (formerly 07-300477, 07-300186, 555-230-714)</i>	07-600780
<i>Avaya Extension to Cellular User's Guide, Avaya Communication Manager Release 4.0 (210-100-700)</i>	210-100-700
<i>GuestWorks® and DEFINITY® Systems Technician Handbook for Hospitality Installations (555-231-743)</i>	555-231-743
<i>Hardware Description and Reference for Avaya Communication Manager (555-245-207)</i>	555-245-207
<i>Installing and Upgrading the Avaya G700 Media Gateway and Avaya S8300 Media Server (555-234-100)</i>	555-234-100
<i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)</i>	03-300430
<i>Maintenance Commands for Avaya Communication Manager, Media Gateways and Servers (03-300431) (formerly 03-300191)</i>	03-300431
<i>Maintenance Procedures for Avaya Communication Manager, Media Gateways and Servers (03-300432) (formerly 03-300192)</i>	03-300432
<i>Reports for Avaya Communication Manager (555-233-505)</i>	555-233-505

Technical assistance

Avaya provides the following resources for technical assistance.

Within the US

For help with:

- ┆ Feature administration and system applications, call the Avaya Technical Consulting Support at 1-800-225-7585
- ┆ Maintenance and repair, call the Avaya National Customer Care Support Line at 1-800-242-2121
- ┆ Toll fraud, call Avaya Toll Fraud Intervention at 1-800-643-2353

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Mention the name and number of this book, *Maintenance Commands for Avaya Communication Manager, Media Gateways and Servers (03-300431)*.

Chapter 1: Maintenance SAT Commands

This chapter contains descriptions of existing and modified SAT commands on Avaya Servers and Gateways. Introductory sections explain the command entries, common command results, and error codes for **busyout**, **release**, and **reset** commands. This information is divided into sections:

- | [New SAT Commands](#) on page 22
- | [Modified SAT Commands](#) on page 22
- | [Replaced and removed commands](#) on page 23
- | [SAT Command-Line Syntax](#) on page 25
- | [Common Input Parameters](#) on page 25
- | [Common Command Output Screens](#) on page 28
- | [Error Messages](#) on page 32
- | [Busyout and Release Commands](#) on page 33
- | [Common Error Codes for maintenance commands](#) on page 34
- | [Alarm and Error Categories](#) on page 36

Many commands can be run from the Communication Manager web interface. For more information on using the web interface, see *Administrator Guide for Avaya Communication Manager (03-300509)*.

A SAT command may apply to a number of servers and media gateways, and it may produce different results depending on the configuration of the system. Some commands apply to certain servers and not others.

New SAT Commands

Table 3: New SAT Commands for Communication Manager 5.0

New SAT command	Screen name
pin	CHANGE PIN
bp	BUSINESS PARTNER ACCESS
craft2	ENABLE/DISABLE CRAFT2
extended-user-profile	Extended User Profile
user-profile	User Profile
user-profile-by-category	User Profile

Modified SAT Commands

Table 4: Modified SAT Commands for Communication Manager 5.0

Modified SAT command	Screen name
public-unknown-numbering - new option <i>trunk-group trunk-group-number</i>	NUMBERING - PUBLIC/UNKNOWN FORMAT

Replaced and removed commands

Table 5: SAT Commands removed and replaced in 5.0 or earlier

Removed command	Replaced with
change/display communication-interface hop-channels	
enable filesystem	enable filexfer
disable filesystem	disable filexfer
list communication-interface	See communication-interface links on page 155
restore announcements	
status dlg cti-link	See status aesvcs cti-link on page 43
status dlg interface	See status aesvcs interface on page 46
status system	

Table 6: Previously removed and replaced SAT commands 1 of 2

Previous command	Replaced with	Notes
add login change login disable login enable login remove login	On the Communication Manager Maintenance Web Page, navigate to Security>Administrator Accounts . or Use the CLI commands: cmuseradd cmusermod cmuserdel cmpasswd	
change permissions		
1 of 2		

Table 6: Previously removed and replaced SAT commands 2 of 2

Previous command	Replaced with	Notes
<code>display login</code> <code>list logins</code>		
<code>emergency transfer</code>	removed	In port networks with IPSI circuit packs, there is no maintenance board. Instead, a lead off of the IPSI supports the power supply and fan.
<code>isdn-testcall</code>	<u>isdnpri-testcall</u>	Displays the progress of an outgoing ISDN-PRI test call on the specified trunk.
<code>list configuration</code> <code>license</code>	<code>serialnumber</code>	See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i>
<code>list measurements</code> <code>security -violations</code> <code>detail</code>	Security Violations Detail Report	
<code>monitor</code> <code>security-violations</code> <code>login</code>	Login Violations Status Report	
<code>remove license</code>	removed	Manually delete license files from the operating system
<code>reset login-session</code>	<code>login-ID</code>	
<code>status clan-usage</code>	<u>status</u> <u>socket-usage</u> on page 509	Use <code>status socket-usage</code> to show a snapshot of the individual socket usage for each C-LAN or Processor Ethernet, and to list the system's: ┆ number of registered IP endpoints ┆ number of registered IP endpoints with TCP signaling sockets established ┆ number of sockets used ┆ number of sockets on the system
2 of 2		

SAT Command-Line Syntax

Each command consists of an action word, an object upon which the action is performed, and sometimes qualifiers that modify the execution of the command. In the [List of SAT Commands](#) on page 36, the syntax of the command appears under the heading at the beginning of each command description. The command syntax is presented in this section as follows:

Action	Object	Required and Optional Qualifiers
test	station	extension [short long]
bold	bold	<i>bold italic</i> if a variable, bold if entered literally [bracketed] if optional () separates exclusive or choice qualifiers

Command words can be abbreviated. A partially spelled word is recognized when enough letters are entered to distinguish it from other valid entries. Otherwise, the screen displays a selection of command words that match the abbreviation. For example:

test alarms step long clear can be entered as **t a l s t l c**.

Drop leading zeroes from numerical entries. For example, cabinet number 03 can be entered as 3.

Press the **HELP** key to show every available command, or every valid qualifier for the command.

Common Input Parameters

Characters shown in this section in **bold** type are entered literally on the command line.

Characters shown in *italic bold* type are variables. For a description of other typography used in commands, see [Table 1: Explanation of typefaces](#) on page 15.

One type of common input parameter is for specifying a hardware location. [Table 7: Hardware Location Parameters](#) on page 26 explains the variations of specifying hardware location in a

command. The valid range of each variable differs depending on the type of configuration of the system.

Table 7: Hardware Location Parameters

Parameter	Meaning
<i>UUCSSpp</i>	The full address of a port: Universal cabinet, carrier, slot, port circuit
<i>GGGVMpp</i>	Media gateway, media module, port circuit
<i>Uc</i>	Cabinet number and carrier for the server
<i>UU</i>	Cabinet number (1-2 digits)
<i>C</i>	Letter designation of a carrier
<i>SS</i>	Circuit pack's slot in a carrier (1- or 2-digits)
<i>GGG</i>	Media gateway number
<i>M</i>	Media module number
<i>V</i>	In a slot or port location field (such as 1V4 or 233V132), indicates a gateway media module or port on a media module
<i>PN</i>	Some MOs, such as TDM-BUS, are addressed by PN number, and PN precedes the number. For example, TDM bus A in port network 5 is PN 05A .
<i>pp or PPP</i>	Port circuit on a circuit pack or media module (1-, 2-, or 3-digits)

The length of the hardware location differs for the various types of commands. For example:

- 1 **display cabinet** requires a location entry of *UU* (**display cabinet 12**)
- 1 **display media-gateway** requires a gateway number in the form *GGG*
- 1 **test port** requires a location entry of *UUCSSpp* or *GGGVMpp*
 - test port 5c0906** tests cabinet 5, carrier C, slot 9, port 6
 - test port 5V906** tests media gateway 5, media module 9, port 6

The **list** and **display** commands are useful in relating hardware locations to information such as PN number, extension, and link numbers.

See [Table 8: Common Command Parameters](#) on page 27 for other common input parameters.

Table 8: Common Command Parameters 1 of 2

Parameter	Meaning
PN#	1- or 2-digit port network number. Use list cabinet to find which port networks are in each cabinet.
schedule	Use schedule to specify a start time for the command. The command is placed in the queue and, when executed, sends the output to the system printer. Schedule is available for display, list and test commands. Schedule used with display alarms or display errors generates a full report. The usual selection screen for error and alarm reports is suppressed so that it does not interfere with the command's execution when it is issued from the queue. Use list command-queue to see what commands are currently queued. Use remove command-queue job# to cancel a queued command. This requires that the system printer is administered on the Feature-Related System Parameters screen.
group#	1- to 3-digit trunk-group number
group#/ member#	Group number followed by a slash and a 1- to 3-digit member number of an individual trunk
extension	The extension number assigned to the port or other maintenance object. The number of digits in an extension is determined by the system dial plan. Use list and display to see extension numbers, maintenance objects, and other components.
next	Next available number
repeat#	The number of times a test sequence is to be repeated. Use with test commands.
short long	Type of test sequence run for this maintenance object. The test sequence that is run varies for each maintenance object. Use with test commands.  CAUTION: For some maintenance objects, long is destructive to call service. The short sequence is always non-destructive and is the default. 1 of 2

Table 8: Common Command Parameters 2 of 2

Parameter	Meaning
clear	Used with test commands, clear repeats the test sequence until any active alarms against the maintenance object are cleared by the passing of tests, or until any test in the sequence fails. If no such alarms are active, the sequence is run once. Long clear clears every alarm against the maintenance object if no errors are encountered. Short clear clears only alarms pertinent to the tests in the short sequence.  CAUTION: If every tests passes, long clear clears every error counter. If firmware counters are cleared while an actual problem exists, customer service may degrade due to calls being routed over faulty components.
2 of 2	

Common Command Output Screens

Common output can be any of the following information:

- 1 A message or other indication that the command successfully completed, or a message giving a reason for a failure or abort. See [Common Error Codes for maintenance commands](#) on page 34.
- 1 An input screen for entering additional information required to complete the command. These commands and screens are described in this section. See [Common Input Parameters](#) on page 25.
- 1 A report or log output screen listing one or more lines of results with error codes that indicate the reason for a FAIL or ABORT. See [Common Command Output Screens](#) on page 28.

Example Common Output Screen

command					
TEST RESULTS					
Port	Maintenance Name	Alt. Name	Test No.	Result	Error Code
02A	TONE-BD		53	ABORT	2100

Each line on an error report represents one test result.

Field Descriptions for Common Output Fields

Table 9: Field Descriptions for common output fields 1 of 2

Port	Port location identifier. See Table 7: Hardware Location Parameters on page 26 for a description of the field. The port length differs for the various types of commands. For example: ▮ a port circuit requires a full-length address such as 11C1502 (circuit number 2 on the circuit pack in cabinet 11, carrier C, slot 15) ▮ a control carrier component, such as an IPSI, is designated as 01B (the component in carrier B of cabinet 1) In critical-reliability systems, port network connectivity is duplicated as two independent sets of PNC components: A-PNC and B-PNC.
Maintenance Name	The name of the MO as it appears in the alarm and error logs.
Alt. Name	The alternate name depends upon the type of the object. For example: Station MO, Alternate Name = <i>nnnnn</i> (extension) Trunk MO, Alternate Name = <i>nn/n</i> (trunk-group#/member #) Personal CO line MO, Alternate Name = P/23 (P/ personal CO line group #)
Test No.	The number of the test run on the MO as part of a test command. Descriptions of each test and related error codes appear under each MO. Other commands such as clear firmware-counters and reset also report a test number. See <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)</i> for specific MO information.
1 of 2	

Table 9: Field Descriptions for common output fields 2 of 2

Result	One of the following results: - PASS: The command successfully completed. For a test command, no errors were detected by the test. - ABORT: The command was prevented from completing. See Table 10: Common Error Codes for busyout, release, test, and reset commands on page 34. - FAIL: A serious error was detected by the test. See Table 10: Common Error Codes for busyout, release, test, and reset commands on page 34. - NO BOARD: The system does not detect a circuit pack in the location specified on the command line. - CONFLICT: Another user was testing this maintenance object. - EPN-DOWN: The EPN holding the MO is inaccessible. The expansion archangel (EA) link may be down. - DISABLED: The MO or test was disabled by the disable command. - NOT ASSIGNED: The location specified does not have a circuit pack administered to it. - EXTRA BOARD: This can appear for these circuit packs: - Maintenance/Test - Announcement - Call Classifier - Tone Detector - Speech Synthesis Each of these circuit packs has restrictions on how many can be in the system or a port network, depending on the system configuration. Remove the extra circuit pack(s).
Error Code	Indicates the reason for a FAIL or ABORT result. For test commands and other commands that return a test result, consult the tables of test error codes under the relevant MO in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)</i>. For busyout, release, and reset commands, see Common Error Codes for maintenance commands on page 34.
2 of 2	

Contention Between Simultaneous Commands

The following limits apply to maintenance and administration activities:

- | Up to 15 users can be logged the system at the same time.
- | Up to 5 maintenance commands can run concurrently.
- | Up to 10 administration commands can run concurrently.
- | In general, you can use only one command at a time on a maintenance object or other system entity. This restriction applies to such action commands as:
 - **busyout**
 - **change**
 - **clear**
 - **recycle**
 - **release**
 - **remove**
 - **set**
 - **test**
- | When an action command is acting on a circuit pack, that circuit pack and every maintenance object located on it are unavailable for other commands.
- | Most commands require the use of shared system resources in order to run. When required resources are already in use, the command aborts. Only one such command can run at one time.
- | Display-only commands such as the following generally do not conflict with any other commands:
 - **display**
 - **status**
 - **get**
 - **monitor**

Error Messages

Examples of error messages and their meanings are listed in the table below.

Error message explanations

Error message	Meaning
All maintenance resources busy; try again later	Every available maintenance resource is currently in use.
Board not inserted	The specified board is not inserted in the system.
Command resources busy; Press CANCEL to clear, and then resubmit	There is a resource problem. Restart the command.
Error encountered; can't complete request	The command cannot be executed, perhaps because of corrupt software. Follow normal escalation procedures.
Hardware-group command aborted with cancel command entered from another terminal	<code>test hardware-group</code> , running in the foreground, is successfully canceled with <code>cancel hardware-group</code> from another terminal.
'login id': 'command' has a command conflict	The command is in conflict with another currently executing command. The login id of the conflicting user and the conflicting command is shown.
Port/Board invalid	The format for the board location is incorrect.
PN is not available	The PN in which the specified board resides is not available.
save translations has a command conflict	An update of the standby server is in progress.

Busyout and Release Commands

The **busyout** command places the object of the command in a maintenance busy state. In the busyout state:

- 1 The object is removed from active service and is not available for use by call processing.
- 1 Services dependent on the busied out component are dropped. If the component supports a link, the link is dropped.
- 1 No scheduled or periodic background tests are run on the object while it is busied out. Demand maintenance tests can be run on the object, but some tests require that the object be released to complete.
- 1 A warning alarm with error type 18 is logged against each busied out object, so that INADS can determine the state of the object.
- 1 To prevent busyouts of particular buses, technicians should move dedicated tone time slots to another bus (the other half of the duplicated bus).

List every busied-out MO by entering **error type 18** in the **Error Type** field on the Hardware Errors Report screen (see [display errors](#) on page 239).

The matching **release** command returns the maintenance object to service, providing the object is not otherwise incapacitated.

Example busyout output screen

The following screen shows a typical result for **busyout board 1c03** (analog line circuit pack in cabinet 1, carrier c, slot 3 with five administered ports). See [Field Descriptions for Common Output Fields](#) on page 29 for field descriptions.

busyout board 01C03					
Command Results					
Port	Maintenance Name	Alt.	Name	Result	Error Code
01C03	ANL-BD			PASS	
01C0301	ANL-16-L	5409		PASS	
01C0302	ANL-16-L	5416		PASS	
01C0303	ANL-16-L	5421		PASS	
01C0304	ANL-16-L	5422		PASS	
01C0305	ANL-16-L	5411		PASS	
Command successfully completed					

Maintenance SAT Commands

The following screen shows a typical result for most maintenance objects for **busyout link 1**.

busyout link 1				
COMMAND RESULTS				
Port	Maintenance Name	Alt. Name	Result	Error Code
01A0617	ETH-PT		PASS	
Command successfully completed				

Common Error Codes for maintenance commands

[Table 10: Common Error Codes for busyout, release, test, and reset commands](#) on page 34 lists common error codes associated with abort and fail results for **busyout**, **release**, **test**, and **reset** commands. In addition to these, many maintenance objects have other unique error codes.

Table 10: Common Error Codes for busyout, release, test, and reset commands 1 of 2

Error Code	Command Result	Description/Recommendation
	ABORT	System resources are unavailable to run command. Try the command again at 1-minute intervals up to 5 times.
0	ABORT	Internal system error. Retry the command at 1-minute intervals up to 5 times.
1005	ABORT	A DS1 interface circuit pack could not be reset because it is currently supplying the on-line synchronization reference. Use set sync to designate a new DS1 interface circuit pack as the on-line reference, then try the reset again.
1010	ABORT	Attempt was made to busyout an object that was already busied out.
1011	ABORT	Attempt was made to release an object that was not first busied out.
1015	ABORT	A reset of this circuit pack requires that every maintenance object on it be in the out-of-service state. Use busyout board to place every object on the circuit pack in the out-of-service state, and try the reset again.
1 of 2		

Table 10: Common Error Codes for busyout, release, test, and reset commands 2 of 2

Error Code	Command Result	Description/Recommendation
1026	ABORT	The specified TDM bus cannot be busied out because the control channel or system tones are being carried on it. Use <code>set tdm PC</code> to switch the control channel and system tones to the other TDM bus.
1426	ABORT	The port cannot be released because the MG has the Emergency Transfer Mode set. The user must use the MG's CLI to clear the mode.
2012 2500	ABORT	Internal system error.
2100	ABORT	System resources to run this command were unavailable. Try the command again at 1-minute intervals up to 5 times.
62524 62525 62526	ABORT	Maintenance is currently active on the maximum number of maintenance objects that the system can support. A common cause is that the system contains a large number of administered stations or trunks with installed circuit packs that are not physically connected. Resolve as many alarms as possible on the station and trunk MOs, or busyout these MOs to prevent maintenance activity on them. Then try the command again.
	NO BOARD	The circuit pack is not physically installed.
	EXTRA BD	This result can appear for: Maintenance/Test, Announcement circuit packs, Call Classifier, Tone Detector, Speech Synthesis circuit packs Each of these circuit packs has restrictions on how many can be installed in the system or in a port network, depending on system configuration. Remove any extra circuit packs.
1	FAIL	For <code>reset</code> commands, the circuit pack was not successfully halted.
2	FAIL	For <code>reset</code> commands, the circuit pack was not successfully restarted after being halted. For both results, replace the circuit pack.
	FAIL	See the applicable maintenance object (from the Maintenance Name field) in <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)</i> .
	PASS	The requested action successfully completed. If the command was a <code>reset</code> , the circuit pack is now running and should be tested.
2 of 2		

Alarm and Error Categories

Use [display alarms](#) on page 49 and [display errors](#) on page 239 to generate reports for certain groups of maintenance objects.

Use the **Category** field of the input screen to restrict the report to maintenance objects in a specific category. The HELP key displays a list of categories. Other fields on the input screen help to further customize the alarm and error report.

List of SAT Commands

aar route-chosen

list aar route-chosen

`list aar route-chosen x [partition n] [schedule]`

Screen name: AAR ROUTE CHOSEN REPORT

Use `list aar route-chosen` to see the parameters used by AAR to route a call to a specific number (**x**).

See also the AAR Routing Table for more information about the routing of the call.

The following is an example of the results of `list aar route-chosen`.

list aar route-chosen 5551234						
AAR ROUTE CHOSEN REPORT						
Location: all			Partitioned Group Number: 1			
Dialed String	Total Min Max		Route Pattern	Call Type	Node Number	Location
5	7	7	2	hnpa		all

list aar route-chosen screen field descriptions

list aar route-chosen field descriptions

Field	Description
Location	Defaults to all .
Partitioned Group Number	Partitioned Group Number as entered on the command line or default 1 .
Dialed String	The matched entry in the AAR Digit Analysis Table .
Total Min Max	Minimum and maximum length of the string matched in the AAR Digit Analysis Table .
Route Pattern	Route pattern used to route the call.
Call Type	The call type as matched on the AAR Digit Analysis Table . See change aar analysis in the <i>Administrator Guide for Avaya Communication Manager</i> (03-300509) screen reference for full explanation of this field.
Node Number	Node number as matched on the AAR Digit Analysis Table .
Location	Defaults to all .

access-endpoint

See:

[busyout access-endpoint](#) on page 37

[release access-endpoint](#) on page 38

[status access-endpoint](#) on page 38

[test access-endpoint](#) on page 40

busyout access-endpoint

`busyout access-endpoint extension`

Use **busyout access-endpoint** to busyout a specified access endpoint. **busyout access-endpoint** is destructive.

Action/Object	Qualifier	Qualifier Description	Feature Interaction
busyout access-endpoint	<i>extension</i>	Extension of endpoint to busyout. Example: busyout access-endpoint 2501	An active call on the endpoint is dropped.

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

release access-endpoint

release access-endpoint extension

Use **release access-endpoint** to remove all ports associated with the specified access endpoint from a maintenance busy state. Periodic and scheduled tests subsequently resume on the released ports. Maintenance completes background initialization testing on the released ports.

For more information see [Busyout and Release Commands](#) on page 33.

Action/Object	Qualifier	Qualifier Description	Login	Default
release access-endpoint	<i>extension</i>	number of the access endpoint.	init inads craft nms	none

For the output of **release access-endpoint 22502**, the port field shows the port address of the released access endpoint.

status access-endpoint

status access-endpoint extension

Use **status access-endpoint** to see the status of an access endpoint and to locate facilities with which access endpoints communicate. For example, use **status access-endpoint** to see the operational state of a non-signaling port on a DS1 interface or on an analog tie trunk circuit pack.

The following display shows a typical result for **status access-endpoint 2300**.

```

status access-endpoint 2300

      ACCESS ENDPOINT STATUS

      Extension: 2300
      Port: 02B0905
Communication Type: wideband
      Width: 6

      Service State: inservice/active

      Connected Ports:01B1907 01B1908 01B1909
                      01B1910 01B1911 01B1912

```

status access-endpoint field descriptions

status access-endpoint

Field	Description
Extension	The extension number of the access endpoint.
Port	The physical location (cabinet-carrier-slot-circuit) of the port for the access endpoint. For wideband access endpoint, the location is for the starting port.
Communication Type	The type of communication supported by the channel: 56k-data, 64k-data, voice-band-data, voice-grade-data, wideband
Width	For 56k-data, 64k-data, voice-band-data, voice-grade-data, width is 1. For wideband, width is the number of DS0s that make up the access endpoint.
Service State	The operational status of the access-endpoint channel: in-service/active, in-service/idle, out-of-service, maintenance-busy, disconnected.
Connected Ports	The location of any facility/endpoint to which this access-endpoint is connected.

test access-endpoint

Use `test access-endpoint` to perform hardware diagnostic tests on all port circuits that are associated with the specified access endpoint extension.

Action/ Object	Qualifier	Qualifier Description	Login	Default
<code>test access-endpoint</code>	<code>extension</code> <code>short</code> <code>long</code> <code>repeat n</code> <code>clear</code>	Access endpoint extension (# of digits determined by dial-plan) See Common Input Parameters on page 25. Examples: <code>test access-endpoint 25012</code> <code>test access-endpoint 45002 sh</code> <code>test access-endpoint 45892 l</code> <code>test access-endpoint 24389 sh r 4</code> <code>test access-endpoint 34899 l r 6</code> <code>test access-endpoint 93483 r 2</code> <code>test access-endpoint 10022 c</code>	<code>init</code> <code>inads</code> <code>craft</code> <code>nms</code>	<code>short</code> <code>1</code>

The following example shows the output for `test access-endpoint 22502`, and assumes the access endpoint ports for extension 22502 are in cabinet 1, carrier C, slot 11, circuit 1 to 6. The responses are displayed on a port-by-port and test-by-test basis with one line of data for each test result.

test access-endpoint 22502 short					page 1 of 1
TEST RESULTS					
Port	Maintenance Name	Alt. Name	Test No.	Result	Error Code
01C1101	WAE-PORT	22502	36	PASS	
01C1102	WAE-PORT	22502	36	PASS	
01C1103	WAE-PORT	22502	36	PASS	
01C1104	WAE-PORT	22502	36	PASS	
01C1105	WAE-PORT	22502	36	PASS	
01C1106	WAE-PORT	22502	36	PASS	

administered-connection

See:

[disable administered-connection](#) on page 41

[enable administered-connection](#) on page 41

[status administered-connection](#) on page 41

disable administered-connection

```
disable administered connection [ a-c # | all ]
```

Use **disable administered connection** to stop scheduled and periodic testing, and to stop processing of in-line errors for all or selected administered connections.

To view administrative information for administered connections, use **list administered-connection** and **display administered-connection**.

Action/Object	Qualifier	Qualifier Description	Login
disable administered-connection	a-c # all	Number of the administered connection Selects all administered connections Examples: <code>disable administered-connection all</code> <code>disable administered-connection 1</code> <code>disable administered-connection 12</code>	init inads craft cust rcust mis

enable administered-connection

```
enable administered-connection [ a-c # | all ]
```

Use **enable administered-connection** to re-enable scheduled and periodic testing and in-line error processing on a specified AC (administered connection) or every AC, after maintenance is disabled with **disable administered-connection**.

Administered-connection commands can help isolate the results of certain maintenance processes by preventing interference.

To view administrative information for administered connections, use **list administered-connection** and **display administered-connection**.

Action/Object	Qualifier	Qualifier Description	Login	Default
enable administered-connection	a-c # all	The number of the connection as assigned during administration Enable every administered connection in the system		init inads craft cust rcust mis

status administered-connection

```
status administered-connection a-c #
```

Maintenance SAT Commands

Use **status administered-connection** to see the operational status of an administered connection.

To view administrative information for administered connections, use **list administered-connection** and **display administered-connection**.

Action/Object	Qualifier	Qualifier Description	Login	Default
status administered-connection	<i>a-c #</i>	The number of the administered connection, assigned during administration.	init inads craft cust rcust bcms browse	

The following display shows a typical result for **status administered-conn 3**. In this example, destination is another switch, and the destination number consists of a trunk access code (512) and extension (26001).

status administered-connection 3	page 1 of 1
ADMINISTERED-CONNECTION STATUS	
Connection Number: 3	
Enabled? y	
Originator: 71001	
Destination: 51226001	
Connection State: connected	
Failure Cause:	
Number of Retries:	
Auto Restorable? y	

status administered-connection field descriptions

status administered-connection field descriptions 1 of 2

Field	Description
Connection Number	The number assigned to the administered connection.
Enabled	Whether the administered connection is enabled.
1 of 2	

status administered-connection field descriptions 2 of 2

Field	Description
Originator	The extension of the access or data endpoint that originates the connection.
Destination	The destination address used to route the administered connection.
2 of 2	

aesvcs

See:

[reset aesvcs-link](#)
[status aesvcs cti-link](#)
[status aesvcs interface](#)
[status aesvcs link](#)
[test aesvcs-server](#)

reset aesvcs-link

reset aesvcs-link [*n/n*]

Use **reset aesvcs-link** [*n/n*] to reset an AESVCS Link. This command closes the socket connection. The AE Server attempts to reconnect.

See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default
reset aesvcs-link	<i>n/n</i>	aesvcs server number/ aesvcs link number Example: reset aesvcs-link 01/01	init inads craft cust	

status aesvcs cti-link

status aesvcs cti-link

Use **status aesvcs cti-link** to see the status of all the CTI links associated to AE Services Servers on the **AE Services Administration** page of the **IP SERVICES** form ([change](#)

Maintenance SAT Commands

ip-services). These links provide connectivity to ASAI adjuncts, which are connected to an Ethernet LAN.

See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default
status aescvs cti-link			init inads craft cust	

The following example shows a typical output for **status aescvs cti-link**.

status aescvs cti-link						
AE SERVICES CTI LINK STATUS						
CTI Link	Version	Mnt Busy	AE Services Server	Service State	Msgs Sent	Msgs Rcvd
1	4	no	server1	down	0	0
2	3	no	server2	established	0	0
3	4	no	server1	down	0	0

status aescvs cti-link field descriptions

status aescvs cti-link field descriptions 1 of 2

Field	Description
CTI Link	The CTI link number 1-16
Version	Negotiated ASAI protocol version
Mnt Busy	y/n If y , the link has been busied out with busyout cti-link . Use release cti-link .
AE Services Server	The name of the AE Services Server on the AE Services Administration page of the IP Services form (change ip-services)
Service State	The status of the TCP/IP Tunnel Connection and CTI link. down/established
1 of 2	

status aevcs cti-link field descriptions 2 of 2

Field	Description
Msgs Sent	Number of ASAI messages sent during a specified 30-minute window collection period.
Msgs Rcvd	Number of ASAI messages received during a specified 30-minute window collection period.
2 of 2	

status aescvcs interface

status aescvcs interface

Use **status aescvcs interface** to see the status of the interfaces over which Avaya Communication Manager is listening for AESVCES Server connections.

Action/Object	Qualifier	Qualifier Description	Login	Default
status aescvcs interface			init inads craft cust	

The following example shows a typical output for **status aescvcs interface**.

status aescvcs interface			
AE SERVICES INTERFACE STATUS			
Local Node	Enabled?	Number of Connections	Status
procr	yes	1	listening

status aescvcs interface field descriptions

status aescvcs interface field descriptions

Field	Description
Local Node	The name of the AESVCS interface as administered on the IP SERVICES form (change ip-services)
Enabled	Shows if the interface is enabled, as set on the Enabled field on the IP SERVICES form (change ip-services).
Number of Connections	Shows the number of active AESVCS Server connections over this interface
Status	The current state of this interface. Disabled - the Enabled field is n on the IP Services form (change ip-services) for this interface. Intfce-down - this interface is not functioning and cannot accept incoming communications. Listening - the interface is up and running and AESVCS Servers can connect over it.

status aescvcs link

status aescvcs link

Use **status aescvcs link** to see the status of all the active sockets associated with AE Services Servers. The sockets are administered on the AE Services Administration page of the **IP SERVICES** form (**change ip-services**).

See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default
status aescvcs link			init inads craft cust	

This is an example of a typical output for **status aescvcs link**.

status aescvcs link							
AE SERVICES LINK STATUS							
Srvr/ Link	AE Services Server	Remote IP	Remote Port	Local Node	Msgs Sent	Msgs Rcvd	
01/01	server1			procr	0	0	
03/05	server3			clan1	0	0	

status aescvcs link field descriptions

status aescvcs interface field descriptions 1 of 2

Field	Description
Srvr/Link	The AE Services Server ID from the AE Services Administration page (1-16) and the AE Services link number (1-16).
AE Services Server	The name of the AE Services Server.
Remote IP	The IP address of the AESVCS Link (AESV-LNK) connection on the AESVCS Server.
Remote Port	The TCP/ IP port of the AESVCS Link connection on the AESVCS Server.
1 of 2	

status aesvcs interface field descriptions 2 of 2

Field	Description
Local Nod	The node name of the interface over which the AESVCS Server is connected.
Msgs Sen	The number of ASAI messages sent during the 30-minutes moving window collection period.
Msgs Rcvd	The number of ASAI messages sent during the 30-minutes moving window collection period.
2 of 2	

test aesvcs-server

test aesvcs-server [1-16] [short/long] [(repeat#)/(clear)] [schedule]

Use **test aesvcs-server** to run diagnostic tests on the specified AESVCS Server and any associated AESVCS Links (AESV-LNK).

Action/Object	Qualifier	Qualifier Description	Login	Default
test aesvcs-server	1-16 short long repeat n clear schedule	aesvcs server # 1-16 See Common Input Parameters on page 25.	init inads craft cust	short

This is an example of a typical output for **test aesvcs-server 1** with no associated AESVCS Links. The test fails.

test aesvcs-server 1					
TEST RESULTS					
Port	Maintenance Name	Alt. Name	Test No.	Result	Error Code
01	AESV-SES		1623	FAIL	

This is an example of a typical output for **test aesvcs-server 1** with an associated AESVCS Link. The test passes.

test aesvcs-server 1					
TEST RESULTS					
Port	Maintenance Name	Alt. Name	Test No.	Result	Error Code
01	AESV-SES		1623	PASS	
01/01	AESV-LNK		1624	PASS	

alarms

See:

[display alarms](#) on page 49

[test alarms](#) on page 54

display alarms

display alarms [schedule]

Use **display alarms** to see an options screen that allows you to choose which alarms to display. After making your option selections, press ENTER to view the Alarm Report.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
display alarms	schedule	See Common Input Parameters on page 25.	inads cust rcust bcms init browse	All alarms are listed.	See Feature interactions for display alarms on page 54

Use **display alarms** to see a hardware alarm report. Use this report to select which alarms to display.

The system creates the reports from the logs of the maintenance subsystem. The subsystem monitors the system hardware and logs problems as errors or alarms. The type of alarm indicates the impact of the problem.

- 1 Warning alarm — A problem that is important enough to log, or may be external to the system but not severe enough to cause a noticeable degradation of service.
- 1 Minor alarm — A problem that could disable a local area of the system and so noticeably degrade the system.
- 1 Major alarm — A problem that widely degrades the system and seriously impairs service. This causes a call to be placed to INADS.

A resolved alarm is a problem that has been corrected, and the alarmed component of the system is functioning correctly again. The system stamps resolved alarms with the date and time the problem was corrected. The system handles any errors associated with the alarms as “resolved.”

Input for display alarms

Enter **display alarms** to display the Alarm Reports options screen. Select different options on this screen for the type of report you want to see and press ENTER.

display alarms	Page 1 of 1
ALARM REPORTS	
The following options control which alarms will be displayed.	
ALARM TYPES	
Active? y_	Resolved? n_
Major? y_	Minor? y_ Warning? y_
REPORT PERIOD	
Interval: m_	From: __/__/__:__ To: __/__/__:__
EQUIPMENT TYPE (Choose only one, if any, of the following)	
Media Gateway:	__
Cabinet:	__
Port Network:	__
Board Number:	_____
Port:	_____
Category:	_____
Extension:	_____
Trunk (group/member):	___/___

display alarms field descriptions

display alarms input screen field descriptions 1 of 2

Field	Description
Alarm Types	Enter y or n in the alarm type fields to specify the type of alarm to display on the report. You can choose a combination of: ┆ active or inactive alarms ┆ major, minor, or warning alarms ┆ resolved or unresolved alarms
Interval	Enter m, h, d, w or a to display alarm records for the last month, last hour, last day, last week, or all. ┆ From: Display alarm records from the time specified by mm/dd/hh:mm, where mm is the month, dd is the day, hh is the hour and mm is the minute. If this field is not defined, the report includes every alarm active since a month prior to the current time. ┆ To: Display alarm record to the time specified by mm/dd/hh/mm, where mm is the month, dd is the day, hh is the hour and mm is the minute. If no To date is entered, any alarm that is active after the From date is used.
1 of 2	

display alarms input screen field descriptions 2 of 2

Field	Description
Equipment Type	Identify the equipment type that you want on the report. If there is no input to these fields, the system defaults to every type. Media Gateway: Display every alarm associated with a particular media gateway. Cabinet: Display every alarm associated with a particular cabinet. Port Network: Display every alarm associated with a particular port network. Board Number: Display every alarm associated with a particular circuit pack. Alarms for a circuit pack are referenced by port location (cabinet-carrier-slot). If the cabinet number is omitted, default is 1. Port: Display every alarm associated with a particular port on a circuit pack. Alarms for a port circuit are referenced by port location (cabinet-carrier-slot-circuit). If the cabinet number is omitted, default is 1. Category: Enter a category to restrict the report to maintenance objects in a specific category. The HELP key displays a list of categories. Extension: Alarms associated with an extension number. Trunk (group/member): Display every alarm associated with a particular trunk group or trunk-group member.
2 of 2	

For the following output example, **display alarms** options were left at their defaults.

display alarms								
ALARM REPORT								
Port	Maintenance Name	On Brd?	Alt Name	Alarm Type	Svc State	Ack? 1 2	Date Alarmed	Date Resolved
02A	TONE-BD	y		MAJOR		y n	05/22/20:34	00/00/00:00
01C07	ANL-BD	y		MINOR		n n	05/22/20:26	00/00/00:00
01C0702	ANL-LINE	n	311	WARNING	IN		05/22/20:26	00/00/00:00
01C0701	ANL-LINE	n	1051	WARNING	IN		05/22/20:26	00/00/00:00
01C0703	ANL-LINE	n	1053	WARNING	IN		05/22/20:26	00/00/00:00
01C1505	CO-TRK	n	78/01	WARNING	OUT		05/22/20:26	00/00/00:00
01C1505	CO-TRK	n	78/01	WARNING	OUT		05/22/20:26	00/00/00:00
02A0201	TONE-PT	n		WARNING			05/22/20:34	00/00/00:00
02A	TDM-CLK	n		WARNING			05/23/13:43	00/00/00:00
PN 02B	TDM-BUS	n		WARNING			05/23/14:53	00/00/00:00

display alarms ALARM REPORT field descriptions

display alarms report field descriptions 1 of 2

Field	Description
Port	The location of the alarmed object. 1 For installed circuit packs, the location appears as cabinet-carrier-[slot]-[circuit]. 1 For port network-related objects, the location appears as PN UUB, where UU is the port network number and B is the bus (A or B). 1 For fiber link-related objects, the location appears as x a-pnc where "x" is the fiber link number and "a" is the PNC side (A or B). This is the same identifier that is used by the alarm log.
Maintenance Name	The name of the MO as it appears in the alarm and error logs.
On Brd	y indicates that the fault was on the associated circuit pack n indicates that the fault is not connected to the circuit pack, but was on an off-board element connected to the circuit pack.
Alt. Name	The alternate name depends upon the type of the object. For example: 1 Station MO, Alternate Name = nnnnn (extension) 1 Trunk MO, Alternate Name = nn/n (trunk-group#/member #) 1 Personal CO line MO, Alternate Name = P/xx (P/personal CO line group #)
Alarm Type	MAJOR, MINOR, or WARNING. This is an indicator of the seriousness of the alarm.
Service State	Service state of the station and trunk ports: 1 RDY = ready for service 1 OUT = out of service 1 IN = in service 1 [Blank] = No associated service state
1 of 2	

display alarms report field descriptions 2 of 2

Field	Description
Ack	Headings 1 and 2 identify the first and second OSS telephone numbers, respectively. The entries in the column below ACK indicate the acknowledged alarm state: - ı y = alarm has been acknowledged - ı n = alarm has not been acknowledged - ı c (cleared) = alarm was first acknowledged, then resolved and cleared - ı [Blank] = no attempt was made to report the alarm If the user disables the alarm origination with change system-parameters maintenance, then the Ack field is blank regardless of the true acknowledged state of the alarm.
Date Alarmed	Day, hour, and minute of alarm.
Date Resolved	Day, hour, and minute of resolution. 0 for active alarms.
2 of 2	

Feature interactions for display alarms

If the alarm origination is disabled by **change system-parameters maintenance**, the **Ack** field appears blank regardless of the true acknowledge state for the alarm.

If **second-as-backup** is entered in the **Alarm Origination to OSS Numbers** field, the column under the **2** heading will be blank for the alarms that the switch has not attempted to send to the second OSS telephone number. For the alarms that the switch has attempted to send to the second OSS telephone number, the column will be **y**, **n**, or **c**, depending on the acknowledgment status of the alarm. After the call to the first OSS telephone number is successful, for the alarms that the switch has attempted to send to OSSN2, the column will be consistent with the column under the **1** heading.

test alarms

```
test alarms [auto-page] [failures] [step] [short | long] [repeat # |
clear]
```

Use **test alarms** to test the hardware associated with selected alarms.

Action/Object	Qualifier	Qualifier Description	Login	Default
test alarms	auto-page failures step short long repeat # clear	See test alarms command parameters on page 55. Examples: test alarms test alarms step failures test alarms long clear auto-page test alarms long failures	inads init nms system technician	short repeat 1

Use **test alarms** to automatically test all of the hardware that is associated with the active alarms in the alarm log. **Test alarms** provides a query screen to help the user narrow the selection of alarmed objects. Once the screen is filled out, press **ENTER** to test the hardware associated with the selected alarm log entries. The results appear in standard test output and status information appears on the message line as the command progresses.

Several alarms may be logged against a single maintenance object, each alarm representing a different problem. Even if there are multiple entries in the alarm log for a single object, **test alarms** tests each physical object once.

test alarms command parameters 1 of 2

Parameter	Description
auto-page	Continue testing and displaying test results by providing a new screen every time the SAT screen is filled with test results. The screen does not scroll to accommodate new results. If the auto-page option is not specified, when the SAT screen is filled with test results testing stops until the user enters the "PAGE" key to continue or the "CANCEL" key to halt the testing.
failures	Show failures on the SAT screen. All passes will not be displayed on the output screen. Hardware failures, aborts, conflicts, and PN-down failures appear.
1 of 2	

test alarms command parameters 2 of 2

Parameter	Description
step	Step to the next or previous alarm without testing the current alarm. Alarm information appears with a prompt for a keypress. Enter: - CANCEL to abort the command - ENTER to test the currently displayed alarm - NEXT ALARM (function key) to move to the next alarm - PREV ALARM (function key) to move to the previous alarm without testing the currently displayed alarm. Press NEXT ALARM (function key) or PREV ALARM (function key) at any time during the command, even during test results. If the NEXT ALARM or PREV ALARM is pressed during a test, the test is aborted, testing of the current alarm stops, and the next alarm or previous alarm appears. If the first alarm appears, and the PREV ALARM is pressed, then the last alarm appears. If the last alarm is currently displayed, and NEXT ALARM is requested, the first alarm appears.
short	Execute a series of nondestructive diagnostic tests.
long	Execute a more comprehensive and longer version of the diagnostic tests. This may involve both destructive and nondestructive tests.
repeat #	Number of times to repeat the test, between 1 and 100.
clear	Repeat the test sequence until the alarm is cleared, or until a single test in the sequence fails. long clear forces a clear of all alarms if no errors are encountered during testing short clear clears alarms pertinent to tests in the short sequence  WARNING: Executing a clear with short option, may not clear all alarms even if all tests pass.  WARNING: Since the “clear long” options clear all counters if tests pass, it is possible for firmware counters to be cleared even when a problem exists. In some cases customer service might degrade since calls may be routed over defective equipment.
2 of 2	

test alarms options form

After entering **test alarms**, you are presented with an options form for alarm selection.

```

test alarms repeat 1

                                HARDWARE TEST ALARM QUERY

The following options control which alarms will be tested.

ALARM TYPES
    Major? y_      Minor? y_      Warning? y_

REPORT PERIOD
    Interval: m_   From: __/__/__:__   To: __/__/__:__

EQUIPMENT TYPE ( Choose only one, if any, of the following )
    Media Gateway:  __
    Cabinet:       __
    Port Network:   __
    Board Number:   __
    Port:           __
    Category:       __
    Extension:      __
    Trunk ( group/member ): __/__
  
```

test alarms field descriptions, Hardware Test Alarm Query

The following fields appear on the **test alarms** screen.

test alarms field descriptions, Hardware Test Alarm Query 1 of 2

Field	Description
ALARM TYPES	The type of alarm or combination of alarms to be tested, specified by y or n in the alarm type fields.
REPORT PERIOD	Test alarms for records for the last hour (h), last day (d), last week (w) or all (a).
From	Specifies error records starting from the time specified by mm/dd/hh/mm (month/day/hour/minute). If no From date is entered, errors from the earliest record in the log are displayed.
1 of 2	

test alarms field descriptions, Hardware Test Alarm Query 2 of 2

Field	Description
To	Specifies every error record up to the time specified by mm/dd/hh/mm . If no To date is entered, every error up to the current date appears.
Equipment Type	To limit the report to a specific group of components, enter the location of a type of equipment in one of the following fields. If no entry is made, errors for the entire system are displayed. 1 Media Gateway: Enter the media gateway number. 1 Cabinet: Enter the cabinet number. 1 Port Network; Enter the port network number. 1 Board Number: Enter the cabinet-carrier-slot address of the circuit pack (for example, 11c04). If the cabinet number is omitted, it defaults to 1. 1 Port: Enter the cabinet-carrier-slot-circuit address of the port (for example, 11c0408). If the cabinet number is omitted, the system will default to 1. 1 Category: Enter a category to restrict the report to maintenance objects in a specific category. The HELP key displays a list of categories. 1 Extension: Enter the extension number of a port. 1 Trunk (group/member): Enter a trunk-group number, or a trunk-group and member number separated by a slash (for example, 78 or 78/1).
2 of 2	

The following example shows the results output from **test alarms** (query form left empty by pressing **ENTER**). The responses display on a test-by-test basis with one line of data for each test result.

test alarms								Page	1
ALARM ENTRY									
Port	Maintenance Name	On Brd?	Alt Name	Alarm Type	Svc State	Ack? 1 2	Date Alarmed	Alarm Count	
01C03	UDS1-BD	n		WARNING			03/06/16:48	1/4	
TEST RESULTS									
Port	Maintenance Name	Alt. Name	Test No.	Result	Error Code				
01C03	UDS1-BD		138	NO BOARD					
01C03	UDS1-BD		139	NO BOARD					
01C03	UDS1-BD		140	NO BOARD					
01C03	UDS1-BD		141	NO BOARD					
01C03	UDS1-BD		142	NO BOARD					
01C03	UDS1-BD		143	NO BOARD					
01C03	UDS1-BD		144	NO BOARD					
01C03	UDS1-BD		145	NO BOARD					
01C03	UDS1-BD		146	NO BOARD					

test alarms output

The responses, with normal output, appear on a test-by-test basis with one line of data displayed for each test result. With the failures option, only the tests that failed appear.

test alarms field descriptions, ALARM ENTRY

test alarms field descriptions, ALARM ENTRY 1 of 2

Field	Description
Port	The location of the alarmed object (cabinet-carrier-slot-circuit). This is the same identifier as used by the alarm log.
Maintenance Name	The name of the MO as it appears in the alarm and error logs.
On Board	Whether the fault detected is on the associated circuit pack, or an off board element connected to the circuit pack.
Alt Name	Extension numbers or trunk-group numbers.
1 of 2	

test alarms field descriptions, ALARM ENTRY 2 of 2

Field	Description
Alarm Type	Major, minor, or warning. This is an indicator to the seriousness of the alarm raised.
Service State	RDY (ready for service), OUT (out of service), or IN (in service). This is the current service state of the station and trunk ports shown.
2 of 2	

When errors are encountered preparing a particular object to be tested (not inserted, contention, etc.) an error message appears in the TEST RESULTS data.

For the following output example, assume that only one alarm was in the alarm log and it is on the board in cabinet 1, carrier c, slot 7. **Test alarms** was entered and the query screen was left empty by just pressing ENTER.

test alarms								Page 1
ALARM ENTRY								
Port	Maintenance Name	On Brd?	Alt Name	Alarm Type	Svc State	Ack? 1 2	Date Alarmed	Alarm Count
01C03	UDS1-BD	n		WARNING			03/06/16:48	1/4
TEST RESULTS								
Port	Maintenance Name	Alt.	Name	Test No.	Result	Error Code		
01C03	UDS1-BD			138	NO BOARD			
01C03	UDS1-BD			139	NO BOARD			
01C03	UDS1-BD			140	NO BOARD			
01C03	UDS1-BD			141	NO BOARD			
01C03	UDS1-BD			142	NO BOARD			
01C03	UDS1-BD			143	NO BOARD			
01C03	UDS1-BD			144	NO BOARD			

analog-testcall

test analog-testcall

```
test analog-testcall trunk-group# / member# | port location | board
location full | supervision | no-selftest | no-return-loss |
no-st-or-rl] [repeat#] [schedule]
```

Use `test analog-testcall` to use the Automatic Transmission Measurement System (ATMS) to originate test calls over analog trunks. ATMS collects performance measurements on the test call and compares them to administered thresholds. Detail and summary reports of these measurements are generated with `list testcalls`.

You can specify testing of an entire trunk group or an individual trunk using either group/member addresses or port and circuit pack location. The type of test call, the number of the testing line on the far-end switch and various other parameters must be administered on the Trunk Group screen before the command can execute.

The `test analog-testcall` test aborts when attempting a test call on these trunk groups:

- ┆ ISDN-PRI
- ┆ SIP
- ┆ DID
- ┆ Any incoming trunk group (transmission tests can only be run on outgoing trunks)

ATMS, `test analog-testcall`, and the measurement reports are described in Automatic Transmission Measurement System (ATMS) in [Automatic Transmission Measurement System](#) in *Maintenance Procedures for Avaya Communication Manager, Media Gateways and Servers* (03-300432) (formerly 03-300192).

announcement-board

See:

[disable announcement-board](#) on page 61

[enable announcement-board](#) on page 62

[announcement](#) on page 62.

disable announcement-board

```
disable announcement-board X
```

See [enable announcement-board](#) on page 62.

enable announcement-board

`enable announcement-board x`

Use `enable/disable announcement-board` to administer a specific announcement board on your system. The **Maximum TN2501 VAL Boards** field and **Maximum G700/G350 VAL Sources** field on the `system-parameters customer-options` screen must be set properly in order to use `enable/disable announcement-board`. For information on administering announcement boards, see *Administrator Guide for Avaya Communication Manager (03-300509)*.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>enable announcement board</code> <code>disable announcement board</code>	<code>x</code>			

announcement

list announcement

`list announcement [ext x] [ to-ext x] [count n] [type x] [schedule]`

Use `list announcement` to see announcement information listed by extension.

Action/Object	Qualifier	Qualifier Description	Login
<code>list announcement</code>		list all announcements by extensions	init inads craft cust rcust
	<code>ext x</code>	list information for a specific extension. Also use <code>list announcement x</code> .	
	<code>to-ext x</code>	when used with <code>[ext x]</code> , list information for all announcement beginning with one extension and ending with another.	
	<code>count n</code>	list a certain number (<i>n</i>) of announcements	
	<code>type x</code> <code>schedule</code>	list all announcements of a specific type See Common Input Parameters on page 25. Examples: <code>list announcement</code> <code>list announcement 27740</code> <code>list announcement ext 27740</code> <code>list announcement 27740 to-ext 27750</code> <code>list announcement 27740 count 10</code> <code>list announcement 27740 type integrated count 10</code>	

The following screen shows the display for **list announcement**.

list announcement				Page 1
ANNOUNCEMENTS/AUDIO SOURCES				
Announcement			Source	Num of
Extension	Type	Name	Pt/Bd/Grp	Files
57700	integrated	AUTOVOAAnnouncement	01A05	1
57800	integrated	AUTOCollDigitAnnounce	01A05	1
57850	integrated	AUTORecordPlaybackAnnounce	01A05	1
59620	integrated	please_hold_st12	01A05	1
59621	integrated	voa	01A05	1
59622	integrated	voa_extra_long	01A05	1
59623	integrated	collect16digits	01A05	1
59624	integrated	direct_agent_announcement	01A05	1
59625	integrated	announcement025longfilename	01A05	1
59626	integrated	announcement026longfilename	01A05	1
59627	integrated	announcement027longfilename	01A05	1
59628	integrated	announcement028longfilename	01A05	1
59629	integrated	announcement029longfilename	01A05	1
59630	integrated	announcement030longfilename	01A05	1
59631	integrated	announcement031longfilename	01A05	1
59632	integrated	announcement032longfilename	01A05	1

arp

netstat arp

```
netstat arp [unsorted | ip-sort | mac-sort | ck-dup]
[all | board board-location]
```

Use **netstat arp** to:

- 1 Display the C-LAN circuit pack's Address Resolution Protocol (ARP) table
- 1 Help troubleshoot, isolate, and correct duplicate IP addresses within the network

netstat arp ck-dup is the default.

The output of **netstat arp** shows as many pages as are required to display all of the data received from the C-LAN boards.

Action/Object	Qualifier	Qualifier Description	Login
netstat arp	unsorted ip-sort mac-sort ck-dup	ARP data in the order it was received ARP data by IP address ARP data by MAC address ARP entries that contain duplicated IP addresses	init inads craft station trunk MSP

The following screen shows an example for **netstat arp unsorted**.

netstat arp unsorted						Page 1 of 3
Seq Num	Dup Status	Board Location	Mtce Name	IP Address	MAC Address	Arp/Err Type
0001		11B15	CLAN-BD	130.240.060.250	02:e0:3b:db:c8:0a	Dynamic
0002		11B14	CLAN-BD	190.010.130.250	00:30:6d:19:5c:0f	Dynamic
0003		11B13	CLAN-BD	130.000.190.250	00:60:2f:a9:45:05	Dynamic
0004		11B12	CLAN-BD	130.000.000.090	08:00:20:81:cc:b8	Dynamic
0005		11B11	CLAN-BD	130.000.160.240	00:00:81:5a:27:05	Dynamic
0006		11B10	CLAN-BD	130.000.160.220	08:00:20:1d:a7:0a	Dynamic
0007		12B15	CLAN-BD	130.000.160.221	08:00:20:7d:ff:6a	Dynamic
0008		12B14	CLAN-BD	130.000.190.200	00:00:81:7f:5d:e8	Dynamic
0009		12B13	CLAN-BD	130.000.190.201	08:00:20:81:cc:b8	Dynamic
0010		12B12	CLAN-BD	220.000.000.000	01:00:5e:00:00:00	Dynamic
0011		12B11	CLAN-BD	220.000.000.000	01:00:5e:00:00:00	Dynamic
0012		12B10	CLAN-BD	220.000.000.000	01:00:5e:00:00:00	Dynamic
0013		13B15	CLAN-BD	220.000.000.000	01:00:5e:00:00:00	Dynamic
0014		12B14	CLAN-BD	220.000.000.000	01:00:5e:00:00:00	Dynamic
0015		12B13	CLAN-BD	130.000.000.140	01:50:da:bf:ae:2a	Dynamic
0016		04A06	CLAN-BD	135.009.005.164	00:00:da:bc:84:63	Dynamic

Use [netstat arp field descriptions](#) on page 67 to interpret this report.

Maintenance SAT Commands

The following screen shows an example for **netstat arp ip-sort all**

netstat arp unsorted						Page 1 of 3
Seq Num	Dup Status	Board Location	Mtce Name	IP Address	MAC Address	Arp/Err Type
0001		12D15	CLAN-BD	130.001.002.001	00:20:fc:1e:13:f9	Dynamic
0002		15D14	CLAN-BD	130.001.002.002	08:00:20:87:f0:87	Dynamic
0003		13D15	CLAN-BD	130.001.002.003	00:80:c7:ac:f0:dc	Dynamic
0004		05A10	CLAN-BD	130.001.002.004	00:50:04:d9:b2:b0	Dynamic
0005		11E09	CLAN-BD	130.001.002.005	00:a0:c9:a4:76:4d	Dynamic
0006		12E14	CLAN-BD	130.001.002.006	00:50:da:ba:c7:93	Dynamic
0007		11D10	CLAN-BD	130.001.002.007	00:50:04:d9:b1:4f	Dynamic
0008		11D11	CLAN-BD	130.001.002.008	08:00:20:75:e3:86	Dynamic
0009		03C09	CLAN-BD	135.003.004.001	08:00:20:7a:ff:b2	Dynamic
0010		10E10	CLAN-BD	135.003.004.002	08:00:20:7a:ff:b2	Dynamic
0011	DUP	05A15	CLAN-BD	135.003.004.003	08:00:20:81:cc:b8	Dynamic
0012	DUP	07B05	CLAN-BD	135.003.004.004	08:00:20:83:21:d0	Dynamic
0013		11B12	CLAN-BD	135.009.004.130	00:01:02:60:a5:43	Dynamic
0014		10C09	CLAN-BD	135.009.004.131	00:a0:c9:b2:89:d7	Dynamic
0015		03D15	CLAN-BD	135.009.004.132	00:50:da:bf:ae:2a	Dynamic
0016		04A06	CLAN-BD	135.009.005.164	00:00:da:bc:84:63	Dynamic

Use [netstat arp field descriptions](#) on page 67 to further interpret this report.

The following screen shows an example for **netstat arp mac-sort**.

netstat arp mac-sort						Page 1 of 3
Seq Num	Dup Status	Board Location	Mtce Name	IP Address	MAC Address	Arp/Err Type
0001		03E09	CLAN-BD	135.240.060.000	00:00:3c:04:2d:55	Dynamic
0002		02A15	CLAN-BD	135.240.060.001	00:00:3c:04:7b:b1	Dynamic
0003		10B12	CLAN-BD	135.000.190.010	00:00:77:01:ab:91	Dynamic
0004		09C13	CLAN-BD	135.000.190.011	00:00:81:5a:27:05	Dynamic
0005		11D15	CLAN-BD	135.000.190.012	00:00:81:7f:5c:e8	Dynamic
0006		12B08	CLAN-BD	135.000.190.013	00:00:a2:c3:82:0a	Dynamic
0007		14C06	CLAN-BD	135.009.160.110	00:00:a5:14:39:00	Dynamic
0008		15C11	CLAN-BD	135.009.160.111	00:00:a5:f5:38:00	Dynamic
0009		02A15	CLAN-BD	135.009.190.112	00:00:a5:f7:38:00	Dynamic
0010		16D11	CLAN-BD	135.009.004.240	00:01:02:36:7c:c1	Dynamic
0011		04A08	CLAN-BD	135.009.004.241	00:01:02:60:a5:43	Dynamic
0012		09B15	CLAN-BD	135.009.004.242	00:01:02:60:a5:6b	Dynamic
0013		15D13	CLAN-BD	135.009.004.243	00:01:02:60:a5:72	Dynamic
0014		13A14	CLAN-BD	135.009.004.244	00:01:02:60:a5:82	Dynamic
0015		07B09	CLAN-BD	135.009.004.245	00:01:02:60:a5:df	Dynamic
0016		04A06	CLAN-BD	135.009.005.164	00:01:02:bc:84:63	Dynamic

Use the [netstat arp field descriptions](#) on page 67 to further interpret this report.

The following screen shows the display for `netstat arp ck-dup`.

netstat arp ck-dup						
Seq Num	Dup Status	Board Location	Mtce Name	IP Address	MAC Address	Arp/Err Type
0001	DUP	03B11	CLAN-BD	135.000.160.110	08:00:6a:19:04:c3	Dynamic
0002	DUP	04B14	CLAN-BD	135.000.160.110	00:00:00:00:00:00	Dynamic

Use [netstat arp field descriptions](#) to interpret this report.

If the system finds no duplicate IP address, it displays NO DUP IP ADDRS

netstat arp field descriptions

netstat arp field descriptions

Field	Description
Seq Num	A switch-generated, sequential reference number
Dup Status	Displays DUP if a duplicated IP address is found
Board Location	Location of the TN799DP (C-LAN) circuit pack
Maint Name	Maintenance Name of the circuit pack
IP Address	IP address
MAC Addr	The MAC address
Arp/ErrType	Other — The IP address and the MAC address for the entry are dissociated. This can be ignored. Invalid — The IP and MAC address for this entry are disassociated. This can be ignored. Dynamic — needs further investigation. Static — needs further investigation. BRD BUSY - the CLAN-BD has been busied out. LPBCK IP -Loopback query failed, typically because the RSCL is down. SNMPFAIL - SNMP query to the board failed. Timeout - SNMP query timeout.

ars route-chosen

list ars route-chosen

`list ars route-chosen x [location n | all] [partition n] [schedule]`

Screen name: ARS ROUTE CHOSEN REPORT

Use `list ars route-chosen` to see the parameters used by ARS to route a call to a specific number (**x**).

See also the ARS Routing Table for more information about the routing of the call.

The following is an example of the results of `list ars route-chosen`.

list ars route-chosen 5551234						
ARS ROUTE CHOSEN REPORT						
Location: 1			Partitioned Group Number: 1			
Dialed String	Total Min Max		Route Pattern	Call Type	Node Number	Location
5	7	7	2	hnpa		all

list ars route-chosen screen field descriptions

list ars route-chosen field descriptions

Field	Description
Location	Location from the command line or default 1 .
Partitioned Group Number	Partitioned Group Number as entered on the command line or 1 .
Dialed String	The matched entry in the ARS Digit Analysis Table
Total Min Max	Minimum and maximum length of the string matched in the ARS Digit Analysis Table .
Route Pattern	Route Pattern used to route the call.
Call Type	The call type as matched on the ARS Digit Analysis Table . See change ars analysis in the <i>Administrator Guide for Avaya Communication Manager</i> (03-300509) screen reference for full explanation of this field.
Node Number	Node number as matched on the ARS Digit Analysis Table .
Location	Phones dialing from this location use the entries on this form. If there are no matching entries in the phone's location, Communication Manager tries the entries in location all .

attendant

status attendant

status attendant console#

Use **status attendant** to see the operational state of the specified attendant console. This information can help in trouble diagnosis and in locating facilities to which the attendant console is connected.

Maintenance SAT Commands

The following example shows the output from **status attendant**.

```
status attendant 1

                                ATTENDANT STATUS

Console Number: 1              Service State: in-service/night service
      Port: 01C1106      Download Status: no
Connected Ports:
```

status attendant field descriptions

status attendant

Field	Description
Console Number	Number assigned to the attendant
Port	Port location of the attendant (cabinet-carrier-slot-circuit)
Service State	In-service/idle, in-service/active, out of service, or disconnected
Usage State	Idle or active
Maintenance Busy State	y/n Is maintenance testing the object
Connected Ports	Port locations to which the attendant is communicating (cabinet-carrier-slot-circuit).

atm board

S8700 series

status atm board

status atm board location

Use **status atm board** to see when the circuit pack was last inserted or when a link went down or came back up.

The following example shows the output from **status atm board 2a01** with Personality ATM-EI.

```
status atm board 02A01

                        ATM BOARD

      Location:  02A01                      Personality: ATM-EI

Network Address: 4700580601d052ae9000ffe1000000f2d100040      Match: Yes
Admided Address: 4700580601d052ae9000ffe1000000f2d100040

Board Insertion: 10/17/2007 12:14:09          Board Boot: 10/16/2007 12:24:36

ILMI Board sysUpTime: 0x0093b930              ILMI Network sysUpTime: 0x0dc67fca

UNI State: up: Last Down:                      Last Up: 10/16/2007 12:25:15
ILMI State: up: Last Down:                      Last Up: 10/16/2007 12:25:08
```

The following example shows the output from **status atm board 4c04** with Personality ATM-TRK.

```
status atm board 02A01

                        ATM BOARD

      Location:  02A01                      Personality: ATM-TRK

Board Insertion: 10/17/2007 12:14:09          Board Boot: 10/16/2007 12:24:36
```

status atm board field descriptions

status atm board field descriptions 1 of 2

Field	Description
Location	physical port location of the ATM circuit pack
Personality	ATM-EI, ATM-TRK
Network Address	Network address obtained from the ATM circuit pack
1 of 2	

status atm board field descriptions 2 of 2

Field	Description
Admined Address	administered network address
Match	compares the administered address with the network address
Board Insertion	month, day, year, hour, minute, and second of last board insertion
Board Boot	month, day, year, hour, minute, second of when the board last booted
ILMI Board sysUpTime	ILMI board up time in 1/100 seconds
ILMI Network sysUpTime	ILMI network up time in 1/100 seconds
UNI State, Last Down, Last Up	UNI state, and the last time the link went down and/or came up.
ILMI State, Last Down, Last Up	ILMI state, and the last time the link went down and/or came up.
2 of 2	

atm pnc**S8700 series**

See:

[add atm pnc](#) on page 72[change atm pnc](#) on page 74[display atm pnc](#) on page 74[list atm pnc](#) on page 76

add atm pnc**add atm pnc n [next]**

Use `add atm pnc n` to add a new ATM PNC to an **S8700 MC**.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>add atm pnc</code>	<code>n</code> <code>next</code>	The number to assign to the ATM PNC Next available number Examples: <code>add atm pnc 23</code> <code>add atm pnc next</code>	init inads craft	

The following example shows the output for `add atm pnc next` on an **S8700 MC**.

```

add atm pnc next                                     Page 1 of 1
                                                    ATM PNC
                                                    Connection Number: 17
Location:
Name:
Address Format: E.164 ATM Private
AFI: 39
E.164:
HO-DSP:
ESI:
SEL:

```

add atm pnc field descriptions

add atm pnc field descriptions

Field	Description
Location	Physical location: cabinet, carrier, slot (2a15)
Name	16-character alpha-numeric characters for identification
Address Format	DCC ATM, E.164 ATM Private, ICD ATM
E.164	Up to 15 decimal digits
HO-DSP	Switch network prefix, part of the address of the PNC that interfaces with an ATM switch
ESI	End system identifier, part of the address of the PNC that interfaces with an ATM switch
SEL	Selector, part of the address of the PNC that interfaces with an ATM switch

change atm pnc

`change atm pnc n`

Use `change atm pnc` to change the name of the ATM switch on **S8700 MC**.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>change atm pnc</code>	<code>n</code>	Number assigned to the ATM PNC Example: <code>change atm pnc 23</code>		

See [add atm pnc](#) on page 72 for example screen and field descriptions.

display atm pnc

`display atm pnc n [schedule]`

Use `display atm pnc` to see specific ATM PNC data for configurations that have an ATM PNC. If the **Async Transfer Mode (ATM) PNC** field on the `display system-parameters customer-options` screen is `n`, `display atm pnc` produces the error message “atm” is an invalid entry.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>display atm pnc</code>	<code>n</code> <code>schedule</code>	The administered number of the ATM PNC. See Common Input Parameters on page 25.	init inads craft	

The following example shows the output for `display atm pnc 2` for **S8700 MC**.

```

display atm pnc 2

                                ATM PNC
                                Connection Number: 2

Location: 01D01
Name: dup atm pnc

Address Format: ICD ATM

AFI: 47
ICD: 0005
HO-DSP: 80FFE1000000F21C31D4
ESI: 000000010D01
SEL: 00

```

display atm pnc field descriptions

S8700 MC

Each PNC that interfaces with an ATM switch has a unique 40-digit ATM address. The address is made up of a switch network prefix (AFI through HO-DSP), an end system identifier (ESI) and a selector (SEL).

display atm pnc field descriptions

Field	Description
Connection Number	Administered number of the ATM PNC.
Location	Cabinet, carrier, slot location of the ATM circuit pack.
Name	Unique name for the PNC.
Address Format	Indicates the format of the PNC's ATM address. Valid values are: 1 DCC ATM (Data Country Code) 1 ICD ATM (International Code Designator) 1 E.164 ATM private.
AFI	Address Format Identifier. Valid values are: 1 39 for DCC 1 47 for ICD 1 45 for E.164.
DCC ICD E.164	Data Country Code, International Code Designator, or ISDN E.164 address depending on the address format.
HO-DSP	High-Order Domain Specific Part.
ESI	End System Identifier uniquely identifies a PNC connected through an ATM switch. The ESI is the Media Access Control (MAC) address programmed into the TN2305X/TN2306X ATM interface circuit packs. The MAC address is located on the MAC address button on the circuit pack.
SEL	Selector byte is always 0.

list atm pnc

`list atm pnc [schedule]`

Use `list atm pnc` to list the administered ATM PNC equipment in the system.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>list atm pnc</code>	<code>schedule</code>	See Common Input Parameters on page 25.	init inads craft	

The following example shows the output for `list atm pnc`.

list atm pnc			Page 1
		ATM PNC	
PNC	A-PNC	B-PNC	
Connection #	LOC	LOC	
1	01C01		
2	01D01		
3	02A01		
4	02E01		
5	03A01		
6	03E01		
7	04A01		
8	04E01		
9	05A01		
10	05E01		
11	06A01		
12	06E01		
13	07A01		
14	07E01		
press CANCEL to quit -- press NEXT PAGE to continue			

audio-group

See:

[list audio-group](#)

[list usage audio-group](#)

list audio-group

```
list audio-group { [1-Max] ( number n | (to-number n) | count n) }
[schedule]
```

Use `list audio-group` to list all audio groups and see how many members (audio sources) are in each group.

For more information on the Audio Groups screen, see *Administrator Guide for Avaya Communication Manager (03-300509)*.

Action/Object	Qualifier	Qualifier Description
<code>list audio-group</code>	<code>1-Max</code>	audio group number to list
	<code>number <i>n</i></code>	range of audio group numbers to list
	<code>to-number <i>n</i></code>	
	<code>count <i>n</i></code>	number of audio groups to see on the page
	<code>schedule</code>	See Common Input Parameters on page 25.

The following is an example of `list audio-group`.

list audio-group		Page 1
AUDIO GROUPS		
Group	Name	Number or Sources
1	Relaxation Music	2
12	Forgive the wait	20
23	Best deals for today	30
At End of Member List		

list audio-group field descriptions

list audio-group field descriptions

Field	Description
Group	Number of the Audio Group
Name	Name of the Audio Group
Number of Sources	Number of members (audio group sources) in the audio group

list usage audio-group

`list usage audio-group n [schedule]`

Use `list usage audio-group` to see all extensions that refer to the specified audio group.

For more information on the Announcements/Audio Sources screen, see *Administrator Guide for Avaya Communication Manager (03-300509)*.

Action/Object	Qualifier	Qualifier Description
<code>list usage audio-group</code>	<i>n</i> <i>schedule</i>	audio group number See Common Input Parameters on page 25.

The following is an example of `list usage audio-group`.

list usage audio-group										Page 1
ANNOUNCEMENTS\AUDIO SOURCES										
Ann.										Group/
No	Ext.	Type	COR	TN	Name	O	Olen	Pr	Rt	Port
2	45525	integrated	1	1	PresidentzWelcome					G3

audits

See:

[clear audits](#) on page 79

[status audits](#) on page 79

clear audits

Use `clear audits` to clear cumulative and/or peak hour's data collected for each data relation audit. `clear audits` clears old data to display data collected since the last `clear audits` when `status audits` is run. See [status bri-port](#) on page 102.

Action/ Object	Qualifier	Qualifier Description	Login	Feature Interaction
<code>clear audits</code>	<i><code>cumulative</code></i> <i><code>peak-hour</code></i>	Clears data collected about the peak hour since the last reboot or <code>clear audits cumulative</code> Clears peak hour data Examples: <code>clear audits cumulative</code> <code>clear audits peak-hour</code>	init inads	See Feature interactions for clear audits

Feature interactions for clear audits

`Status audits` displays data cleared by `clear audits`. After `clear audits` executes successfully, `display audits cumulative` and/or `display audits peak-hour` display information collected since the last `clear audits`. The start date displays on the `status audits` screen reflecting the time that `clear audits` executed.

status audits

Use `status audits` to see the results of Data Relation Audits that are built into the switch. Data Relation Audits check for inconsistencies between selected data items in the switch, and report inconsistencies. Data Relation Audits are useful during development and testing phases of projects to uncover software errors. In the field they help the switch to recover from data corruption before service is interrupted.

`Status audits` displays the date and time that the requested interval begins, the number of times that the full sequence of audits executes (audit cycles), and status information about each audit that detected a problem or aborted during the interval. The status information contains:

- 1 The name of the audit

Maintenance SAT Commands

- | The number of times that an audit ran and corrected an error
- | The number of times that an audit ran and detected an irreparable error
- | The number of times that an audit ran and aborted
- | The date and time that the audit first detected a problem (only for cumulative)
- | The time of the most recent error detected by the audit (only for cumulative)

Audit data information cumulates from the last reboot or the last **clear audits cumulative** command, and for peak hours since the last reboot or the last **clear audits peak-hour** or **clear audits cumulative**.

Note:

Single process restarts, warm starts, cold 2 restarts, cold 1 restarts, or processor interchanges do not clear this data.

Audits can execute directly using **test MO**. For example, **test MO 1 8192 p 512 t 0** executes the Station Connections Audits, audit names and numbers (names) included in [Table 11: Time-available Maintenance Audits](#) on page 83. When the “test MO” command executes an audit, report results display on the screen. In general, errors discovered from a demand tests are not logged in the error logs. To be consistent with other error logging, and to avoid confusion, errors that are discovered from a demand test that executes an audit are not displayed.

The screen does not automatically update, but reflects the system at the time of the request.

Action/ Object	Qualifier	Qualifier Description	Login	Feature Interaction
status audits	peak-hour cumulative	data collected since the last reboot or since the last execution of clear audits cumulative . Data for the peak hour since the last reboot or since the last execution of the clear audits cumulative or clear audits peak-hour .	init inads	see Feature interactions for status audits on page 83

The following example shows the output from **status audits**.

```
status audits cumulative
```

AUDIT STATUS INFORMATION					
Start Date: 13:00 THU NOV 1 2007 # of Audit Cycles Completed: 67532					
Audit Name	# Cycles Fixed Data	# Cycles Could Not Fix Data	# Cycles Audit Aborted	First Error	Most Recent Error
CR-AUDIT	135	0	0	11/02/10:12	11/02/19:17
HU-CALLS	2	0	0	11/02/10:12	11/02/10:20
SE-CALLS	1	0	1	11/02/10:13	11/02/19:14
TTR-SID	1	0	0	11/02/02:17	11/02/02:17
CO-CALLS	1	0	0	11/02/02:16	11/02/02:16
DE-CALLS	1	0	0	11/02/10:12	11/02/10:12
TR-QUE	1	0	0	11/02/13:05	11/02/13:05
CTRK	0	1	0	11/01/10:12	11/02/10:12
AT-ADM	1	0	0	11/01/10:12	11/02/10:12
PC-ADM	1	0	0	11/01/15:05	11/02/15:05
PRI					

```
status audits peak-hour
```

AUDIT STATUS INFORMATION			
Start Date: 10:00 THU NOV 01 2007 # of Audit Cycles Completed: 25			
Audit Name	# Cycles Fixed Data	# Cycles Could Not Fix Data	# Cycles Audit Aborted
HTLK	0	25	0
HU-CALLS	2	0	0
CR-AUDIT	1	0	0
DE-CALLS	1	0	0
CTRK	0	1	0
AT-ADM	1	0	0
CO-ADM	1	0	0
SE-CALLS	0	0	1
PRI-USR (SCH)	1	0	0

Audit information displays with one line of data displayed audit that has detected an error or aborted. Audits that did not detect any errors or aborted do not display. The output sorts in descending order, based on the sum of the values in the **# Cycles Fixed Data**, **# Cycles Could Not Fix Data**, and **# Cycles Audit Aborted** fields.

status audits field descriptions

status audits field descriptions

Field	Description
Start Date	Date and time that interval begins. cumulative = date and time of the last reboot or of clear audits cumulative peak-hour = date and time of the beginning of the peak hour since the last reboot or of clear audits cumulative or of clear audits peak-hour
# of Audit Cycles Completed	Number of audit cycles completed in the specified interval (0 – 999999). Asterisks indicate numbers that exceed 999999. The switch executes audits in a set order. After all audits execute, the switch restarts the sequence. Individual audit values can be larger than the values described below (if the switch is partially through another audit cycle). Audit Cycles numbers do not apply to these audits that execute as part of scheduled maintenance.
Audit Name	Audit's name that detected an error or aborted. A few audits do not run in the normal audit sequence. Instead, they execute as part of scheduled maintenance and are marked with "(SCH)" following the audit name.
# Cycles Fixed Data	Number of times that the audit ran, in the specified interval, and found a fixable problem. (0–65534) Asterisks are used form numbers that exceed 65534.
# Cycles Could Not Fix Data	Number of times that the audit ran, in the specified interval, and found an problem that could not be fixed. The audited switch data is inconsistent when this happens. (0–65534) Asterisks are used for numbers that exceed 65534.
# Cycles Audit Aborted	Number of times that the audit ran, in the specified interval, and aborted due to an internal error. (0–65534) Asterisks are for numbers that exceed 65534.
First Error	Date and time that the audit first detected fixed data, could not fix data or audit aborted problems since the last clear audits cumulative command. Example: 03/27/14:31 for 2:31 pm, March 27th. Appears with status audits cumulative .
Most Recent Error	Date and time that the audit last detected fixed data, could not fix data or audit aborted problems since the last "clear audits cumulative" command. Example: 03/27/14:31 for 2:31 pm, March 27th. Appears with status audits cumulative .

Feature interactions for status audits

- | `clear audits` affects the data from `status audits cumulative` and `status audits peak-hour`
- | `clear audits cumulative` clears data collected to date, resets the start time kept for that data, and clears peak hour data
- | `clear audits peak-hour` clears data kept for the peak hour so that a new peak hour can be established

Table of audits

[Table 11: Time-available Maintenance Audits](#) on page 83 shows the names of the audits that are run as part of time available maintenance, the audit number (pname) and a short description of each audit. These audits execute using lname MO_DR_AUDIT (8192). These audits may execute using the `test mo` command with lname 8192, pname "audit number," and test number 0 (for example, `test mo 1 8192 p 607 t 0` executes the AC state audit).

Table 11: Time-available Maintenance Audits 1 of 6

Audit name	Audit number	Description
AAP-MSG	585	aap message buffer audit
AC-ISG	607	AC state audit
ADJUSR	595	Adjunct user record audit
ADMTRM	559	Administration terminal audit
ANUR-A	589	Announcement user record audit
AN-ADM	574	Announcement group administration audit
AN-CALLS	572	Announcement group calls audit
AN-QUE	577	Announcement group queue audit
AQSA	545	ACB queue slot allocation audit
ASLINK	606	ASAI link status audit
ASYLED	605	ASAI yellow LED audit
ATACT	558	Attendant active audit
ATAV	557	Attendant availability audit
AT-ADM	529	Attendant group administration audit
1 of 6		

Table 11: Time-available Maintenance Audits 2 of 6

Audit name	Audit number	Description
AT-CALLS	515	Attendant group calls audit
AT-QUE	523	Attendant group queue audit
ATSC-AUD	561	ISDN-PRI TSC UUI Buffer Audit
AUR-A	540	Attendant user record audit
AU-CIDP	596	Announcement user cid/port audit
BR-CALLS	629	Bridged extensions audit
BRDG-LK	625	bridging button lock audit
BUTLK	560	Button lock audit
CALK	569	Coverage answer member lock audit
CATT	527	Attendant connections audit
CD-PN-TAB	622	CD_Pn_tab Audit
CDM	528	Data module connections audit
CLDIR	631	Clear Directory DEMAND-ONLY audit
CNF-A	637	conference record audit
CO-ADM	530	Coverage group administration audit
CO-CALLS	516	Coverage group calls audit
CR-AUDIT	513	Call processing data audit
CSR-A	544	Connection service record audit
CSTAT	512	Station connections audit
CTRK	526	Trunk connections audit
DA-CALLS	583	DAP call record audit
DA-CR	628	dap call records audit
DA-MSG	584	DAP message buffer audit
DE-ADM	531	Data extension group administration audit
DE-CALLS	517	Data extension group calls audit
2 of 6		

Table 11: Time-available Maintenance Audits 3 of 6

Audit name	Audit number	Description
DIR	630	integrated directory audit
DMLK	563	Data module lock audit
DMTM-A	640	multimedia data index audit
DUR-A	543	Data user record audit
DXLK	567	Data extension member lock audit
EAL-VCTOKEN	644	EAL SVC Objects audit
EI-TAB	620	Expansion Interface Table Audit
EMMC-LL	657	EMMC: EMMC_T linked list audit
FHT	554	Facility status hundreds table audit
FSM-TIMER	632	fsm (fac_st) timer audit
FTED	553	Facility status tracked user audit
FTING	552	Facility tracking user audit
FTSRA	593	Fiber time-slot record allocation audit
GIP-TIMER	611	GIP Timer Audit
H248TERM-DR	659	H248 term data relation audit
HTLK	568	Hunt member lock audit
HU-ADM	532	Hunt group administration audit
HU-CALLS	518	Hunt group calls audit
HU-QUE	524	Hunt group queue audit
IAP-CALLS	590	IAP call record audit
IAP-URB	591	IAP user record audit
IGAR	654	IGAR: UM<->CM data relations audit
IM-HMM	579	HMM image table audit
INST-LNK	604	Instigator/down-link user link audit
IP-EPT-TAB	651	IP EPT table audit
3 of 6		

Table 11: Time-available Maintenance Audits 4 of 6

Audit name	Audit number	Description
IPBW-AUD	653	IP bandwidth audit for CAC
IPSI-HMM	650	IPSI clock/pktint audit
ISGR-A	594	ISG call record audit
LIP-TIMER	626	LIP Timer Audit
LOG-A	570	MDM error/alarm log audit
MAP-HMM	580	HMM map status table audit
MIS-FAC	587	MIS facility state audit
MM-A	636	meet-me user CID audit
MMIP-EPT-TAB	655	MM IP EPT table audit
MP-ADM	575	Modem pool group administration audit
MP-CALLS	573	Modem pool group calls audit
MP-CHL-TAB	661	Medpro channel table audit
MSAP-MSG	600	msap message buffer audit
MSAP-PCALLS	623	masi path call record audit
MSAP-REC	601	msap local record audits
MSGQ-HMM	582	HMM map request queue audit
MS-CALLS	588	MISAP call record audit
MTM-A	638	multimedia complex audit
MTMU-A	641	multi media user CID audit
MUSIC-AUD	634	Multiple Music audit
MUV	555	Message user verification audit
MWIA	550	Message waiting indicator audit
MWL-NOAP	599	Message waiting lamp no AP audit
NR-IGAR	656	IGAR: CM net region audit
PA-ADM	533	Paging group administration audit
4 of 6		

Table 11: Time-available Maintenance Audits 5 of 6

Audit name	Audit number	Description
PA-CALLS	519	Paging group calls audit
PCLK	566	PCOL member lock audit
PC-ADM	535	Personal CO line group administration audit
PC-CALLS	521	Personal CO line group calls audit
PE-CALLS	608	PRI Endpoint calls audit
PINC-TAB	614	Packet Inter-Port Network Connection Sub-Table audit
PI-ADM	534	Pickup group administration audit
PK-ALERT	586	pickup alert audit
PKT-VCTOKEN	643	Packet SVC Objects audit
PLIP-LNK	602	LIP link audit
PN-HMM	578	HMM pname table audit
PRI-CR	598	PRI call record audit
PRI-TBUF	592	TSCUUI buffer audit
PUR-A	541	Phantom user record audit
SBS-MTM-A	652	SBS trk MTM index Audit
SDSBUF	581	Service dispatcher stim buffer audit
SDSID	571	Service dispatcher SID audit
SE-ADM	538	Terminating extension group administration audit
SE-CALLS	537	Terminating extension group calls audit
SMTM-A	639	multimedia station index audit
STNLK	562	Station lock audit
SUR-A	539	Station user record audit
S-INC-TAB	613	Service Inter-Port Network Connection Sub-Table audit
S-LD-TAB	635	Service port listen disconnect subtable audit
S-PT-TAB	612	Service-Port Connection Sub-Table audit
5 of 6		

Table 11: Time-available Maintenance Audits 6 of 6

Audit name	Audit number	Description
S-TAB	619	Service Table Audit
TDM-VCTOKEN	642	TDM SVC Objects audit
TEGLK	565	TEG member lock audit
TKLK	564	Trunk lock audit
TONE-TS	610	Tone Time Slot Sub-table Audit
TR-ADM	536	Trunk group administration audit
TR-CALLS	522	Trunk group calls audit
TR-QUE	525	Trunk group queue audit
TR-SID	514	Touch tone receiver audit
TR-TAB	621	Touch Tone Receiver Table Audit
TSC-PRI	520	ISDN-PRI TSC resource audit
TSRA	547	Time slot record allocation audit
T-TS-TAB	615	Tone Time Slot Connection Sub-Table Audit
TTI-AWOH	616	TTI/AWOH Audit
UGMA	551	User group membership audit
UPUSR-LNK	603	Up-link user link record audit
URMB	548	User record maintenance busy audit
VDNMM-CALLS	658	VDN MM EMMC: Call Audit
VDN-AUD	633	VDN Call Count Audit
XMOBILE-UPGRADE	649	XMOBILE type upgrade audit
MGMC-AUD	542	MGMC Message table audit
6 of 6		

[Table 12: Scheduled Maintenance Audits](#) on page 89 shows the names of audits that run as part of scheduled maintenance, the audit number (pname) and a short description of each audit. These audits execute using lname MO_SCH_AUDIT (8193). These audits may execute using the `test MO` command with lname 8193, pname “audit number,” and test number 0. For example, `test MO 1 8193 p 556 t 0` executes the Message Waiting Lamp Audit audit.

Table 12: Scheduled Maintenance Audits

Audit name	Audit number	Description
BRG-REC	647	bridge record audit
BUTC	609	Button memory compaction audit
LABEL-AUD	660	Custom button label audit
MWL	556	Message Waiting Lamp Audit
NUMBER-MAPPING	648	XMOBILE mapping tables audit
PRI-USR	597	PRI user record audit
SSUR-FREE	662	Shared station user record free list audit
SUR-FREE	624	Station User Record Free List Audit
MWL-NOAP	599	MSG Message Waiting Lamp Audit

bcms

See:

[monitor bcms](#) on page 89

`list bcms`: see *Avaya Communication Manager Call Center Software Basic Call Management System (BCMS) Operations (07-300061)* for more information on BCMS commands and reports.

monitor bcms

`monitor bcms split split# | system split# | skill skill# | vdn vdn#`

Use `monitor bcms` to see a summary of Basic Call Management System (BCMS) conditions for agents and splits. The on-line status report is automatically updated every 30 seconds or on demand by pressing **UPDATE**. Press **CANCEL** and terminate the login to cancel `monitor bcms`.

Maintenance SAT Commands

Action/ Object	Qualifier	Qualifier Description
monitor bcms	split split# system system# skill skill# vdn	status of 1 split and the <i>number</i> of the split (ACD hunt group number). status of the split queue and cumulative split information for every split measured by BCMS, and the <i>numbers</i> of the split (ACD hunt group numbers) separated by spaces and/or split number ranges separated by a hyphen (-). status of 1 particular skill group and the <i>number</i> of the group. vector directory number Examples: monitor bcms system mon bcms spl 1

The following is an example of **monitor bcms system**.

monitor bcms system										Page 1 of 1
BCMS SYSTEM STATUS										
										Date: 14:02 THU OCT 18 2007
										AVG AVG AVG %IN
SPLIT NAME	CALLS	OLDEST	SPEED	AVAIL	ABAND	ABAND	ACD	TALK	AFTER	SERV
	WAIT	CALL	ANS	AGENT	CALLS	TIME	CALLS	TIME	CALL	LEV
Service	3	1:03	:45	0	3	:30	20	2:30	1:25	
Sales	5	:33	:15	0	11	:45	36	1:32	:35	

monitor bcms system field descriptions

monitor bcms system field descriptions 1 of 2

Field	Description
Date	The current date and time. Updated every 30 seconds or when UPDATE is pressed.
SPLIT	The name of the split being reported. If no name is administered, the split extension appears as "EXTxxxx". Splits appear in split number order.
CALLS WAIT	The number of calls currently waiting in this split's queue. Direct Agent Calls are preceded by an asterisk. This field is real-time status data.
1 of 2	

monitor bcms system field descriptions 2 of 2

Field	Description
OLDEST CALL	The amount of time that the oldest call has waited in queue. Real-time status data.
AVG SPEED ANS	The average time required for an answer in this split during the current period, including time in queue and time ringing at the agent's voice terminal. Intraflow calls (those that overflow from one ACD split to another split) will not have queue time from previous splits included in the average. The calculation is Total Answer Time/Total Automatic Call Distribution (ACD) Calls. This is measurement data and includes only completed calls.
AVAIL AGENT	The number of agents in this split currently available to receive an Automatic Call Distribution (ACD) call from this split. Real-time status data.
ABAND CALLS	The number of calls abandoned during the current period. This is measurement data.
AVG ABAND TIME	The average time abandoned calls waited in queue before abandoning during the current period. The calculation is Total Abandon Time/Total Calls Abandoned. This is measurement data and includes only completed calls.
ACD CALLS	The number of Automatic Call Distribution (ACD) calls handled by this split during the current period. This includes calls that intraflow into the split. This is measurement data.
AVG TALK TIME	The average talk time for Automatic Call Distribution (ACD) calls handled by this split during the current period. This does not include ring time at the agents' voice terminal. The calculation is Total ACD Talk Time/Number of ACD Calls. This is measurement data and includes only completed calls.
AVG AFTER CALL	The average After Call Work (ACW) time for Automatic Call Distribution (ACD) calls handled by this split during the current period. ACD calls with no ACW time are included in the average. Time spent on direct incoming or outgoing calls while in ACW are not included in the average. The calculation is (Total ACW Time - Total ACW Incoming Time - Total ACW Outgoing Time)/Total ACD Calls. This is measurement data and includes only completed calls.
% IN SERV LEVL	Percent in Service Level for a particular skill. It is the percentage of calls that were offered to the skill that were answered within the administered Service Level time according to the service agreement (for example, 80% of the calls within 20 seconds. If all calls were answered in that time, the value for the IN SERV LEVL would be 100%). The administered service level is defined on the hunt group form.
2 of 2	

Maintenance SAT Commands

The following is an example of **monitor bcms split 1**.

monitor bcms split 1				Page 1 of 1		
BCMS SPLIT (AGENT) STATUS						
Split: 1						
Split Name: hunt group 1				Date: 9:02 TUE OCT 23 2007		
Calls Waiting: 0						
Oldest Call: 0:00						
0=Staffed 0=Avail 0=ACD 0=ACW 0=AUX 0=Extn 0=OtherSplit						
AGENT	EXT	STATE	TIME	ACD CALLS	EXTN IN CALLS	EXTN OUT CALLS

monitor bcms split field descriptions

monitor bcms split field descriptions 1 of 2

Field	Description
Split	The number of the split requested. This is translation data.
Split Name	The name of the split requested. If no name exists, "EXT xxxxx" appears.
Date	The current date and time, updated every 30 seconds or when the UPDATE key is pressed.
Calls Waiting	The number of calls currently waiting in this split's queue. Direct Agent Calls are preceded by an asterisk. This is real-time status data.
Oldest Call	The time in minutes:seconds that the current oldest call has waited in this split's queue. This is real-time status data.
Staffed	The number of agents currently logged into this split. This is real-time status data.
Avail	The number of agents currently available to receive an Automatic Call Distribution (ACD) call in this split. Agents are in the Auto-in or Manual-in work modes and are not currently on a call. If the agent is on another split's call or in After Call Work (ACW) for another split, this agent is not considered available and will not be recorded here. This is real-time status data.
ACD	The number of agents in this split currently on an Automatic Call Distribution (ACD) call for this split. This includes ACD calls handled by this split that arrive as coverage from another split. This also includes outbound calls (Outgoing Call Manager) distributed through the ACD. If an agent puts an ACD call on hold, but does not enter another state (for example, the agent does not enter the AVAIL state), the agent is still seen as in the ACD state. This is real-time status data.
1 of 2	

monitor bcms split field descriptions 2 of 2

Field	Description
ACW	The number of agents in this split currently in After Call Work (ACW) split. This is real-time status data.
AUX	The number of agents in this split currently in AUX work for this split. If an agent is on another split's call or in After Call Work (ACW) for another split, this agent is not considered in AUX work and is not recorded here. This is real-time status data.
Extn	The number of agents in this split currently on non-ACD (Automatic Call Distribution) calls, incoming or outgoing directly to/from their extensions. If the agents are also in After Call Work (ACW) or AUX they are recorded as Extn rather than ACW or AUX. This is real-time status data.
OtherSplit	The number of agents in this split on another split's call or in After Call Work (ACW) for another split. Used if agents belong to multiple splits. This is real-time status data.
AGENT	The name of the agent associated with the extension. If no name exists this field is blank.
EXT	The agent's extension. This field is translation data.
STATE	The current state of the agent for this split. Possible states are Avail, ACD, ACW, AUX, Extn In, Extn Out, OtherSplit, and Unstaff. This is real-time status data.
TIME	The clock time at which the agent entered the current state. This is real-time status data.
ACD CALLS	The number of Automatic Call Distribution (ACD) calls (inbound and outbound), that the agent has completed for this split during the current period (half hour or hour). If the maximum number of 255 calls exceeded, 255 appears. This is measurement data.
EXTN IN CALLS	The number of non-ACD incoming calls that the agent has received and completed during the current period, maximum 255. This is measurement data.
EXTN OUT CALLS	The number of outgoing non-ACD (Automatic Call Distribution) calls that the agent has completed during the current period, maximum 255. This is measurement data.
2 of 2	

The following is an example of **monitor bcms vdn**.

monitor bcms vdn 12345-12349											
BCMS VECTOR DIRECTORY NUMBER STATUS											
Date: 15:30 Mon Sep 24, 2007											
VDN NAME	CALLS WAIT	OLDEST CALL	ACD CALLS	AVG SPEED ANS	ABAND CALLS	AVG ABAND TIME	AVG TALK/HOLD	CONN CALLS	FLOW OUT	CALLS BUSY/DISC	% IN SERV LEVL
knives	5	:25	50	:39	5	:45	2:30	0	0	24	91
EXT 12346*	0	:00	0	:00	0	:00	:00	0	0	0	0

monitor bcms vdn field descriptions

monitor bcms vdn field descriptions 1 of 2

Field	Description
Date	The current date and time (updated every 30 seconds or when Update is pressed).
VDN NAME	The name of the VDN being reported. If the VDN does not have a name administered, this field displays EXT ## where ## is the VDN extension.
CALLS WAIT	The number of calls that encountered this VDN and have not been answered, abandoned, outflowed, or forced busy/disc. Includes calls in queues, in vector processing, and ringing at an agent telephone.
OLDEST CALL	The time the oldest call currently waiting has waited in the VDN. Timing starts when the call enters the VDN.
ACD CALLS	The number of completed ACD calls answered in a BCMS-measured split. The split may have been reached via the queue-to-main, check backup, route-to, messaging split, or adjunct routing commands. Includes Direct Agent calls (EAS only).
AVG SPEED ANS	The average speed of answer for ACD and connect calls (see CONN CALLS below) that have completed for this VDN during the current period. This includes the time in vector processing, in a split queue, and time ringing. The calculation is: $\frac{\text{Total Answer Time}}{\text{Total ACD Calls} + \text{Total CONNect CALLS}}$ Answer time for a call is recorded when the call ends. For example, if a call originates in interval x, is answered in interval y, and ends in interval z, the associated answer and talk times are recorded in interval z.
1 of 2	

monitor bcms vdn field descriptions 2 of 2

Field	Description
ABAND CALLS	The number of calls to this VDN that have abandoned before being answered during the current period. This includes VDN calls that were routed to an attendant, telephone, or announcement, and abandoned before being answered.
AVG ABAND TIME	The average time abandoned calls waited before abandoning during the current period. The calculation is: $\frac{\text{Total Abandon Time}}{\text{Total Calls Abandoned}}$
AVG TALK/HOLD	The average talk time for ACD calls completed by this VDN during the current period. This does not include ring time, but it does include any time the caller spent on Hold. The calculation is: $\frac{\text{Total Talk Time}}{\text{ACD Calls}}$
CONN CALLS	The number of completed calls that were routed to a telephone, attendant, announcement, messaging split, or call pickup and were answered there.
FLOW OUT	The number of calls that were routed to another VDN or to a trunk, including successful look-ahead attempts.
CALLS BUSY/DISC	The number of calls that were forced busy or forced disconnect during the current interval. This value includes: Calls that encountered a busy or disconnect vector step Calls disconnected by a stop vector step Calls forwarded to a split with a full queue Calls forwarded to a split with no available agents and no queue This value does not include abandoned calls.
% IN SERV LEVL	The percent of calls offered that completed and were answered within the acceptable service level defined on the VDN screen. The calculation is: $\frac{\text{accepted} * 100}{\text{calls offered}}$ <i>calls offered</i> is defined as: acdcalls + flowout calls + abandoned + connect + busy/disc <i>accepted</i> is the number of ACD and CONNect calls that were answered within the administered service level. This field is blank if no calls were recorded for this time interval. This field is also blank if no Acceptable Service Level has been administered on the VDN screen.
2 of 2	

board

See:

[busyout board](#) on page 96

[release board](#) on page 96

[reset board](#) on page 97

[test board](#) on page 97

busyout board

busyout board location

Use **busyout board** to busyout all the ports associated with the specified access endpoint. In a port network with duplicated TN2602AP circuit packs, only the standby circuit pack can be busyout.

Action/Object	Qualifier	Qualifier Description	Login
busyout board	<i>location</i>	board address (PCSSPP) Example: busyout board 01c11	init inads craft

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

release board

release board location

Use **release board** to activate administered maintenance objects on the circuit pack at specified locations.

Action/Object	Qualifier	Qualifier Description	Login
release board	<i>location</i>	Board location: <i>PCSS</i>	init inads craft nms

For **release board 1c07**, the port field shows the port address of the released maintenance object.

For more information, see [Common Command Output Screens](#) on page 28 and [Busyout and Release Commands](#) on page 33.

reset board

`reset board location [repeat repeat#]`

CAUTION:

Note that `reset board` can be service disrupting and may cause extraneous alarms. Effects of a reset vary depending upon the type of object being reset and upon whether the component is duplicated. See the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)* on the relevant maintenance object for details.

Use `reset board` on a specified port circuit pack or media module to perform a software reset of every administered port on the circuit pack. Every port must be busied out before the port board is reset.

In critical-reliability systems (duplicated PNC), reset of an Expansion Interface, Switch Node Interface, Switch Node Clock, or DS1 Converter circuit pack on the active PNC is not permitted. Busyout the standby components before entering the reset.

For more information, see [Common Input Parameters](#) on page 25 and [Common Command Output Screens](#) on page 28.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>reset board</code>	<code>location</code>	Reset every administered port on the circuit pack.		1
	<code>repeat#</code>			1

test board

`test board location [short | long] [repeat repeat# | clear] [schedule]`

Use `test board` to perform a set of hardware diagnostic tests on a specified circuit pack. The system first validates that the board exists at the specified location. Then, based on the logical type of board (for example, Analog, Digital, Hybrid), a series of tests performs diagnostics on the board and then returns results of the tests along with any possible error codes.

Some of the tests can be disabled by administration.

Maintenance SAT Commands

Destructive long tests on a Switch Node Interface (SNI) board are not allowed unless the board has been busied out.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>test board</code>	<code>location</code> <code>short</code> <code>long</code> <code>repeat n</code> <code>clear</code>	Physical location of the board <i>PCSS</i> See Common Input Parameters on page 25. Examples: <code>test board 01a01</code> <code>test board 01a02</code> <code>test board 01a03</code> <code>test board 01a05</code> <code>test board 01a10</code>	init inads craft nms	short 1

For more information, see [Common Command Output Screens](#) on page 28.

boot-image

See:

[get boot-image](#) on page 98

[set boot-image](#) on page 100

get boot-image

`get boot-image location`

Use `get boot-image` to view the two firmware image parameters on the TN2501AP circuit pack.

Action/Object	Qualifier	Qualifier Description	Login
<code>get boot-image</code>	<code>location</code>	The physical location of the circuit pack (cabinet, carrier, slot).	init inads craft cust

This is an example of `get boot-image`.

```
get boot-image 1C07
                                DISPLAY FIRMWARE IMAGE(S)

                                Image 1      Image 2

Board Type:  TN2501             TN2501
FW Vintage:   02                 02
HW Signature: 02                 02
Suffix:       A                  A
Date:         03/02/02           03/02/01
Timestamp:    10:30:50           12:42:18
CRC Checksum: Good              Good
Active Image: Yes                No
Reboot Image: Yes                No
```

get boot-image field descriptions

get boot-image field descriptions

Field	Description
Board Type	For VAL, this field is TN2501.
FW Vintage	The firmware vintage number
HW Signature	The hardware signature number
Suffix	The circuit pack suffix code letter
Date	The date the firmware file was created or transferred to the circuit pack
Timestamp	The time that the firmware file was created or transferred to the circuit pack
CRC Checksum	Cyclic Redundancy Check (data integrity algorithm)
Active Image	y indicates the active firmware image file. n indicates the inactive firmware image file. To change the active image file, use set boot-image on page 100.
Reboot Image	y indicates that this image becomes active after a system reset. n indicates that this image becomes inactive after a system reset.

set boot-image

```
set boot-image [board location] image 1 | 2
```

Use `set boot-image` to direct the system to use 1 of 2 possible firmware image files on the TN2501AP circuit pack.

Note:

After you enter `set boot-image`, reseal the circuit pack to activate the firmware image.

Action/Object	Qualifier	Qualifier Description	Login
set boot-image	board	The physical location of the circuit pack	init
	location		inads
	1	use the Image 1 firmware file	craft
	2	use the Image 1 firmware file	cust
Example: set boot-image board 1B08 image 1			

bp

See:

[change bp](#) on page 100

[display bp](#) on page 102

change bp

The Avaya INIT login control business partner access via the `change bp` command.

Action/Object	Qualifier	Qualifier Description	Login
change bp			init

The following is an example of the **change bp** screen:

```
change bp
                                BUSINESS PARTNER ACCESS

                                Enable Use of dadmin login: y      PIN is set
                                Enable Use of craft2 login: y      PIN is unset
```

change bp field descriptions

change bp field descriptions

Field	Description
Enable Use of dadmin login: y/n	This field is set to yes by default after a new installation. If this field is set to yes, then profile 2 may be used by a login spelled as dadmin if it is enabled in the license and subject to other existing constraints. If the field is set to no, then profile 2 is disabled. This field cannot grant access for dadmin if it is disabled in the license, but can inhibit access if dadmin is enabled in the license.
PIN is set/unset	This display-only field indicates whether a PIN has been established for the login (set) or not (unset). If the PIN is unset, then the next SAT access to that login will require the PIN to be established.
Enable Use of craft2 login: y/n	This field works the same as the field for the dadmin login, except that it applies to the second craft login if/when it is enabled by dadmin.

Note that the ""enable" fields are NOT the same as, for example, "enable craft2 joe", which is accessible to the business partner login dadmin. This form is accessible only to INIT and applies another level of lockout for these logins.

display bp

The **display bp** command displays the same form as the **change bp** command, except that all of the fields are display-only and cannot be changed. This command can only be issued by the INIT login ID.

The following is an example of **display bp**.

```
display bp

                                BUSINESS PARTNER ACCESS

                                Enable Use of dadmin login: y      PIN is set
                                Enable Use of craft2 login: y      PIN is unset
```

See [change bp field descriptions](#) on page 101 for a description of the fields.

bri-port

status bri-port

status bri-port location

Use **status bri-port** to see the service state, maintenance state and layer 1 state of an ISDN-BRI port. There is also information about the point-to-point signaling links carried over the port. For more information, see [BRI-PORT \(ISDN-BRI Port\)](#) in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)*.

Action/Object	Qualifier	Qualifier Description
status bri-port	<i>location</i>	location of the BRI port

The following screen shows an example of **status bri-port**.

```

status bri-port 1c1701                                     Page 1 of 1
                                     STATUS BRI-PORT

      Port: 01C1701
      Service State: in-service
      Maintenance Busy?: no
      Layer 1 State: activated

      TEI Value  Layer2 State  Endpt Extension  Endpt SPID  Service SPID?
Link1    64      13-established      1010          1010
Link2
Link3

```

status bri-port field descriptions

See [Table 13: Interpreting BRI-Port Status Reports](#) on page 105 for information on interpreting results.

status bri-port field descriptions 1 of 2

Field	Description
Port	The location of the ISDN-BRI port.
Service State	Whether the ISDN-BRI port is “in-service” or “out-of-service.”
Maintenance Busy	Whether maintenance testing is currently being performed on the port.
Layer 1 State	The operational state of the physical connection (Layer 1) of the ISDN link carried over the port: activated = Layer 1 frames are being passed between the port and BRI endpoints. pend-activation = The port is in service, the layer 1 interface device is turned on and layer 1 frames are being sent from the port, but the BRI endpoints are not responding. deactivated = The layer 1 interface device on the BRI has been turned off due to the port being out of service.
TEI Value	The Terminal Endpoint Identifier (TEI) is a layer 2 addressing parameter used by the switch to exchange information with BRI endpoints over the point-to-point signaling link. The TEI is a number from 1 to 127.
1 of 2	

status bri-port field descriptions 2 of 2

Field	Description
Layer2 State	The operational state of the point-to-point signaling link (Layer 2): assigned = The link is currently in the AWAIT_EST (Await Establish) state at layer 2. If the BRI endpoint supports TEI allocation procedures, those procedures have been successfully executed and a TEI has been assigned to the endpoint by the switch. established = The link is in the MF_EST_NORM (Multi-Frame Established Normal) state at layer 2. The switch has successfully started the link and is now capable of exchanging layer 3 frames with the endpoint. If the endpoint does not support SPID initialization procedures, the voice extension of the endpoint associated with the link is also displayed. This is the normal state for a link in a point-to-point wiring configuration. L3-established = The link is in the MF_EST_NORM state at layer 2 and SPID initialization procedures have been successfully completed. The voice extension of the endpoint associated with the link is also displayed. This is the normal state for a link in a multipoint wiring configuration. hyperactive = Traffic on this link has exceeded the threshold and the link has been suspended.
Endpt Extension	The extension of the voice/data endpoint associated with the link. This field is blank if the link is not in the established or L3-established state.
Endpt SPID	The SPID (Service Profile Identifier) administered for the voice/data endpoint. This field is blank if the link is not in the established or L3-established state.
Service SPID	If the link is associated with the Service SPID this field displays yes and the Endpoint Extension field is blank. Otherwise this field is blank. Service SPID is a feature used by service technicians to check building wiring between the switch and the BRI endpoint.
2 of 2	

Interpreting Results of status bri-port

[Table 13: Interpreting BRI-Port Status Reports](#) on page 105 helps interpret the results of `status bri-port`. Find the combination of the output field values in your report and follow the recommendations for the type of endpoint connected to the port.

Table 13: Interpreting BRI-Port Status Reports 1 of 6

Error Type	Aux Data	Associated Test	Alarm Level	On/Off Board	Test to Clear Value
BRI, ASAI	0-126	Assigned	blank	blank	This is a transitory state for BRI endpoints and ASAI adjuncts. The switch is attempting to establish the link. 1. Check the endpoint and wiring by following the SPID Facility test's procedure described in BRI-SET, Various Adjuncts on page 598 in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)</i>. 2. Repeat <code>status bri-port</code> to determine that the Layer 2 state of the signaling link is either L3-Established (for ASAI adjuncts and BRI endpoints supporting MIM initialization) or Established (for fixed TEI BRI endpoints and automatic TEI BRI endpoints not supporting MIM initialization). If it is not, follow normal escalation procedures. (A MIM or management information message is a level-3 message that conveys management and maintenance information between a communications system and a BRI terminal.)
					1 of 6

Table 13: Interpreting BRI-Port Status Reports 2 of 6

Error Type	Aux Data	Associated Test	Alarm Level	On/Off Board	Test to Clear Value
ASAI	0-63	Established	blank	blank	This is a transitory state for ASAI adjuncts. ASAI signaling is connected at Layer 2 but the Layer 3 Restart procedure has not been completed between switch and adjunct. 1. Check the adjunct by following the recommended repair procedures of the manufacturer. 2. Repeat status bri-port and determine whether the L2 state of the signaling link is L3-Established. If it is not, follow normal escalation procedures.
BRI	0-126	Established	ext#	blank	This is the normal state for non-MIM initializing, fixed, and automatic TEI BRI endpoints.
BRI, ASAI	64-126	Established	blank	blank	This is a transitory state for automatic TEI BRI endpoints that support MIM initialization. 1. Verify that SPID administration on the switch and the endpoint are consistent. Repeat status bri-port to determine whether the Layer 2 state of the signaling link is L3-Established. 2. Try replacing the endpoint. Repeat status bri-port to determine whether the Layer 2 state of the signaling link is L3-Established. If it is not, follow normal escalation procedures.
BRI	64-126	L3-Established	ext#	blank	This is the normal state for automatic TEI BRI endpoints that support MIM initialization.
					2 of 6

Table 13: Interpreting BRI-Port Status Reports 3 of 6

Error Type	Aux Data	Associated Test	Alarm Level	On/Off Board	Test to Clear Value
BRI, ASAI	64-126	L3-Established	blank	yes	A demand SPID Facility test is in progress on the port, and the link is not currently associated with a BRI endpoint. See SPID Facility test's procedures described in BRI-SET, Various Adjuncts on page 598 in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)</i> .
BRI	64-126	L3-Established	ext#	yes	A demand SPID Facility test is in progress on the port, and the link is associated with an endpoint on the port. See SPID Facility test's procedures described in BRI-SET, Various Adjuncts on page 598 in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)</i> .
BRI	0-126	L3-Established	blank	blank	An invalid SPID is assigned to link. 1. Change the SPID value in the BRI endpoint to match the SPID administered to the BRI endpoint on the port. Repeat status bri-port to determine whether the Layer 2 state of the signaling link is L3-Established . If it is not, follow normal escalation procedures.
					3 of 6

Table 13: Interpreting BRI-Port Status Reports 4 of 6

Error Type	Aux Data	Associated Test	Alarm Level	On/Off Board	Test to Clear Value
BRI	0-126	L3-Assigned	ext#	blank	This is a transitory state for BRI endpoints that support MIM initialization. 1. Wait 5 seconds and repeat the command. If the state has not changed, continue with Step 2. 2. Make sure SPID administration on the switch and endpoint are consistent. Repeat status bri-port to determine whether the Layer 2 state of the signaling link is L3-Established. If it is not, go to Step 3. 3. Try replacing the endpoint. Repeat status bri-port to determine whether the Layer 2 state of the signaling link is L3-Established. If it is not, follow normal escalation procedures.
					4 of 6

Table 13: Interpreting BRI-Port Status Reports 5 of 6

Error Type	Aux Data	Associated Test	Alarm Level	On/Off Board	Test to Clear Value
BRI	0-126	L3-Assigned	ext#	yes	This is a transitory state for BRI endpoints that support MIM initialization when a SPID Facility test has been used to initialize the station. 1. Wait 5 seconds and repeat the command. If the state has not changed continue with Step 2. 2. Make sure SPID administration on the switch and endpoints are consistent. Repeat status bri-port to determine whether the Layer 2 state of the signaling link is L3-Established. If it is not, go to Step 3. 3. Try replacing the endpoint. Repeat status bri-port to determine whether the Layer 2 state of the signaling link is L3-Established. If it is not, follow normal escalation procedures.
					5 of 6

Table 13: Interpreting BRI-Port Status Reports 6 of 6

Error Type	Aux Data	Associated Test	Alarm Level	On/Off Board	Test to Clear Value
ASAI BRI	0-126	Hyperactive	ignore	ignore	Link has sent too many messages per unit time. Signaling has been suspended. After 60 seconds, the system attempts to put the link into service. If a link remains in this state while there is no activity at the BRI endpoint, take the following steps: 1. Make sure SPID administration on the switch and endpoints are consistent. Repeat status bri-port to determine whether the Layer 2 state of the signaling link is L3-Established. If it is not, go to Step 2. 2. Try replacing the endpoint. Repeat status bri-port to determine whether the Layer 2 state of the signaling link is L3-Established. If it is not, follow normal escalation procedures.
ASAI	0-126	L3-Restarting	ext#		The switch has sent a Restart message to the adjunct but has not yet received a Restart Acknowledgment message from the adjunct.
ASAI	0-126	L3-Restarted	ext#		After receiving a Restart Acknowledgment message, the switch has sent a Heartbeat message to the adjunct and is waiting for a response.
ASAI	0-126	L3-Established	ext#		This is the normal state for ASAI adjunct.
6 of 6					

bulletin board

display bulletin board

For detailed information about the Communication Manager bulletin board see *Administrator Guide for Avaya Communication Manager (03-300509)*.

cabinet

S8700 series

See:

[add cabinet](#) on page 111

[change cabinet](#)

[display cabinet](#)

[list cabinet](#) on page 115

[status cabinet](#) on page 117

add cabinet

`add cabinet <n>`

Use `add cabinet` to administer cabinets on a five carrier cabinet (MCC) with an [S8700 series](#).

Action/Object	Qualifier	Qualifier Description	Login
<code>add cabinet</code>	<i>n</i>	Number assigned to the cabinet	init super-user inads craft dadmin

Maintenance SAT Commands

The following is an example screen for **add cabinet** for a **G650** gateway.

add cabinet 20		Page 1 of 1	
CABINET			
CABINET DESCRIPTION			
Cabinet: 20			
Cabinet Layout: G650-rack-mount-stack			
Cabinet Type: expansion-portnetwork			
Location: 1			
Rack:	Room:	Floor:	Building:
CARRIER DESCRIPTION			
Carrier	Carrier Type	Number	Duplicate
E	not-used		
D	not-used		
C	not-used		
B	not-used		
A	G650-port		

The following is an example screen for **add cabinet** for an **S8700 series** server.

add cabinet 1		Page 1 of 1	
CABINET			
CABINET DESCRIPTION			
Cabinet: 1			
Cabinet Layout: five-carrier			
Cabinet Type: expansion-portnetwork			
Number of Portnetworks: 1			
Survivable Remote EPN? n			
Location: 1		IP Network Region: 1	
Cabinet Holdover: A-carrier-only			
Room:	Floor:	Building:	
CARRIER DESCRIPTION			
Carrier	Carrier Type	Number	Duplicate
C	not-used	PN 01	
B	port	PN 01	
A	expansion-control	PN 01	
X	fan		
D	not-used	SN 01	
E	switch-node	SN 01	05ED

add cabinet field descriptions

add cabinet field descriptions 1 of 2

Field	Description
CABINET DESCRIPTION	
Cabinet	Number assigned to cabinet
Cabinet Layout	Description of the layout type of cabinet / stack: cmc-carrier-stack (available when the IP-PNC field is y on the system-parameters customer-options screen) five-carrier G650-rack-mount-stack G650-port not-used single-carrier-stack
Cabinet Type	Description of the type of cabinet: cmc-port (available when IP-PNC is y on the system-parameters customer-options screen) expansion-portnetwork MCC (multicarrier cabinet) PPN SCC (single-carrier cabinet) S75XE (System 75 XE single-carrier cabinet) G650-rack-mount-stack , expansion-port network appears in the Cabinet Type . If Enable Operation of IPSI Duplication is y on the system-parameters duplication screen, G600 and CMC1 media gateways are not allowed.
Number of Portnetworks	1 through 5
Survivable Remote EPN	y/n
Location	Location number in which cabinet resides. Use display locations to see the administered descriptions of all locations. If display system-parameters customer-options shows Multiple Locations set to n , Loc defaults to 1. Cabinets connected through a center stage switch (CSS) are required to be in network region 1.
IP Network Region	IP Network Region assigned to the cabinet, to map port networks (non-IP circuit packs) to Network Regions Cabinets connected through a center stage switch (CSS) are required to be in network region 1.
1 of 2	

add cabinet field descriptions 2 of 2

Field	Description
Cabinet Holdover	A-carrier-only , or all-carriers S8700 series : Appears when Five Port Networks Max Per MCC is y on the System-Parameters Customer-Options screen.
Rack	appears when Cabinet Layout is G650-rack-mount-stack or rack-mount-stack
Room, Floor, Building	The physical location of the equipment
CARRIER DESCRIPTION	
Carrier	Letter designation of the carrier
Carrier Type	expansion-control fan not-used port rmc-port switch-node When Cabinet Layout is G650-rack-mount-stack , Carrier Type for Carrier A is G650-port and is display-only.
Number	PN (port network) or SN (switch-node) number of the carrier
Duplicate	
2 of 2	

change cabinet**S8700 series****change cabinet *n***

Use **change cabinet** to administer cabinets on a five carrier cabinet (MCC) with an **S8700 series**.

Action/Object	Qualifier	Qualifier Description	Login	Default
change cabinet	<i>n</i>	Number assigned to the cabinet		

See [add cabinet](#) on page 111 for example screen and field descriptions.

display cabinet

S8700 series

display cabinet *n*

Use **display cabinet** to see the how a specific cabinet is administered.

Action/Object	Qualifier	Qualifier Description	Login	Default
display cabinet	<i>n</i>	Number assigned to the cabinet		

See [add cabinet](#) on page 111 for example screen and field descriptions.

list cabinet

S8700 series

list cabinet [schedule]

Use **list cabinet** to see the type, layout, room, floor, building, location and port network number for each cabinet in the system.

Action/Object	Qualifier	Qualifier Description	Login	Default
list cabinet	schedule	See Common Input Parameters on page 25.		

The following is an example of the output for **list cabinet** on **S8700 MC**.

list cabinet												
CABINET REPORT												
No	Type	Layout	Room	Floor	Building	Loc	A	B	C	D	E	
1	EPN	5-car				1	PN 01	PN 01	PN 01	PN 01	SN 01	
2	EPN	5-car				1	PN 02	PN 02	PN 02	PN 02	PN 02	
3	EPN	5-car				1	PN 03	PN 03	PN 03	PN 03	SN 01	
4	EPN	5-car				1	PN 04	PN 04	PN 04	PN 04	PN 04	
5	EPN	5-car				1	PN 05	PN 05	PN 05	PN 05	PN 05	
6	EPN	5-car				1	PN 06	PN 06	PN 06	PN 06	PN 06	
7	EPN	5-car				1	PN 07	PN 07	PN 07	PN 07	PN 07	
8	EPN	5-car				1	PN 08	PN 08	PN 08	PN 08	PN 08	

The following is an example of the output for `list cabinet` on [S8700 IP-PNC](#).

list cabinet												
CABINET REPORT												
No	Type	Layout	Room	Floor	Building	Loc	A	B	C	D	E	
1	EPN	rmc				1	PN 01	PN 01	PN 01	PN 01	PN 01	
2	EPN	rmc				1	PN 02	PN 02	PN 02	PN 02	PN 02	
3	EPN	rmc				1	PN 03	PN 03	PN 03	PN 03	PN 03	
4	EPN	rmc				1	PN 04					

list cabinet field descriptions

list cabinet field descriptions

Field	Description
Number	Number assigned to the cabinet.
Type	The type of cabinet.
Layout	Description of the layout type of the cabinet or stack: cmc-carrier-stack expansion-control fan not-used port switch-node S8700 IP-PNC : rmc G650 : G650-port G650-rack-mount-stack
Room	Room where cabinet resides, if administered on the cabinet screen.
Floor	Floor where cabinet resides, if administered on the cabinet screen.
Building	Building where cabinet resides, if administered on the cabinet screen.
Loc	Location number in which cabinet resides. Use <code>display locations</code> to see the administered descriptions of all locations. If <code>display system-parameters customer-options</code> shows Multiple Locations set to n , Loc defaults to 1.
A B C D E	The letter designation of each carrier. For each carrier the port network number is given (PN). If the carrier is a switch node this number is preceded by SN . On S8700 IP-PNC , carrier E is not used.

status cabinet

S8700 series

status cabinet UU

Use **status cabinet** to see the operational status and attributes of the specified cabinet.

The output screen displays configuration information for each carrier, connectivity, and alarm information for each port network or switch node and the emergency transfer status of the cabinet.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status cabinet	UU	Location number of cabinet		1	

The following example shows the output for **status cabinet** when **Cabinet Layout** on the Cabinet screen is **rack-mount-stack**.

Note:

When a system contains no PN maintenance boards, the **Emergency Select Transfer Switch** field is **NoEqp**.

status cabinet 1									
CABINET CONFIGURATION STATUS					CABINET CONNECTIVITY STATUS				
Carrier	PN/SN	Carrier	Cabinet	PN/SN	Connectivity Status				
Location	Number	Type	Type		Active	Standby			
01A	PN 1	rmc-port	RMC	PN 1	down				
01B	PN 1	rmc-port							
01C	PN 1	not-used							
01D	PN 1	not used							
CABINET EMERGENCY TRANSFER					CABINET ALARM STATUS				
Emergency	Select			PN/SN	Mj	Mn	Wn		
Transfer	Switch								
				PN 1	0	1	19		
01B	auto-								
01A	auto-								

status cabinet field descriptions**status cabinet field descriptions 1 of 3**

Field	Description
Carrier Location	The cabinet number and carrier letter of each carrier in the cabinet.
PN/SN Number	The Port Network number or Switch Node number (1 or 2) of the indicated carrier.
Carrier Type	The type of the indicated carrier: processor, port, expansion-control, switch-node, dup-sw-node or not-used.
Cabinet Type	One of the following types: MCC (multicarrier cabinet) SCC (single-carrier cabinet) S75XE (System 75 XE [pre-R1V4] single-carrier cabinet) blank (undetermined cabinet type).
PN/SN	Each Port Network and Switch Node located in the cabinet is identified by its PN number or its SN number and PNC designation (A or B).
1 of 3	

status cabinet field descriptions 2 of 3

Field	Description
Connectivity Status	For PNs connectivity status refers to the availability of the EAL (Expansion Archangel Link) and INL (Indirect Neighbor Link) to the carrier for both active and standby PNCs (if duplicated). Possible values are: up — EAL and INL are both available. down — EAL and INL are both unavailable. near-end — The EAL is available, and the INL is unavailable. far-end — The INL is available, and the EAL is unavailable. aa — Points to a problem with the archangel. The control is up, but the archangel is not functioning and is not available. blank — In the standby column, this means PNC is not duplicated. For SNs connectivity status indicates circuit pack insertion on the Switch Node as follows: up — At least one switch node interface circuit pack in the Switch Node is inserted. down — There are no switch node interface circuit packs inserted on the Switch Node. blank — In the active column, this indicates that the Switch Node carrier is currently the standby in a critical-reliability system. In the standby column, this indicates that the Switch Node carrier is currently active (whether or not PNC is duplicated).
Emergency Transfer	The location of the circuit pack containing the emergency transfer select switch (PN maintenance).
Select Switch	The current setting of the emergency transfer switch: on Emergency transfer has been manually activated. off Emergency transfer is being manually prevented. auto+ The cabinet is controlling emergency transfer and is activated. auto- The cabinet is controlling emergency transfer and is not activated. unavail The current setting of the emergency transfer switch is not available.
PN/SN	Each Port Network and Switch Node located in the cabinet is identified by its PN number or its SN number and PNC designation (A or B).
2 of 3	

status cabinet field descriptions 3 of 3

Field	Description
Mj, Mn, Wn	The number of major, minor and warning alarms currently logged against the Port Network or Switch Node.
3 of 3	

calltype route-chosen

list calltype route-chosen

`list calltype route-chosen n [location n | all] [partition n] [schedule]`

Use `list calltype route-chosen` to see what would happen to a call routed through CALLTYPE.

The following is an example of the results of `list calltype route-chosen`.

```
list calltype route-chosen 6001452 location 1
                                CALLTYPE ANALYSIS ROUTE CHOSEN REPORT

Location:  1                      Partitioned Group Number: 1

Match:  6001452
length: Min 7 Max 7
Selected Location: all

    After Delete and Insert      Type   Result
1: 6001452                      ext    No dialplan match.
2: 452                          aar    Match 452, min=3, max = 7
```


list calltype route-chosen screen field descriptions

list calltype route-chosen field descriptions 1 of 2

Field	Description
Location	Location from the command line. Allows you to see what would happen if the telephone number you enter into your administration terminal were dialed from a phone's call log in this location. If there are matching entries in the entered location, those get used. If there are no matching entries in the entered location, Communication Manager tries the entries in location all .
Partitioned Group Number	Partitioned Group Number as entered on the command line. Default is 1 .
Match	numeric = the entry in the Calltype Digit Analysis Table that was selected for the dialed string Blank = no matching entries for this dialed string in the Calltype Digit Analysis Table
length Min Max	numeric = the entry in the Calltype Digit Analysis Table that was selected for the dialed string Blank = no matching entries for this dialed string in the Calltype Digit Analysis Table
Selected Location	Phones dialing from this location use the entries on this form. If there are matching entries in the phone's location, those entries get used. If there are no matching entries in the phone's location, Communication Manager tries the entries in location all .
After Delete and Insert	The digit string as it appears after call type digit manipulation for that pattern, up to 4 manipulations.
1 of 2	

list calltype route-chosen field descriptions 2 of 2

Field	Description
Type	ext aar ars udp The call type used by the call type algorithm to test the modified string. Call types correspond to the equivalent entries on the Calltype Digit Analysis Table (display calltype analysis).
Result	Results of the analysis on the dialed string. If there was a successful match and completion of the call, the modifications to the dialed string appear. Results stop at the first successful match and valid route. Use this information to view the call type's specific routing analysis form (AAR Routing Table, ARS Routing Table, dialplan analysis tables and the uniform-dialplan tables) for more information about the routing of the call.
2 of 2	

campon-busyout

campon-busyout

campon-busyout [*trunk* | *processor*] <*trunk group/member* | *location*>

Use **campon-busyout** to busy-out system resources that need maintenance or repair, and to remove idle VoIP resources from the system's pool of available VoIP resources.

Campon-busyout allows present activity to continue and prevents future activity, so that the facilities will eventually become idle and allow board replacement to occur.

Use **campon-busy-out media-processor** to select the media processor to be busied out while the media processor is still in service. Once all of the media processor's resources are in a busy-out state, the associated board can be removed from the system without disrupting active calls. Use [status media-processor board](#) on page 411 to check the busy-out status of a media processor.

Action/Object	Qualifier	Qualifier Description
campon-busyout trunk campon-busyout media-processor	<i>trunk-group/member</i> location	location of the resource

A redundant **campon-busyout**, issued for a media processor already in the pending busyout or busyout service state, results in **ABORT** with an error code for any media processor resource that is already busied.

Use **release board** to abort **campon-busyout**:

- 1 Busied resources are returned to service. The command result is **PASS**.
- 1 Resources marked for busyout, pending busyout, are cleared. The command result is ABORT with an error code that signifies the release of a media processor that was in the pending busy service state.

Busyout board and **busyout port** override any pending busyout states created with **campon-busyout** for media processors.

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

capacity

display capacity

display capacity [schedule]

Use **display capacity** to see how your system is administered, and to see a snapshot status of system resources.

Use **display capacity** to see the maximum capacities of system resources allowed by the system and the current level of usage. Most of the maximum capacities depend on your contract with Avaya. Capacities are defined in the license files and displayed on the System-Parameters Customer-Options screen.

Action/Object	Qualifier	Qualifier Description	Login	Default
display capacity	schedule	See Common Input Parameters on page 25.	init inads dadmin craft cust rcust	

The screen below shows the output for page 1 of **display capacity**.

Note:

The capacities in this example may not coincide with your system. The information is presented to help explain the command and the field values, not to provide capacity information.

display capacity	Page 1 of x		
SYSTEM CAPACITY			
Current System Memory Configuration: G3xV11			
	Used	Available	System Limit
	- - -	- - -	- - -
AAR/ARS			
AAR/ARS Patterns:	17	623	640
Inserted Digit Strings:	6	2994	3000
ABBREVIATED DIALING (AD)			
AD Entries Per System:	10	99990	100000
AD Personal Lists Per System:	1	4999	5000
ADJUNCT SWITCH APPLICATION INTERFACE (ASAI)			
Active Controlling Associations:	0	6000	6000
Notification Requests:	0	10000	10000
Simultaneous Active Adjunct Controlled Calls:	0	3000	3000

display capacity field descriptions, page 1

display capacity field descriptions, AAR/ARS, ABBREVIATED DIALING (AD), ADJUNCT SWITCH APPLICATION INTERFACE (ASAI) page 1 1 of 2

Field	Description
Current System Memory Configuration	The platform on which the translations were saved. Can also be unknown if no flash card is present or translations made on old load. This is important because platforms are not always compatible. Standard or Extra Large = translations are saved on CM 4.0 or later. Anything other than Standard or Extra Large = translations were saved on a pre-CM4.0 system.
AAR/ARS	
AAR/ARS Patterns	The number of route patterns. See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> .
Inserted Digit Strings	Number of 12-digit strings inserted and available for AAR/ARS preferences. See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> .
ABBREVIATED DIALING (AD)	
AD Entries Per System	The number of abbreviated dialing entries for both group and personal lists.
1 of 2	

display capacity field descriptions, AAR/ARS, ABBREVIATED DIALING (AD), ADJUNCT SWITCH APPLICATION INTERFACE (ASAI) page 1 2 of 2

Field	Description
AD Personal Lists Per System	The number of abbreviated dialing personal lists. See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> .
Adjunct Switch Application Interface (ASAI)	
Active Controlling Associations	The number of station domain controls that ASAI adjuncts can request.
Notification Requests	The number of requests ASAI can make to monitor call activity at a split or VDN.
Simultaneous Active Adjunct Controlled Calls	The number of calls that can be controlled by ASAI adjuncts.
2 of 2	

Following is the page 2 output for **display capacity**.

display capacity	Page 2 of x		
SYSTEM CAPACITY			
	Used	Available	System Limit
	- - -	- - -	- - -
ATTENDANT SERVICE			
Attendant Positions:	2	26	28
Queue Length:	0	300	300
Queue/Call Status Buttons:	0	15913	15928+
Authorization Codes:	0	90000	90000
BASIC CALL MANAGEMENT SYSTEM (BCMS)			
BCMS Measured Agents:	0	2000	2000
BCMS Measured ACD Members:	0	40000	40000
BCMS Measured Splits/Skills:	50	550	600
BCMS Measured VDNs:	40	472	512
'+' Limit combined with Facility Busy Indicators			

display capacity field descriptions, page 2

Table 14: display capacity field descriptions, ATTENDANT SERVICE, BASIC CALL MANAGEMENT SYSTEM (BCMS) page 2

ATTENDANT SERVICE	
Attendant Positions	The number of administered attendants.
Queue Length	A real-time snapshot of the number of calls waiting for attendant service.
Queue/Call Status Buttons	The number of attendant queue status buttons administered on stations. There are two types of queue status buttons: ▮ atd-qcalls (ATD - Queue Calls) ▮ atd-qtime (ATD - Queue Time)
Authorization Codes	The number of authorization codes used for security purposes. See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> .
BASIC CALL MANAGEMENT SYSTEM (BCMS)	
BCMS Measured Agents	The number of agents the Basic Call Management System (BCMS) is measuring.
BCMS Measured ACD Members	The number of ACD members BCMS is measuring.
BCMS Measured Splits/Skills	The number of hunt groups BCMS is measuring.
BCMS Measured VDNs	The number of vector directory numbers BCMS is measuring.

Following is the page 3 output for **display capacity**.

display capacity	Page 3 of x		
SYSTEM CAPACITY			
	Used	Available	System Limit
	- - - -	- - - -	- - - -
CALL COVERAGE			
Coverage Answer Groups:	0	1000	1000
Coverage Paths:	7	9992	9999
Call Pickup Groups:	0	5000	5000
Call Records:	-	-	15424
CALL VECTORING/CALL PROMPTING			
Total Vector Directory Numbers:	43	19998	20000
Meet-me Conference VDNs per system:	1	1799	1800
Total Vectors Per System:	27	972	999
Meet-me Conference Vectors per System:	1	998	999
BSR Application-Location Pairs Per System:	334	2226	2560

display capacity field descriptions, page 3

Table 15: display capacity field descriptions, CALL COVERAGE, CALL VECTORING/CALL PROMPTING page 3 1 of 2

CALL COVERAGE	
Coverage Answer Groups	Number of Coverage Answer Groups. See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> .
Coverage Paths	Number of paths taken when a call goes to coverage. See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> .
Call Pickup Groups	Number of administered call pickup groups. See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> .
Call Records	Maximum number of active calls at a given time, set at the system level.
CALL VECTORING/CALL PROMPTING	
Total Vector Directory Numbers	Number of system VDNs. See <i>Avaya Call Center Release 4.01 Call Vectoring and Expert Agent Selection (EAS) Guide, 07-600780 (formerly 07-300477, 07-300186, 555-230-714)</i> .
1 of 2	

Table 15: display capacity field descriptions, CALL COVERAGE, CALL VECTORING/CALL PROMPTING page 3 2 of 2

Meet-me Conference VDNs per system	Number of vector directory numbers for the meet-me conference feature.
Total Vectors Per System	Number of vectors per system. See <i>Avaya Call Center Release 4.01 Call Vectoring and Expert Agent Selection (EAS) Guide, 07-600780 (formerly 07-300477, 07-300186, 555-230-714)</i> .
Meet-me Conference vectors per System	Number of vectors for the meet-me conference feature.
BSR Application - Location Pairs Per System	Number of mappings administered in a multisite network. The maximum number of application-location pairs per system is 2560. For example, for a network of 10 locations, you can assign up to 256 applications. With 20 locations, you can assign up to 128 applications. See <i>Avaya Call Center Release 4.01 Call Vectoring and Expert Agent Selection (EAS) Guide, 07-600780 (formerly 07-300477, 07-300186, 555-230-714)</i> .
2 of 2	

Following is the page 4 output for **display capacity**.

display capacity		Page 4 of x		
SYSTEM CAPACITY				
		Used	Available	System Limit
		- - - - -	- - - - -	- - - - -
DATA PARAMETERS				
Administered Connections:		5	123	128
Alphanumeric Dialing Entries:		0	1250	1250
DIAL PLAN				
Extensions:		7551	42182	49733
Miscellaneous Extensions:		2153	24105	26258
UDP Extension Records:		2	79998	80000
Digital Data Endpoints:		50	7450	7500
Expansion Port Networks:		6	58	64
Facility Busy Indicators:		2	15913	15928+
`+' Limit combined with Queue/Call Status Buttons				

display capacity field descriptions, page 4

Table 16: display capacity field descriptions, DATA PARAMETERS, DIAL PLAN, page 4

DATA PARAMETERS	
Administered Connections	The number of connections between two access or data endpoints. See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> .
Alphanumeric Dialing Entries	See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> .
DIAL PLAN	
Extensions	This includes stations, data endpoints, hunt groups, announcements, TEGs, VDNs, common shared extensions, and code calling IDs.
Miscellaneous Extensions	Anything that is not a station, trunk, data module, or attendant. This includes, but is not limited to, PCOL groups, common shared extensions, access endpoints, administered TSCs, code calling IDs, VDNs, LDNs, hunt groups, announcements, and TEGs.
UDP Extension Records	The number of 4-digit or 5-digit extension numbers that allow a user to call from one PBX to another using that number.
Digital Data Endpoints	The number of digital serial communication devices that permit the asynchronous transfer of data. This also includes the number of analog adjuncts.
Expansion Port Networks	The number of port networks connected to the TDM bus and packet bus of a processor port network.
Facility Busy Indicators	The number of visual indicators of the busy/idle status of any particular trunk group, hunt group member, or station user. See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> .

Maintenance SAT Commands

Following is the page 5 output for **display capacity**.

display capacity

Page 5 of x

SYSTEM CAPACITY

	Used	Available	System Limit
	- - -	- - -	- - -
HUNT GROUPS, SPLITS, OR SKILLS			
Groups/Splits/Skills:	55	944	999
Administered Logical Agents:	699	9301	10000
Administered Logical Agent-Skill Pairs:	13868	51132	65000
Logged-In ACD Agents:	0	5200	5200
Logged-In Advocate Agents:	0	5200	5200
Logged-In IP Softphone Agents:	0	5200	5200
Group Members Per System:	0	60000	60000
CMS Measured ACD Members:	0	60000	60000
Dynamic Queue Slots Per System:	2453	9547	12000
Queue/Call Status Buttons:	13	15913	15928+
Intercom Groups Per System:	0	256	256
Modem Pool Groups Per System:	0	63	63
Personal CO Line (PCOL) Trunk Groups:	0	200	200
'+' Limit combined with Facility busy Indicators			

display capacity field descriptions, page 5

Table 17: display capacity field descriptions, HUNT GROUPS, SPLITS, OR SKILLS page 5

HUNT GROUPS, SPLITS, OR SKILLS	
Groups/Splits/Skills	The number of ACD hunt groups.
Administered Logical Agents	The number of logical agents administered. Applicable to systems with Expert Agent Selection.
Administered Logical Agent-Skill Pairs	The number of logical agent-skill pairs that are administered.
Logged-In ACD Agents	A real-time field displaying the number of agents actually logged in. For example, if an agent is logged into 4 skills (and there are no other agents), then the Logged-In ACD Agents field is 1 and the Group Members Per System field is 4.
Logged-In Advocate Agents	The number of Advocate agents that are currently logged in.
Logged-In IP Softphone Agents	The number of IP Softphone agents that are currently logged in.
Group Members Per System	The number of agent/group pairs.
CMS Measured ACD Members	The number of agent pairs being measured by CMS.
Dynamic Queue Slots Per System	The number of hunt group queue positions being used. The system pool of queue slots is dynamically assigned as needed. All calls can be queued.
Queue/Call Status Buttons	The number of hunt group queue status buttons administered on stations. There are four types of queue status buttons; attendants use the last two queue status buttons: q-calls (Queue Calls) q-time (Queue Time) atd-qcalls (ATD - Queue Calls) atd-qtime (ATD - Queue Time)
Intercom Groups Per System	The number of intercom groups set up within your organization.
Modem Pool Groups Per System	The number of modem pool groups. See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> .
Personal CO Line (PCOL) Trunk Groups	The number of PCOL trunk groups. See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> .

Following is the page 6 output for **display capacity**.

display capacity	Page 6 of x		
SYSTEM CAPACITY			
	Used	Available	System Limit

RECORDED ANNOUNCEMENTS/MUSIC/AUDIO SOURCES			
Analog Queue Slots:	0	1000	1000
Administered Announcement Files:	111	2889	3000
TN2501 VAL Boards:	1	4*	5
Media Gateway vVAL Sources:	0	0	0
TN2602 Boards with 80 VoIP Channels:	0	0	0
TN2602 Boards with 320 VoIP Channels:	1	1	2
TEMPORARY SIGNALING CONNECTIONS (TSC)			
Administered TSCs:	7	243	250
NCA-TSC Calls:	2	997	999
'' Available VAL Boards limited by other inserted integ type annc boards			

display capacity field descriptions, page 6

Table 18: display capacity field descriptions, TEMPORARY SIGNALING CONNECTIONS (TSC) page 6 1 of 2

Recorded Announcement Analog Queue Slots	
TN2601 VAL Board	The current usage, license limit, and available capacity associated with the "Maximum TN2601 VAL Boards" license feature.
Media Gateway VAL Sources	The current usage, license limit, and available capacity associated with the "Maximum G700 VAL Sources" license feature.
TN2602 Boards with 80 VoIP Channels	The current usage, license limit, and available capacity associated with the "Maximum TN2602 Boards with 80 VoIP Channels" license feature. Used = total number of TN2602 circuit packs in the system administered with 80 VoIP channels Limit = value in the Maximum TN2602 Boards with 80 VoIP Channels field on the system -parameters customer-options form.
1 of 2	

Table 18: display capacity field descriptions, TEMPORARY SIGNALING CONNECTIONS (TSC) page 6 2 of 2

TN2602 Boards with 320 VoIP Channels	The current usage, license limit, and available capacity associated with the "Maximum TN2602 Boards with 320 VoIP Channels" license feature. Used = total number of TN2602 circuit packs in the system administered with 320 VoIP channels Limit = value in the Maximum TN2602 Boards with 320 VoIP Channels field on the system -parameters customer-options form.
TEMPORARY SIGNALLING CONNECTIONS (TSC)	
Administered TSCs	
NCA-TSC Calls	
2 of 2	

Following is the page 7 output for **display capacity**.

display capacity	Page 7 of x		
SYSTEM CAPACITY			
	Used	Available	System Limit
	- - -	- - -	- - -
TRUNKS			
DS1 Circuit Packs:	10	390	400
DS1 With Echo Cancellation:	0	400	400
ICHT For ISDN Trunks:	0	576	576
ISDN CBC Service Selection Trunks:	1	199	200
Trunks Groups:	34	1966	2000
Trunks Ports:	604	7396	8000
Remote Office Trunks (included in 'Trunk ports'):	0	4000	4000
SBS Trunks (included in 'Trunk ports'):	0	1000	1000
SIP Trunks (included in 'Trunk ports'):	765	4000	4000
'*' Available VAL Boards limited by other inserted integ type annc boards			

display capacity field descriptions, page 7

Table 19: display capacity field descriptions, TRUNKS, page 7 1 of 2

TRUNKS	
DS1 Circuit Packs	The number of allowed DS1 circuit packs.
1 of 2	

Table 19: display capacity field descriptions, TRUNKS, page 7 2 of 2

DS1 With Echo Cancellation	The number of DS1 circuit packs that can have echo cancellation.
ICHT For ISDN Trunks	The number of Incoming Call Handling Table (ICHT) entries administered for trunk groups.
ISDN CBC Service Selection Trunks	The number of call-by-call trunk groups.
Trunk Groups	The number of trunk groups administered.
Trunk Ports	The number of trunk ports administered.
H.323 Trunks (included in Trunk ports')	The number of administered H.323 Office trunks
Remote Office Trunks (included in 'Trunk ports')	The number of administered Remote Office trunks.
SBS Trunks (included in 'Trunk ports')	The number of administered SBS (Separation of Bearer and Signaling) trunks.
SIP Trunks (included in Trunk ports')	The number of administered SIP trunks
2 of 2	

Following is the page 8 output for **display capacity**.

display capacity	Page 8 of x		
SYSTEM CAPACITY			
	Used	Available	System Limit
	- - -	- - -	- - -
VOICE TERMINALS			
Station Button Memory (units):	10 %	90 %	17496000
Team Button / Monitoreed stations:	9	5991	6000
Customized Button Labels:			
Station Records:	5392	30565*	36000
Station Records Used by TTI (Not Shared):	41		
Station Records Used by TTI (Shared):	0		
Stations (includes BRI stations):	4693		
Stations With Port:	686		
Stations Without Port:	4007	-	-
Other Stations:	699	-	-
TTI Ports:	0	-	-
Auto Moves Stations:	0	5000	5000
Administered IP SoftPhones:			
Video Capable H.323 Stations:			
Video Capable IP Softphones:			
ISDN-BRI Endpoint And Trunk Ports:	38	6962	7000

display capacity field descriptions, page 8

Table 20: display capacity field descriptions, VOICE TERMINALS, page 8

VOICE TERMINALS	
Station Button Memory (units)	The percentage of memory being consumed by every administered button.
Team Button / Monitored stations	The number of team button assignments. Team buttons are used to monitor members of a team of stations, functional between one Communication Manager server and the Tenovis 155 hardware platform.
Station Records	The number of resources being used by regular stations, announcements, and music on hold.
Stations (includes BRI stations)	The number of voice terminals.
Station Records Used by TTI (Not Shared)	TTI ports that are administered by the system when TTI is activated on the Feature-Related System-Parameters screen (change system-parameters features). The ports provide dial-tone to the unadministered physical station attached to the physical port location.
Station Records Used by TTI (Shared)	Ports that are shared with AWOH stations. The ports are administered by the system when is TTI activated on the Feature-Related System-Parameters screen (change system-parameters features). The ports provide dial-tone to the unadministered physical station attached to the physical port location.
Stations With Port	The number of connected voice terminals (stations with specific administered ports).
Stations Without Port	The number of voice terminals not having an administered port, such as AWOH.
Other Stations	The number of ports used as conversion resources, agent login ID, MASI, and analog announcements.
TTI Ports	The number of ports assigned by TTI features.
Auto Moves Stations	The number of stations available to move using ACTR.
ISDN-BRI Endpoint and Trunk Ports	The number of ISDN-BRI ports.

Following is the page 9 output for **display capacity**.

display capacity

Page 9 of 10

SYSTEM CAPACITY

SYSTEM CAPACITY

TOTAL LICENSED CAPACITY	Used	Available	License Limit
Station and Trunk Ports:	2762	438	3200
Station Capacity:	1789	611	2400
SBS Stations:	0	500	500
Radio Controllers:	0	0	0
Wireless Terminals:	0	0	0
XMOBILE Stations:	0	700	700
EC500:	0		
DECT:	0		
PHS:	0		
Off-PBX Telephone - EC500:	0	0	0
Off-PBX Telephone - OPS:	100	0	100
Off-PBX Telephone - PBFMC:	0	0	0
Off-PBX Telephone - PVFMC:	0	0	0
Off-PBX Telephone - SCCAN:	0	0	0
Off-PBX Telephone Memory (units):	0%	100%	1039500

display capacity field descriptions, page 9

Table 21: display capacity field descriptions, TOTAL LICENSED PORTS, page 9 1 of 2

TOTAL LICENSED PORTS	
Station and Trunk Ports	The number of subscribed ports in the system
Station Records	The number of station records administered on the system
SBS Stations	The number of extensions administered as SBS (Separation of Bearer and Signaling).
Radio Controllers	The number of subscribed Radio Controller circuit packs
Wireless Terminals	The number of subscribed wireless terminals
XMOBILE Stations	The number of X-station mobility (XMOBILE) stations
EC500	The number of Avaya Extension to Cellular (EC500) ports
DECT	The number of DECT ports
PHS	The number of PHS ports
1 of 2	

Table 21: display capacity field descriptions, TOTAL LICENSED PORTS, page 9 2 of 2

Off-PBX Telephone - EC500	Usage of the EC500 application (AvayaExtension to Cellular)
Off-PBX Telephone - OPS	Usage of the OPS application (Off-PBX Station, supporting non-native endpoints)
Off-PBX Telephone - SSE	Usage of the SSE or SCCAN application (combines cellular voice and wireless VoIP)
Off-PBX Telephone Memory (units)	The number of PHS ports
2 of 2	

Following is the page 10 output for **display capacity**.

display capacity

Page 10 of x

CONCURRENT REGISTRATION COUNTS

CONCURRENT REGISTRATION COUNTS

	Currently Registered	Available	System Limit
IP Stations:	296	2704	3000
IP Stations in TTI State:	0	-	-
IP Attendant Consoles:	0	3	3
Remote Office Stations:	0	300	300

display capacity field descriptions, page 10

Table 22: display capacity field descriptions, CONCURRENT REGISTRATION COUNTS page 10

CONCURRENT REGISTRATION COUNTS	
Field	Description
IP Stations	The number of IP stations
IP Stations in TTI State	The number of registered IP stations in TTI state
IP Attendant Consoles	The number of IP attendant consoles
Remote Office Stations	The number of remote office stations

Following is the page 11 output for **display capacity**.

display capacity										Page 11 of x
CURRENT REGISTRATION COUNTS BY PRODUCT ID										
ID	Rel	Regist.	Avail.	System Limit	ID	Rel	Regist.	Avail.	System Limit	
IP_Agent		:	0	5000	5000		:			
IP_Phone		:	296	4704	5000		:			
IP_ROMax		:	0	300	300		:			
IP_Soft		:	0	5000	5000		:			
IP_eCons		:	0	28	28		:			
		:					:			
		:					:			
		:					:			
		:					:			
		:					:			

display capacity field descriptions, page 11

Table 23: display capacity field descriptions, CURRENT REGISTRATION COUNTS BY PRODUCT ID, page 11

ID	Product identifier from the license file IP_Agent = IP agents IP_Phone = IP phones IP_ROMax = R300 remote office phones IP_Soft = IP Softphones IP_eCons = IP Softconsole Soft_Share = API_Share =
Rel	Release number of IP endpoint. A blank implies any release.
Regist.	Number of products registered
Avail.	Number of products available for registration
System Limit	Registration limit

Following is the page 12 output for **display capacity**.

display capacity	Page 12 of 12
SYSTEM CAPACITY	
CURRENT SYSTEM INFORMATION	
Software Load: R015x.00.0.824.0 Memory Configuration: Extra Large Offer Category: A	
LAST TRANSLATION LOADED INFORMATION:	
Software Load: R015x.00.0.824.0 Memory Configuration: Extra Large Offer Category: A Platform: 6	

display capacity field descriptions, page 12

Table 24: display capacity field descriptions, CURRENT SYSTEM INFORMATION, LAST TRANSLATION LOADED INFORMATION, page 12

CURRENT SYSTEM INFORMATION	
Software Load	The current software load on which the system is running.
Memory Configuration	The system platform.
Offer Category	The system's offer category.
LAST TRANSLATION LOADED INFORMATION	
Software Load	The software load translations saved before upgrade or reboot. Can also be <code>unknown/no trans</code> if no flash card is present. Also, if load translations were upgraded from one prior to G3V4 load 71 or early G3V5 loads, <code>unknown/no trans</code> displays.
Memory Configuration	The platform on which the translations were saved. Can also be <code>unknown</code> if no flash card is present or translations made on old load. This is important because platforms are not always compatible. Standard or Extra Large = translations are saved on CM 4.0 or later. Anything other than Standard or Extra Large = translations were saved on a pre-CM4.0 system.
Offer Category	The offer category that was set when the last <code>save translation</code> was done before upgrade or reboot. Can also be <code>unknown</code> if no flash card is present or translations made on old load.

carrier

recycle carrier

recycle carrier *UUC* [*override*]

Use **recycle carrier** to momentarily shut down and restore power to a specified [S8700 series G650](#) or [G650](#) carrier. When a power unit is replaced in a carrier, use **recycle carrier** to restart the power on that carrier.

Action/ Object	Qualifier	Qualifier Description	Login	Default
recycle carrier	<i>cabinet carrier</i> <i>slot override</i>	cabinet location carrier (or G650 within a G650 stack) slot location (0 or 15 in a G650) Required when the controlling TN2312BP circuit pack is present in the same carrier as the specified power supply	init super-user inads craft dadmin switch circuit pack maintenance permissions	

Use **recycle carrier** to:

- 1 Reset all the boards in the carrier in an attempt to clear a problem when a board stops responding to control channel messages
- 1 Verify that each power supply, in a carrier with two power supplies, can supply the full power load for the carrier

Note:

Use **recycle carrier** to check the voltages from redundant power supplies. Specify the slot number, and force the power supply in the other slot to be the only power supply on the backplane. The power supplies monitor the voltage on the backplane, not the voltage from the power supplies.

The following carriers cannot be recycled:

- 1 Switch Node Carrier
- 1 PN Control Carrier
- 1 Any carrier holding an active Tone-Clock or an active EI circuit pack

Note:

Recycle carrier might take 90 seconds to complete. Do not use the LED activity on the front of the power supply as an indicator of the command status.

! CAUTION:

S8700 series When a port carrier is recycled, every port and adjunct supported by circuit packs on that carrier undergoes a service outage. Use **recycle carrier** *Uuc override* to power recycle a control carrier.

! CAUTION:

Never recycle power to a carrier containing DEFINITY AUDIX TN566/TN2169 circuit packs without first shutting down the AUDIX system. Doing so can damage AUDIX software. Follow instructions on the TN566/TN2169 faceplate (these also appear under ADXDP-PT in *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)*).

! CAUTION:

Recycle carrier drops all calls within a carrier when:

- 1 Do not specify a slot number
- 1 Specify slot 0 for a carrier with a single power supply

! CAUTION:

Use **recycle carrier override** to power recycle a control carrier. When you execute **recycle carrier** for a carrier that contains the controlling TN2312BP, **recycle carrier** drops all calls within the port network in the following situations:

- 1 Do not specify a slot number
- 1 Specify slot number 0 for a carrier with a single power supply

When you specify a slot, only the power supply in that slot is shut down. If there is another power supply, it provides power to the carrier while the other power supply is shut down.

When you do not specify a slot, all operating power supplies in the carrier are momentarily shut down and restored.

Use **test board** to confirm that the power supply in slot 15 has ringing capability.

For more information, see [Common Input Parameters](#) on page 25 and [Common Command Output Screens](#) on page 28.

cdr-link

See:

[busyout cdr-link](#) on page 142

[release cdr-link](#) on page 142]

[status cdr-link](#) on page 143

[test cdr-link](#) on page 144

busyout cdr-link

busyout cdr-link [primary | secondary]

Use **busyout cdr-link** to put the call detail recording link in a maintenance busy state. When busied out, the link is dropped and must be re-established later when returned to service. See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default
busyout cdr-link	primary secondary	Specify which CDR output device to busyout. Examples: busyout cdr-link busy cdr secondary	init inads craft	primary

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

release cdr-link

Use **release cdr-link** to remove maintenance objects associated with specified call detail recording (cdr) links from a maintenance busy state. These links provide asynchronous data connections from switches to peripherals. They are composed of:

- ┆ A manager that initiates and maintains the link
- ┆ A controller/protocol that services the link

For information on what a CDR link is and does, see the description of [status cdr-link](#) on page 143. See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default
release cdr-link	primary secondary	Specify which CDR output device to busyout. Examples: busyout cdr-link busy cdr secondary	init inads craft	none

The Maintenance Name field for **release cdr-link primary** shows PRI-CDR for primary cdr-link, or SEC-CDR for secondary cdr-link.

status cdr-link

status cdr-link

Use **status cdr-link** to see the status of the call detail recording (CDR) links. If a link is down, the report includes the number of times the switch has tried to re-establish the link.

The CDR link is established by socket connection between Communication Manager and a CDR output device such as a CDR adjunct. The link is used by the server to send call detail records to the output device. A system may have up to two CDR links, a primary and a secondary. See [PRI-CDR \(Call Detail Recording Link\)](#) in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)*.

See [status link](#) on page 358 for more details on links.

The following is an example of the output for **status cdr-link**

```
status cdr-link
                                CDR LINK STATUS
                                Primary          Secondary
Links state: up                  endpoint not administered
Number of retries:
Date & Time:
Forward Seq. No:
Backward Seq. No:
CDR Buffer & Full:
Reason Code:
```

status cdr-link field descriptions

status cdr-link field descriptions 1 of 2

Field	Description
Link State	The operational status of the link: up The link is established and is capable of supporting the application. This is the normal operational state. down The link is physically down. endpoint not administered An output device has not been assigned on the CDR system parameters screen.
Number of Retries	The number of times the switch has tried to set up the link.
Date & Time	The last time the CDR link went up or down.
1 of 2	

status cdr-link field descriptions 2 of 2

Field	Description
Forward Seq. No	A counter which increments with every Session Protocol Data Unit (SPDU) sent from the switch to the CDR adjunct. Both the primary and secondary CDR outputs have independent Forward Sequence numbers.
Backward Seq. No	A counter that indicates the number of the next Session Protocol Data Unit (SPDU) that is expected from the CDR adjunct. Both the primary and the secondary CDR outputs have independent Backward Sequence numbers.
CDR Buffer % Full	When the switch produces a CDR record that cannot be immediately transmitted to the CDR adjunct, that record is placed in the CDR buffer. This percentage indicates how full the CDR buffer is at any point in time. If the switch, the CDR adjunct, and the IP link that interconnects them are all working properly, this number should be zero or very close.
Reason Code	Why the CDR link (primary or secondary) last changed from up to down or vice versa. Values appear when CDR is administered. CDR connection is closed CDR Output mode is blank Data write failure EIA port Bit rate changes LSP is inactive Maintenance Busy Path is destroyed by COM Primary extension is changed Queue for primary CDR is full Secondary extension is changed
2 of 2	

test cdr-link

```
test cdr-link primary | secondary [short | long] [repeat# | clear]
[schedule]
```

Use **test cdr-link** to validate that a call detail recording link has been administered and established.

Test cdr-link first validates that the Call Detail Recording (CDR) link has been administered and exists in the switch. Then individual diagnostic tests run on the link and return results of the test along with any possible error codes. For more information on the CDR link, see [status cdr-link](#) on page 143.

See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default
test cdr-link	primary secondary short long repeat# clear schedule	test the primary link test the secondary link See Common Input Parameters on page 25.	inti inads craft	primary short

For more information, see [Common Command Output Screens](#) on page 28.

circuit packs

See:

[change circuit-packs](#) on page 146

[display circuit-packs](#) on page 150

change circuit-packs

change circuit-packs *UU*

Use **change circuit-packs** to administratively add, change or remove circuit packs that are to be inserted into port, expansion control, and switch node carriers. Also use **change circuit-packs** to:

- 1 configure the system when the circuit packs have not yet been physically inserted.
- 1 remove a 655A power supply from translations
- 1 add a missing 655A power supply to translations

Note:

When you add a DS1-C circuit pack to a **G650** media gateway, set **IP Control** on the IP Server Interface screen for the media gateway to **n**.

Note:

A 655A power supply is self-administering. Do not use **change circuit-packs** to add power supply translations.

The TN code for the TN2312 IPSI and TN2182 tone generator circuit packs are not allowed to be entered on this form. The TN code will be displayed but cannot be changed.

Action/Object	Qualifier	Qualifier Description	Login	Default
change circuit-packs	<i>UU</i>	The number of the cabinet containing the circuit packs to be modified. On an S8700 IP-PNC , the number applies to port slots 1-10.	init inads craft cust nms	1

Output for change circuit packs, pages 1 - 5

This is an example of **change circuit-packs 1**, page 1, on **S8700 MC**. See [change circuit-packs field descriptions](#) on page 150.

change circuit-packs 1

Page 1 of 5

CIRCUIT PACKS

Cabinet: 1

Carrier: A

Cabinet Layout: five-carrier

Carrier Type: expansion-control

Slot Code	Sf Mode	Name	Slot Code	Sf Mode	Name
01: TN570	D	EXPANSION INTF	11: TN799DP	C	CONTROL-LAN
02:			12:		
03: TN464	G	DS1 INTERFACE	13:		
04: TN2198		BRI LINE	14: TN754	C	DIGITAL LINE
05: TN748	D	TONE DETECTOR	15: TN793	B	ANALOG LINE
06: TN464	F	DS1 INTERFACE	16:		
07: TN464	G	DS1 INTERFACE	17:		
08: TN464	F	DS1 INTERFACE	18: TN767	E	DS1 INTERFACE
09: TN464	F	DS1 INTERFACE	19:		
10: TN464	F	DS1 INTERFACE			

'#' indicates circuit pack conflict.

This is an example of **change circuit-packs 1**, page 2, on **S8700 MC**. See [change circuit-packs field descriptions](#) on page 150.

change circuit-packs 1

Page 2 of 5

CIRCUIT PACKS

Cabinet: 1

Carrier: B

Cabinet Layout: five-carrier

Carrier Type: port

Slot Code	Sf	Mode	Name	Slot Code	Sf	Mode	Name
00:				11: TN2302			IP MEDIA PROCESSOR
01: TN2312AP			IP SERVER INTFC	12:			
02: TN570	D		EXPANSION INTF	13: TN754	C		DIGITAL LINE
03: TN464	F		DS1 INTERFACE	14: TN754	C		DIGITAL LINE
04:				15:			
05: TN464	F		DS1 INTERFACE	16:			
06: TN464	F		DS1 INTERFACE	17: TN771	D		MAINTENANCE/TEST
07: TN754	C		DIGITAL LINE	18: TN2181			DIGITAL LINE
08: TN464	F		DS1 INTERFACE	19: TN464	D		DS1 INTERFACE
09: TN464	F		DS1 INTERFACE	20: TN464	F		DS1 INTERFACE
10: TN464	F		DS1 INTERFACE				

'#' indicates circuit pack conflict.

Maintenance SAT Commands

This is an example of **change circuit-packs 1**, page 3, on **S8700 MC**. See [change circuit-packs field descriptions](#) on page 150.

```
change circuit-packs 1                                     Page 3 of 5
```

CIRCUIT PACKS

Cabinet: 1
Cabinet Layout: five-carrier

Carrier: C
Carrier Type: not-used

Slot Code	Sf Mode	Name	Slot Code	Sf Mode	Name
00:			11:		
01:			12:		
02:			13:		
03:			14:		
04:			15:		
05:			16:		
06:			17:		
07:			18:		
08:			19:		
09:			20:		
10:			21:		

'#' indicates circuit pack conflict.

This is an example of **change circuit-packs 1**, page 4, on **S8700 MC**. See [change circuit-packs field descriptions](#) on page 150.

change circuit-packs 1

Page 4 of 5

CIRCUIT PACKS

Cabinet: 1

Carrier: D

Cabinet Layout: five-carrier

Carrier Type: not-used

Slot Code	Sf Mode	Name	Slot Code	Sf Mode	Name
00:			11:		
01:			12:		
02:			13:		
03:			14:		
04:			15:		
05:			16:		
06:			17:		
07:			18:		
08:			19:		
09:			20:		
10:			21:		

'#' indicates circuit pack conflict.

This is an example of **change circuit-packs 1**, page 5, on **S8700 MC**. See [change circuit-packs field descriptions](#) on page 150.

change circuit-packs 1

Page 5 of 5

CIRCUIT PACKS

Cabinet: 1

Carrier: E

Cabinet Layout: five-carrier

Carrier Type: switch-node

Slot Code	Sf Mode	Name	Slot Code	Sf Mode	Name
01:			11:		
02: TN573	B	SWITCH NODE INTF	12: TN572		SWITCH NODE CLOCK
03: TN573	B	SWITCH NODE INTF	13:		
04: TN573	B	SWITCH NODE INTF	14:		
05: TN573		SWITCH NODE INTF	15:		
06: TN573	B	SWITCH NODE INTF	16:		
07: TN573	B	SWITCH NODE INTF	17:		
08: TN573	B	SWITCH NODE INTF	18:		
09: TN573	B	SWITCH NODE INTF	19:		
10: TN572		SWITCH NODE CLOCK	20:		
			21:		

'#' indicates circuit pack conflict.

This is an example of **change circuit-packs** on Cabinet 15, page 1, on an **S8700 IP-PNC**. See [change circuit-packs field descriptions](#) on page 150.

change circuit-packs 15

Page 1 of 2

CIRCUIT PACKS

Cabinet: 15

Carrier: A

Cabinet Layout: rack-mount-stack

Carrier Type: rmc-port

Slot Code	Sf	Mode	Name	Slot Code	Sf	Mode	Name
01: TN556	D		BRI LINE				
02: TN2312AP			IP SERVER INTFC				
03:							
04: TN760	D		TIE TRUNK				
05: TN2302			IP MEDIA PROCESSOR				
06: TN2224	B		DIGITAL LINE				
07: TN556	D		BRI LINE				
08: TN799DP	C		CONTROL-LAN				
09: TN2224	B		DIGITAL LINE				
10: TN464	F		DS1 INTERFACE				

'#' indicates circuit pack conflict.

change circuit-packs field descriptions

change circuit-packs field descriptions

Field	Description
Cabinet	The administered number of the cabinet
Cabinet Layout	Type of cabinet CG650-rack-mount-stack when Cabinet Layout is G650-rack-mount-stack
Carrier	Each page of this screen reports the information for 1 carrier. This field indicates the letter designation of the carrier displayed on the current page.
Carrier Type	The function of the carrier: port G650-(port) when Cabinet Layout type is G650-rack-mount-stack processor switch-node dup-switch-node not-used cmc-port
Slot	The carrier slot numbers Populates 655A in slots 00 and 15 if a power supply is plugged in when Cabinet Layout type is G650-rack-mount-stack
Code	The TN or UN part number of the circuit pack. This number identifies the circuit pack type to system software.
Sfx	The letter suffix of the circuit pack, if applicable.
Name	The name of the circuit pack. This field aids in entering the circuit pack codes. This field is not populated automatically.

display circuit-packs

display circuit-packs <cabnet>

Use **display circuit-packs** to list circuit packs on a specific cabinet. The output shows what boards are in which slots in each cabinet and carrier.

clan-all

status clan-all

status clan-all

Use **status clan-port** to determine if a C-LAN board:

- 1 is in-service
- 1 can be used by IMS (Integrated Management System) as a source board
- 1 is healthy for firmware-download (no alarms on the board or ports)

The following example shows the output for Page 1 from **status clan-all**

```
status clan-all
```

```
Page 1
```

```
CLAN STATUS FOR FIRMWARE DOWNLOAD (FWDL)
```

Slot	Service State	Auto FWDL Capable	Slot	Service State	Auto FWDL Capable
01C17	out-of-service	n	20B06	in-service	y
04D16	in-service	y	07C05	in-service	y
07E09	in-service	y	07E11	in-service	y
04B02	in-service	y	24A02	in-service	y
08A04	in-service	y	08A05	in-service	y
06B02	in-service	y	25A14	in-service	y
20B07	in-service	y	20B08	in-service	y
10B14	in-service	y	10B15	in-service	y
10B16	in-service	y	09C05	in-service	y
04D17	in-service	y	07D10	in-service	y
08D14	in-service	y	09D03	in-service	y
12C15	in-service	y	10D10	in-service	y
09C03	in-service	y	01B05	in-service	y
04C08	in-service	y	06D13	in-service	y
06D14	in-service	y	07C06	in-service	y

```
press CANCEL to quit -- press NEXT PAGE to continue
```

status clan-all field descriptions

status clan-all field descriptions 1 of 2

Field Name	Description
Slot	Slot where the C-LAN circuit pack is located
1 of 2	

status clan-all field descriptions 2 of 2

Field Name	Description
Service State	in-service or out-of-service
Auto FWDL Capable	i n - CLAN is not firmware-capable, CLAN is in use on another download form, or no PPP ports available i y - CLAN is healthy and available for firmware-download
2 of 2	

clan-ip**status clan-ip****status clan-ip location**

Use **status clan-ip** to see the activity on a C-LAN circuit pack.

Action/Object	Qualifier	Qualifier Description
status clan-ip	<i>location</i>	board location of the C-LAN circuit pack

The following example shows the output from **status clan-ip**.

status clan-ip 04E05				
IP STATUS				
Reset Time: 09/10 18:03				
Incoming Received:	Octets	Datagrams	Discards	Hdr Errors
Since Reset	39294813	108862	0	0
Outgoing Transmitted:	Octets	Datagrams	Discards	No Routes
Since Reset	10571795	109174	0	0
Datagrams w/o Routes	ICMP Dest Unreachables	ICMP Redirects		
Since Reset	6	0		

status clan-ip field descriptions

status clan-ip field descriptions

Field Name	Description
Reset Time	Time the last reset occurred.
Incoming Received: Octets	The number of octets received since the last reset.
Incoming Received: Datagrams	The total number of input datagrams received from interfaces, including those received in error, since the last reset.
Incoming Received: Discards	The number of input IP datagrams for which no problems were encountered to prevent their continued processing, but which were discarded (e.g., for lack of buffer space) since the last reset. This total does not include any datagrams discarded while awaiting re-assembly.
Incoming Received: Hdr Errors	The number of input datagrams discarded since the last reset due to errors in their IP headers, including bad checksums, version number mismatch, other format errors, time-to-live exceeded, errors discovered in processing their IP options, etc.
Outgoing Transmitted: Octets	The number of octets transmitted since the last reset.
Outgoing Transmitted: Datagrams	The total number of IP datagrams which local IP user-protocols (including ICMP) supplied to IP in requests for transmission since the last reset.
Outgoing Transmitted: Discards	The number of output IP datagrams for which no problem was encountered to prevent their transmission to their destination, but which were discarded (e.g., for lack of buffer space) since the last reset.
Outgoing Transmitted: No Routes	The number of IP datagrams discarded since the last reset because no route could be found to transmit them to their destination. This total includes any datagrams which a host cannot route because all of its default gateways are down.
Datagrams w/o Routes: ICMP Dest Unreachables	The number of ICMP Destination Unreachable messages received since the last reset.
Datagrams w/o Routes: ICMP Redirects	The number of ICMP Redirect messages received since the last reset.

clan-port

status clan-port

status clan-port port location

Use **status clan-port** to see link and status information regarding a C-LAN port. There are five pages of output which display the following:

- | LINK/PORT STATUS
- | ERROR COUNTERS
- | PROCESSOR CHANNEL STATUS
- | TCP/IP Applications Currently Active
- | Media Gateways

The following example shows the output for Page 1 from **status clan-port 1b0517**

```

status clan-port 01B0517                               Page    1 of    5
                                LINK/PORT STATUS

      Link Number: 97
      Link Status: connected
      Link Type: ethernet
      Link Name: clan_1b0517
      Service Port Location: 01B0517
      Service Port Data Extension: 40823
      Service State: in-service/idle
      Node Name: clan_1b0517
      Source IP Address: 172.41.23.145
      Subnet Mask: 255.255.0.0
      Broadcast Address: 172.41.255.255
      Physical Address: 00:4d:04:a0:9c:b3
      Enabled?: yes
      Maintenance Busy?: no
      Active Channels: 0

```

The same information that is displayed by **status clan-port** can be invoked with **status link n**. See [status link](#) on page 358 for more information.

Action/Object	Qualifier	Qualifier Description	Login	Default
status clan-port	<i>port location</i>	C-LAN port location		1

clan-usage

`status clan-usage` has been replaced with `status socket-usage`.

See:

[status socket-usage](#) on page 509.

cleared-alarm-notif

status cleared-alarm-notif

Expert Systems use `status cleared-alarm-notif` to detect chronic alarming conditions. If `cleared-alarm-notif` displays **Feature is suspended**, Expert Systems can identify open trouble tickets as chronic problems for special consideration.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>cleared-alarm-notif</code>	<i>1</i>	First OSS telephone number status of Cleared Alarm Notification.	init	First OSS telephone number for the Cleared Alarm Notification status.
	<i>2</i>	Second OSS telephone number status of Cleared Alarm Notification.	inads craft cust rcust	

communication-interface links

See:

[change communication-interface links](#) on page 155

[display communication-interface links](#) on page 156

change communication-interface links

`change communication-interface links`

Use `change communication-interface links` to administer the links to the servers from peripheral adjuncts.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>change communication-interface links</code>			init inads craft	

See [status link](#) on page 358 for more details on links.

display communication-interface links

`display communication-interface links [schedule]`

Use `display communication-interface links` to list translations for the links to the servers from peripheral adjuncts.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>display communication-interface links</code>	schedule		init inads craft	

See [status link](#) on page 358 for more details on links.

The following example shows the output from **display communication-interface links**.

display communication-interface links							Page 1 of 15
INTERFACE LINKS							
Link	Enab	Est	Ext	Type	Dest.	Conn.	Name (20 characters)
		Conn			Number	Module	
1:							
2:							
3:							
4:							
5:							
6:							
7:							
8:							
9:							
10:							
11:							
12:							
13:							
14:							
15:							
16:							
17:							

display communication-interface links field descriptions

display communication-interface links field descriptions 1 of 2

Field	Description
Link	Number of the administered link (data module screen).
Enable	y/n Depending upon data module administration (processor interface, Ethernet, and PPP).
Est Conn	Establish connection data from the data module forms (processor interface and PPP).
Ext	Extension number of the local data module for this link.
Type	Protocol for this link: ppp ethernet
Dest. Number	Destination of the link as administered on the data module forms (processor interface and PPP).
1 of 2	

display communication-interface links field descriptions 2 of 2

Field	Description
DTE/DCE	Processor interface administration from data module screen (processor interface only).
Conn. Module	Connected data module administration from data module screen (processor interface)
Name	Name from the data module forms (processor interface, Ethernet, and PPP)
2 of 2	

communication-interface processor-channels

See:

[change communication-interface processor-channels](#) on page 158

[display communication-interface processor-channels](#) on page 161

change communication-interface processor-channels

change communication-interface processor-channels [schedule]

Use **change communication-interface processor-channel** to assign each local processor channel to an interface link channel, and to define the information associated with each processor channel on an Ethernet link.

Action/Object	Qualifier	Qualifier Description	Login	Default
change communication-interface processor-channels	<i>schedule</i>		init inads craft	

The following shows the output from **change communication-interface processor-channels**

change communication-interface processor-channels										Page 1 of 24
PROCESSOR CHANNEL ASSIGNMENT										
Proc	Gtwy		Interface		Destination		Session		Mach	
Chan	Enable	Appl.	To	Mode	Link/Chan	Node	Port	Local/Remote	ID	
1:	-	_____	_____	-	_____	_____	0	_____	_____	_____
2:	-	_____	_____	-	_____	_____	0	_____	_____	_____
3:	-	_____	_____	-	_____	_____	0	_____	_____	_____
4:	-	_____	_____	-	_____	_____	0	_____	_____	_____
5:	-	_____	_____	-	_____	_____	0	_____	_____	_____
6:	-	_____	_____	-	_____	_____	0	_____	_____	_____
7:	-	_____	_____	-	_____	_____	0	_____	_____	_____
8:	-	_____	_____	-	_____	_____	0	_____	_____	_____
9:	-	_____	_____	-	_____	_____	0	_____	_____	_____
10:	-	_____	_____	-	_____	_____	0	_____	_____	_____
11:	-	_____	_____	-	_____	_____	0	_____	_____	_____
12:	-	_____	_____	-	_____	_____	0	_____	_____	_____
13:	-	_____	_____	-	_____	_____	0	_____	_____	_____
14:	-	_____	_____	-	_____	_____	0	_____	_____	_____
15:	-	_____	_____	-	_____	_____	0	_____	_____	_____
16:	-	_____	_____	-	_____	_____	0	_____	_____	_____

change communication-interface processor-channels field descriptions

change communication-interface processor-channels field descriptions 1 of 2

Field	Description
Enable	y/n The processor channel is enabled/disabled.
Appl	Identifies the switch application type/adjunct connection used on this channel over a dedicated network. The application gateway is used for conversion between ISDN and TCP/IP. Other forms must be properly administered as well. Valid entries are audix - Voice Messaging dcs - Distributed Communication System fp-mwi - ISDN Feature Plus Message Waiting Indication. This channel passes message waiting light information for subscribers on the messaging system, from a messaging adjunct on a main switch for a phone on a satellite switch. The terminating location (far end) of this channel must be an Avaya Communication Manager system compatible with ISDN Feature Plus proprietary protocol. gateway - Supports an X.25-connected AUDIX connected to an ISDN DCS network. gtwy-tcp - Supports a TCP connected AUDIX connected to an ISDN DCS network. mis - Management Information System, otherwise known as CMS (Communication Management System) qsig-mwi - QSIG Message Waiting Indication. Used with a QSIG-based interface to a messaging system, this channel passes message waiting light information for subscribers on the messaging system. - blank All "msa" entries refer to an obsolete product. An error message appears if an "msa" value is entered: msaamwl, msackl, msahlwc, msallwc, msamcs. Voice Messaging.
Gtwy To	Identifies which processor channel the given processor channel is serving as a gateway to. Valid entries are a number between 1-(maximum number of processor channels), or blank.
1 of 2	

change communication-interface processor-channels field descriptions 2 of 2

Field	Description
Mode	Identifies whether the IP session is passive (client) or active (server). This field must be blank if the interface link is processor . This field cannot be blank if the type of interface link is ethernet or ppp . Valid entries are c (client), s (server), or blank.
Interface Link	Identifies the physical link carrying this processor (virtual) channel. Links are numbered 1 through 254 or p for processor.
Interface Chan	For TCP/IP, interface channel numbers are in the range 5000-64500. The value 5001 is recommended for CMS and 5003 is recommended for DCS.
Destination Node	Identifies the switch or adjunct at the far end of this link. Enter an adjunct name, switch name, far-end IP address, node ID, or leave blank for services local to this switch. For ppp connections, match the Destination Node Name on the ppp Data Module screen.
Destination Port	Identifies the port number of the destination. The number 0 means any port can be used. Valid entries are 0, 5000-64500 .
Session Local	The Local and Remote Session numbers can be any value between 1 and 256 (si model) or 384 (r model), but they must be consistent between endpoints. For each connection, the Local Session number on this switch must equal the Remote Session number on the remote switch and vice versa. It is allowed, and sometimes convenient, to use the same number for the Local and Remote Session numbers for two or more connections.
Session Remote	
Mach ID	Destination switch ID identified on the dial plan of the destination switch.
2 of 2	

display communication-interface processor-channels

```
display communication-interface processor-channels [ schedule ]
```

Use **display communication-interface processor-channels** to list the TCP/IP listen port to carry each processor (virtual) channel (on an Ethernet link).

Action/Object	Qualifier	Qualifier Description	Login	Default
display communication-interface processor-channels			init inads craft	

conference

status conference

status conference [**all** | **conference-ID**] [**schedule**]

status conference [**all** | **conference-ID**] [**endpoint all** | **endpoint-id**]

Use **status conference** to help identify problems with a multimedia conference, and to help solve more complex problems.

Action/Object	Qualifier	Qualifier Description	Login	Default
status conference	all conference-ID	display all stored conference data display data on specified conference (current or last completed)	inads init system technician	all
	endpoint all endpoint-id schedule	See Common Input Parameters on page 25. Examples: status conference status conference 2 status conference endpoint		

The first screen appears when **status conference** is entered and at least 1 valid conference is found.

Use **status conference** to solve the following multimedia problems:

- ┆ A user unable to join or remain joined to a conference.
- ┆ A conference having poor video quality due to it being downgraded because of the automatic algorithms - audio AUTO mode and the Px64 video picture specifications.
- ┆ A user not receiving full service, such as being an audio-only endpoint (no video).
- ┆ An audio add-on user unable to join or remain joined to a conference.
- ┆ A conferee not being seen by other users due to interworking problems.
- ┆ A user not able to participate in the Multipoint Communications Service conference.
- ┆ A continuous conference not switching endpoints in or out of quadrants.

Output for status conference, page 1

Depending on the **status conference** command entered, it is possible to have many records display. Active conferences display first (in order of conference-ID), followed by completed conferences (most recently completed first). There is no data or information about conferences not yet begun.

The data for each conference displays in 2 parts: the first screen describes the status of the conference and indicates the modes and levels of the conference. It also shows certain endpoint information such as which endpoints are in use and which endpoint caused the conference operating mode to change. This screen is similar to the administration screens. The remainder of the screens display endpoint level data (up to 8 endpoints per screen), displaying the ports and drop reasons.

The screen below shows page 1 of a typical **status conference** screen, when at least 1 valid conference is found.

```

status 50
Page 1 of 2

STATUS OF CONFERENCE: 50    Status: in-use

Conference Name: MMCH DYNAMIC    Conference Mode: voice-activated
Password Scope:
    Password:
        Class: dedicated
Start Time/Date: 09:08 OCT 28    Audio Mode: G.728
Stop Time/Date: 00:0 000 00    Data Mode: none    MLP Rate:
    Chair:
    Format (in/out): CIF    Admin Bandwidth: 64k    No of Channels: 2
    Conf Bandwidth: 64k    Rate Adaptation? y
    FPS: 7.5    QFPS: 7.5    Lo/Hi Interworking? n

Dial In ----Capability---- Rate Bond
Type Use Chl Aud Vid Mlp Gx Adpt Mode Ts Vs
1: P64    in  c  y  y  c      e      b
2: AUD    out y      y
3:
4:
5:
6:

```

status conference field descriptions, page 1

Table 25: status conference field descriptions, page 1 1 of 9

Field	Description
status	The current status of the conference - active, in-use, complete
conference name	Always set as MMCH DYNAMIC
conference mode	Always set as voice-activated
password	Not Applicable
password scope	Not Applicable
cascade mode	Conference cascade mode - blank
audio mode	The current operating audio mode - G.711-A, G.711-mu, G.728, G.722
class	The type of conference - dedicated
data mode	Data mode capability for this conference - none, any-mlp, ww-pcs
MLP rate	MLP Data Rate for this conference - blank.
no of channels	The number of channels (transfer rate) required for each Px64 endpoint - 2 .
Chair	Identifies the current chair token holder. This field is always blank.
conf bandwidth	The current operating channel conference bandwidth. This can be different from the administered bandwidth because of Rate Adaptation.
Rate adaptation	Does this conference support Rate Adaptation? - n/ y .
1 of 9	

Table 25: status conference field descriptions, page 1 2 of 9

Field	Description
Format (in/out)	┆ For single-screen conference, the video format of the conference, CIF, QCIF, QCIF/CIF, H.CTS, H.CTX+, and SG4. ┆ For conferences other than H.261, the input and output formats are always symmetric and the mode is the same for input and output. These display as H.CTX, H.CTX+, SG4. ┆ For H.261 mode non-continuous presence conferences, the format is always symmetric and displays as CIF and QCIF. The same is true for the non-presentation, continuous presence conference in single-screen. ┆ For presentation mode H.261 single screen continuous presence capable conferences, the input and output formats may be symmetric QCIF/CIF (displayed as CIF) or asymmetric QCIF/CIF, depending on if the format is administered as upgradeable. ┆ For quad-screen conferences, the format is QCIF/CIF to reflect the input of QCIF from every participant and output of CIF to every participant. ┆ For presentation mode quad-screen conference, the format is also QCIF/CIF to reflect the input/output of every participant except the presenter. In quad-screen mode, the input from the presenter is always CIF.
FPS	The CIF frame rate (frames per second) — ‘-’, 30, 15, 10, 7.5 . FPS indicates the rate that an endpoint is capable of receiving frames. Note that there is no indication of the maximum transmit frame rate nor the current frame rate that the MCU can detect. The frame rate changes as a function of the amount of motion in the input image.
QFPS	The ACIF frame rate (frames per second) — ‘-’, 30, 15, 10, 7.5. QFPS indicates the rate that an endpoint is capable of generating/receiving frames. For quad-screen VAS conferences, QFPS reflects the highest common QCIF frame rate of every endpoint and the rate of the video mixer board, which may be lower than the rest of the participants. Note that QCIF calculation takes into account the highest common CIF frame rate declared by every conference participant, since QCIF rate cannot be greater than that of the highest common CIF rate. For quad-screen presentation conferences, QFPS reflects the highest common QCIF frame rate of every participant and the rate of the video mixer board. Note that the QFPS cannot be greater than the CIF frame rate announced by the presenter. QFPS field is blank for proprietary modes.
2 of 9	

Table 25: status conference field descriptions, page 1 3 of 9

Field	Description
lo/hi interworking	Conference supports Low Speed/High Speed Interworking. Always n .
Type	The type of conferee, either Audio/Video (P64), Audio Add-on (AUD), Cascade Link (CAS), BONDing Call (BOND), BONDing Cascade Link (BCAS), UCC Controller (UCC), or Dedicated Access (DA). BONDing calls use up to 12 channels to form a single multimedia pipe.
Ext	Endpoint extension chosen at administration. This field is blank.
Meet-me number	Meet-Me Number administered for the Meet-Me Extension. This field is blank.
Dial Type	Indicates whether dial-in or dial-out is used to join the endpoint to the conference - in , out . in is for dial-in, out is for dial-out.
In Use	Is the endpoint currently participating in the conference or in process of connecting to the conference? - y, c, e, f, n, blank. y The endpoint is in use and is fully connected on all media in an active conference. c The endpoint is in use and is fully connected, however the endpoint has changed the conference audio or video capability or has changed the rate of the conference because of rate adaptation. This condition requires analysis of this endpoint's capabilities and mode fields to identify which capability was reduced. e The endpoint is in use but the endpoint had capability problems. The endpoint does not have one of the required capabilities (Vid, Bhl, MLP) to be a full participant. For MLP capabilities, see the T120 field. This condition requires analysis of this endpoint's capabilities and mode field to identify the missing capability. f The endpoint is in use but is not connected to all media. This indicates that the endpoint has declared every required capability (channel/video/audio/data) but is not fully connected to all conference media at this time. This endpoint may be in the process of connecting, has failed to connect, or is not a valid video source. This condition requires analysis of this endpoint's capabilities and mode fields to identify the problem. n The endpoint was connected in a conference but has/was disconnected or attempted to connect to a conference but was unsuccessful. - blank until the first call is made from/to the endpoint
3 of 9	

Table 25: status conference field descriptions, page 1 4 of 9

Field	Description
Chl	Data on the quantify and quality of channels (transfer rate)? - y, e, n, blank y The endpoint has the required number of channels. e The endpoint has not declared support for the correct number of channels and cannot participate fully in the conference. n The endpoint has declared the correct number of channels, but every channel has not yet joined the conference, due to either a network or endpoint problem. - blank Audio add-on endpoints always set to blank.
Aud	Does it have the required audio capability? - y, c, e, blank y The endpoint has the required audio capability. Audio add-on endpoint always have the Aud field set to y once the endpoint has joined the conference. c This endpoint is PCM only and it changed the video quality of the conference by changing the operating audio from G.728 to G.711. If the administered audio mode is auto and the administered bandwidth is 112 kbps (56 k/channel) or 128 kbps (64 k/channel), the system starts out with the highest common audio of G.728. When the administered bandwidth is greater than 128 kbps, the system starts out with the highest common bandwidth of 7 kHz. e A PCM-only endpoint that did not have the capability of supporting the administered audio mode of G.728 (such as a data conference), or G. 278/G.711 endpoint that did not have the capability of supporting the administered audio mode of 7 kHz. Such endpoints operate with PCM audio and interwork with the current operating audio mode. - blank until the first call is made from/to the endpoint
4 of 9	

Table 25: status conference field descriptions, page 1 5 of 9

Field	Description
Vid	Does it have the required video capability and is receiving video? - y, c, e, n, blank y The endpoint has the required video capability and should be receiving video if the Chl, Aud, and Dat fields are y. c It downgraded the conference's video quality - either from CIF to ACIF or by decreasing the frame rate. The conference video mode is set by default to CIF and if a QCIF-only endpoint joins the conference, then the entire conference is made to operate in QCIF, with the video clarity downgraded. Also, the conference frame rate is initially set to the highest frame rate that can then be reduced by any endpoint. If the conference video mode is not administered with upgrade capability, then if the video parameters for a conference have been "downgraded," they are not "upgraded" until every endpoint disconnects from the conference. e The endpoint has not declared any video capability in its cap-set. n Audio only, not receiving video, possibly due to an audio or data problem. - blank Audio add-on endpoints always blank.
Mlp	The state of the Control Link to the ESM (T.120 stack terminator), the endpoint MLP data capability, and the state of the data connection in the T.120 stack. This field value is always blank, indicating that the Data Mode for the conference is none, and therefore, the data does not apply, or the endpoint has never joined the conference.
Gx	Does it have the Still Frame Graphics capability? - y, e, blank y This endpoint has this capability. e This endpoint did not declare this capability. The conference retains the still frame graphics capability when a non-compliant endpoint joins the conference. - blank This endpoint has never joined the conference.
5 of 9	

Table 25: status conference field descriptions, page 1 6 of 9

Field	Description
Rate Adpt	Rate adaptation/interworking indicator - 5, 6, y, c, e, n, blank. Values of 5 and 6 apply only to low-speed/high-speed Interworking. Every other value applies only to rate adaptation. 5 - A 56-kbps (low-speed) endpoint has joined a high-speed (128-kbps or above) conference. This endpoint is connected with audio-only capability, but is neither a valid video source nor destination. 6 - A 64-kbps (low-speed) endpoint has joined a high-speed (128-kbps or above) conference. This endpoint is connected with audio-only capability, but is neither a valid video source nor destination. y - This endpoint has joined a conference at the administered rate of 64 kbps, but (because rate adaptation to 56 kbps was triggered by another endpoint) this endpoint has successfully rate-adapted to 56 kbps. c - The administered bandwidth of a conference is 64 kbps and this endpoint has joined the conference at 56 kbps. The first 56-kbps endpoint that joins a 64-kbps rate-adaptable conference triggers rate adaptation (see Join Time below). n - A 64-kbps conference was triggered to rate adapt to 56 kbps by some other endpoint. This endpoint joined the conference at the bandwidth of 64 kbps, but encountered problems in rate adapting down to 56 kbps. This endpoint may have the audio and may be receiving video, but is not a valid video source. - blank - Rate adaptation was never triggered by any endpoints. So, if an endpoint is in use and connected, then it joined the conference at the administered bandwidth.
Bond Mode	BONDing Mode - blank. This field is blank for calls that are not related to bonding.
6 of 9	

Table 25: status conference field descriptions, page 1 7 of 9

Field	Description
Ts	Indication of the talking state of the endpoint - t, m, M, S, blank. t - At the time the command was invoked, voice energy (talking) was detected from the endpoint. m - At the time the command was invoked, the endpoint indicated to the MCU that it was muted. It is possible that an endpoint may mute, but not send any indication to the MCU. In this situation the MCU does not display a mute indication. M - At the time the command was invoked, the endpoint's audio was muted via UDD/CRCS Agent interface. M displays when both the endpoint and the UCC/CRCS Agent have muted the endpoint audio. S - At the time the command was invoked, the endpoint's audio was muted because of solo-audio state set by UCC/CRCS Agent. While in solo-audio state, new endpoints joining the conference are automatically muted. - blank - At the time the command was invoked voice energy (talking) was not being detected from the endpoint.
Vs	a This value applies only to quad-screen conferences. *a indicates that an endpoint is part of the current mixed image and is fixed in one of the quadrants via administration. *a indicates that the endpoint is fixed in a quadrant but is not currently connected (Fill image displays). b For full-screen conference it indicates that at the time the command was invoked, this endpoint's video was being broadcast to other sites. This conference was in VAS, broadcast, or presentation mode. For quad-screen VAS conference it is prefixed with an asterisk (*) and indicates that this endpoint's video is part of the mixed image because of VAS. For quad-screen presentation conferences, b (without an asterisk) identifies the presenter as the broadcaster. B At the time the command was invoked the endpoint's video was being broadcast to other sites because of the UCC roll call feature. UCC roll call feature can only be performed in full-screen mode. c At the time the command was invoked this endpoint's video was being broadcast to other sites. The conference was in chair mode and the broadcaster was designated by the chair. Chair features can only be performed in full-screen mode.
7 of 9	

Table 25: status conference field descriptions, page 1 8 of 9

Field	Description
Vs (cont'd)	i - At the time the command was invoked the endpoint was not a valid video source. For continuous presence conference, if this endpoint is fixed in a particular quadrant, an asterisk (#) is affixed before i. r - For full-screen conferences, at the time the command was invoked the endpoint's video was the return video to the broadcaster. For continuous presence conference in presentation mode, *r represents a VAS quadrant that is part of the mixed image. R - At the time the command was invoked, the endpoint's video was the return video to the broadcaster because of the UCC browse feature. UCC Browse feature can only be performed in full-screen mode. s - At the time the command was invoked this endpoint's video was suppressed at the request of the endpoint. For continuous presence conference with fixed quadrant participants, if this endpoint is fixed in a particular quadrant a # is affixed before s. S - At the time the command was invoked this endpoint's video was suppressed via UCC/CRCS Agent interface. For continuous presence conference with fixed quadrant participants, if this endpoint is fixed in a particular quadrant, # is affixed before S. S appears when the endpoint and the UCC/CRCS Agent have suppressed the endpoint video. u - For full-screen conferences, at the time the command was invoked this endpoint's video was being broadcast to other sites. The conference was in VAS mode and the broadcaster was designated by the UCC/CRSCS Agent interface. For quad-screen conferences, it indicates that UCC/CRCS Agent designated this endpoint as fixed in a quadrant. An asterisk (*) is affixed before u if the endpoint is currently part of the quad image, and # is affixed if the endpoint is not currently joined.
8 of 9	

Table 25: status conference field descriptions, page 1 9 of 9

Field	Description
	U Applies only to quad-screen conference and indicates that UCC/CRCS Agent designated a quadrant as VAS. An asterisk (*) is affixed before U to indicate that this endpoint is part of the current quad image. v At the time the command was invoked this endpoint's video was being broadcast to other sites. The conference was in VAS mode but the endpoint has asked to be a broadcaster via "See-Me" request and was granted a MCV (Multipoint Command Visualize) token. The See-Me feature is only performed in full-screen mode. blank At the time of the request the endpoint's video was not broadcast, return, video, or part of the mixed-image, but it is a valid video source.
9 of 9	

Output for status conference, page 2

```

status conference                                     page 2 of 2
                                     STATUS OF CONFERENCE:
                                     Sum Grp: Group1  Group2  Group3  Group 4
                                     L1:
                                     L2:

Ext      Join      Drop      Drop      AC  -----Ports----- Sum
      Time      Time      Reason    Num Trunk   Video  Aud/Esm Grp  Software

1:
2:
3:
4:
5:
6:

```

status conference field descriptions, page 2

Table 26: status conference field descriptions, page 2 1 of 4

Field	Description
Sum Grp	The VD audio Level 1 (L1) and Level 2 (L2) summer group parts for each assigned group (1–4). Summer parts are assigned only for conferences with over 6 participants. When a conference operates at an audio mode of 7 kHz (administered audio mode is 7 kHz, or auto with the bandwidth greater than 128 kbps), the system allocates “primary” and “secondary” L1 and L2 summer parts. These primary and secondary parts are allocated as adjacent port slots on the same board. Status conference only displays the primary summer ports. The secondary summer ports are always one slot higher than the displayed primary summer port.
Join Time	Time (in 24-hour notation) when the channel joined the conference.
Drop Time	Time (in 24-hour notation) when the channel disconnected. If the first channel has a drop time, then it means that the endpoint is idle. If there is a drop time without a join time, it means that the call disconnected without being joined to the conference.
Drop Reason	The reason for the channel’s disconnect: 1 2-pri This drop reason occurs when an administration error causes a mismatch in primary-secondary designation for a cascade link. This mismatch shows that both MCUs are administered as primaries (see “Cascading” for a description of primary-secondary compatibility). 1 2-sec This drop reason occurs when an administration error causes a mismatch in primary-secondary designation for a cascade link. This mismatch shows that both MCUs are administered as secondaries (see “Cascading” for a description of primary-secondary compatibility). 1 Agent The reservation agent has caused the call to disconnect (for example, the agent has changed a connected dial-out destination number). 1 Bandwidth mismatch between a call and the conference it attempted to join. For example, a 56-kbps call attempted to join a 64-kbps conference that does not allow rate adaptation. 1 BondHshake BONDing handshake drop reason can be caused due to the following reasons: information channel parameter not supported or invalid, parameter negotiation terminated out of sequence, timer expired because of the secondary channels did not establish, or BONDing framing was not detected for one of the other channels.
1 of 4	

Table 26: status conference field descriptions, page 2 2 of 4

Field	Description
Drop Reason	1 Busy This dial-out drop reason occurs when the MCU detects that the conferee's terminal equipment is busy. This drop reason is detected by an ISDN cause value (for example h0). See "Dial-out" for a description of CPTR usage. 1 Chair disconnected the endpoint, using either Chair Command Disconnect (CCD) or Chair Command Kill (CCK) signals. 1 Conf End The conference was ended due to reaching stop time for a reserved conference or due to an active conference being converted to file. 1 Endpoint Clearing received from DS1 - the disconnect came from the endpoint. The endpoint notified the MCU that it intended to disconnect. 1 Far-end Clearing received from DS1 - the disconnect came from either the network or the endpoint. 1 Handshake Either framing was never found (the endpoint could not complete initialization - problems finding Frame Alignment Signal (FAS), Multi Frame Alignment (MFA) and getting a corrected coded cap-set) or framing was lost for some time (over 40 seconds) and the endpoint was disconnected. 1 IDtimeout The MCU has not received response to the UIN/password Query from the H.320 user after three attempts. Each attempt has a system administered timeout period. 1 Internal MCU has a problem allocating trunk resources necessary to route the dial-out call for the specified dial-numbers. This problem can be associated with routing pattern or trunk associated translation (for example, TAC specified in the dial-out number or routing pattern points to a trunk group without members), or it can indicate a lack of trunk resources (for example, every trunk member is maintenance busy or every in-service member is busy on a call). 1 Network Clearing received from DS1 - the disconnect came from the network. The endpoint that had the disconnect notification capability disconnected without notifying the MCU. 1 No-ring This dial-out drop reason occurs when the call has been up for 30 seconds and no ringing is detected. 1 Not-MCU The dial-out destination number(s) of the "CAS" extension has terminated to a number that is not a dial-in cascade MCU extension.
2 of 4	

Table 26: status conference field descriptions, page 2 3 of 4

Field	Description
Drop Reason (cont'd)	1 Password Either the user entered the wrong password or the audio add-on user did not enter it within the specified time period. Note that the audio add-on user gets one attempt to enter a correct password and inter-digit timing for each digit (that is, about 10 seconds between digits). 1 Pre-AnsDrop The call disconnected before answer by an endpoint. The cause of the disconnect may be the network, an endpoint, or a terminal adapter. This drop reason is different from 'No-answer,' which indicates that a 60-second timeout occurred while alerting. In this case, the call drops before the 60-second timer has expired. Some busy endpoints connected through terminal adapters display this behavior. 1 Resource MCU could not provide resources (VC or MMI) when the call arrived or lost the resources during the call. This could be due to them being Out of Service, busied out by craft, or being used by system maintenance. This drop reason could also occur if the DS1/MMI cable is disconnected. If there was a resource problem when the call arrived, it would get reorder (fast busy) and not get disconnected by the MCU. 1 Reorder This dial-out drop reason occurs when the MCU detects that there are no available trunks in the network to place the call. This drop reason is detected by MCU CPTR resources. See "Dial-out" for a description of CPTR usage. 1 System An MCU restart (level 2) disconnected every call. 1 UIN-Inv The user entered an invalid User Identification Number. 1 Unknown The system could not determine the cause of the disconnect. 1 Wrong-num This dial-out drop reason occurs when the MCU detects the wrong destination number was dialed. This drop reason is detected by MCU CPTR resources SDN cause value. See "Dial-out" for details. 1 UCC controller intentionally disconnected the endpoint.
AC Num	Administered Connection Number - from 1 to 128. AC number can be used to further diagnose a problem by combining status conference information with status administered connection and data stored in the error and alarm logs.
Ports Trunk	The data endpoint that the channel is using.
Ports Video	The MMI port for the channel.
3 of 4	

Table 26: status conference field descriptions, page 2 4 of 4

Field	Description
Ports Aud	If the endpoint type is not "UCC," the VC audio encoder port (which is always paired to a decoder port) for the channel (only the first channel). Because only one audio encoder port is allocated per endpoint, it appears together with the ESM data port in the endpoint's channel 1 port slot position of the Port Aud/ESM column. For "UCC" endpoint type, the channel 1 port slot position displays the allocated Call Classifier resource.
Ports ESM	The Expansion Service Module MMI data port. This field is always blank.
Sum Grp	Endpoint's assigned summer group number. The summer group port assignments are on screen 1.
software	For Avaya use only.
4 of 4	

Output for status conference endpoint

status conference x endpoint y

This is an example of the first page of **status conference x endpoint y**. Data relevant for each endpoint appears on 6 pages. If the endpoint-ID of **a11** is used, every possible endpoint associated with the specified conference appears.

status conference endpoint		page 1 of 6
STATUS OF CONFERENCE ____		ENDPOINT: ____
Ext: ____ Type: ____		Status: ____
Manufacturer/Country: ____/____		Product: ____
Terminal Name: _____		Data Mode: _____
Admin Bandwidth: _____		MLP Rate: _____
Conf Bandwidth: _____		Rate Adaptation: _
Meet-Me Number: _____		Lo/Hi Interworking: _
Sum Grp: _ L1: _____ L2: _____		Dial Out #1: _____
Quadrature: _____		#2: _____
ENDPOINT STATES/CAPABILITIES/MODES		
In	Enh	----Capability----
Use	BAS	Chl Aud Vid Mlp Gx Adpt Mode Ts Vs
-	-	- - - - - - - - - -

status conference endpoint field descriptions, page 1**Table 27: status conference endpoint field descriptions, page 1 1 of 8**

Field	Description
Endpoint	Endpoint-ID is a slot number associated with the endpoint entered on the conference forms.
Product	Product identification number obtained from the endpoint.
Manufacturer/ Country	Manufacturer identification number and manufacturer's country code obtained from the endpoint.
Terminal Name	blank
Sum Grp	Summer group number to which this endpoint belongs and the VC Audio Level (L1) and Level 2 (L2) summer ports for this group. These fields have an entry only for conferences with over 6 participants.
Dial Out #1 Dial Out #2	Blank Blank
1 of 8	

Table 27: status conference endpoint field descriptions, page 1 2 of 8

Field	Description
In Use	Is the endpoint currently participating in the conference or in process of connecting to the conference? – y, c, e, f, n, blank. 1 y – The endpoint is in use and is fully connected on all media in an active conference. 1 c – The endpoint is in use and is fully connected, however the endpoint has changed the conference audio or video capability or has changed the rate of the conference because of rate adaptation. This condition requires analysis of this endpoint's capabilities and mode fields to identify which capability was reduced. 1 e – The endpoint is in use but the endpoint had capability problems. The endpoint does not have one of the required capabilities (Vid, Bhl, MLP) to be a full participant. For MLP capabilities, see the T120 field. This condition requires analysis of this endpoint's capabilities and mode field to identify the missing capability. 1 f – The endpoint is in use but is not connected to all media. This indicates that the endpoint has declared every required capability (channel/video/audio/data) but is not fully connected to all conference media at this time. This endpoint may be in the process of connecting, has failed to connect, or is not a valid video source. This condition requires analysis of this endpoint's capabilities and mode fields to identify the problem. 1 n – The endpoint was connected in a conference but has/was disconnected or attempted to connect to a conference but was unsuccessful. 1 blank – The field is blank until the first call is made from/to the endpoint.
Enh BAS	EnhancedBasic Service Flag – n, y y – The endpoint supports the enhanced BAS commands/caps; n – The endpoint only supports the basic BAS commands/caps.
2 of 8	

Table 27: status conference endpoint field descriptions, page 1 3 of 8

Field	Description
Chl	Data on the quantify and quality of channels (transfer rate)? – y, e, n, blank y – The endpoint has the required number of channels. e – The endpoint has not declared support for the correct number of channels and cannot participate fully in the conference. n – The endpoint has declared the correct number of channels, but every channel has not yet joined the conference, due to either a network or endpoint problem. - blank – Audio add-on endpoints always have a blank Chl field.
Aud	Does it have the required audio capability? – y, c, e, blank y – The endpoint has the required audio capability. Audio add-on endpoint always have the Aud field set to y once the endpoint has joined the conference. c – This endpoint is PCM only, and it changed the video quality of the conference by changing the operating audio from G.728 to G.711. If the administered audio mode is auto and the administered bandwidth is 112 kbps (56 k/channel) or 128 kbps (64 k/channel), the system starts out with the highest common audio of G.728. When the administered bandwidth is greater than 128 kbps, the system starts out with the highest common bandwidth of 7 kHz. e – A PCM-only endpoint that did not have the capability of supporting the administered audio mode of G.728 (such as a data conference) G – 278/G.711 endpoint that did not have the capability of supporting the administered audio mode of 7 kHz. Such endpoints operate with PCM audio and interwork with the current operating audio mode. - blank – The field is blank until the first call is made from/to the endpoint.
3 of 8	

Table 27: status conference endpoint field descriptions, page 1 4 of 8

Field	Description
Vid	Does it have the required video capability and is receiving video? – y, c, e, n, blank 1 y – The endpoint has the required video capability and should be receiving video if the Chl, Aud, and Dat fields are y. 1 c – It downgraded the conference's video quality - either from CIF to ACIF or by decreasing the frame rate. The conference video mode is set by default to CIF and if a QCIF-only endpoint joins the conference, then the entire conference is made to operate in QCIF, with the video clarity downgraded. Also, the conference frame rate is initially set to the highest frame rate that can then be reduced by any endpoint. If the conference video mode is not administered with upgrade capability, then if the video parameters for a conference have been "downgraded," they are not "upgraded" until every endpoint disconnects from the conference. 1 e – The endpoint has not declared any video capability in its cap-set. 1 n – Audio only, not receiving video, possibly due to an audio or data problem. 1 blank – Audio add-on endpoint always have the Vid field set to blank.
Mlp	The state of the Control Link to the ESM (T.120 stack terminator), the endpoint MLP data capability, and the state of the data connection in the T.120 stack. This field value is always blank, indicating that the Data Mode for the conference is none, and therefore, the data does not apply, or the endpoint has never joined the conference.
Gx	Does it have the Still Frame Graphics capability? – y, e, blank 1 y – This endpoint has this capability. 1 e – This endpoint did not declare this capability. The conference retains the still frame graphics capability when a non-compliant endpoint joins the conference. 1 blank – This endpoint has never joined the conference.
4 of 8	

Table 27: status conference endpoint field descriptions, page 1 5 of 8

Field	Description
Rate Adpt	Rate adaptation/Interworking indicator – 5, 6, y, c, e, n, blank. Values of 5 and 6 apply only to low-/high-speed interworking. Every other value applies only to rate adaptation. 1 5 – A 56-kbps (low-speed) endpoint has joined a high-speed (128-kbps or above) conference. This endpoint is connected with audio-only capability, but is neither a valid video source nor destination. 1 6 – A 64-kbps (low-speed) endpoint has joined a high-speed (128-kbps or above) conference. This endpoint is connected with audio-only capability, but is neither a valid video source nor destination. 1 y – This endpoint has joined the conference at the administered rate of 64 kbps, but (because rate adaptation to 56 kbps was triggered by another endpoint) this endpoint has successfully rate adapted to 56 kbps. 1 c – The administered bandwidth of the conference is 64 kbps and this endpoint has joined the conference at 56 kbps. The first 56-kbps endpoint that joins 64-kbps rate-adaptable conference triggers rate adaptation (see Join Time below). 1 n – A 64-kbps conference was triggered to rate adapt to 56 kbps by some other endpoint. This endpoint joined the conference at the bandwidth of 64 kbps, but encountered problems in rate adapting down to 56 kbps. This endpoint may have the audio and may be receiving video, but is not a valid video source. 1 blank – Rate adaptation was never triggered by any endpoints. So, if this endpoint is in use and connected, then it joined the conference at the administered bandwidth.
Bond Mode	BONDing Mode – blank. This field is blank for calls that are not related to bonding.
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Table 27: status conference endpoint field descriptions, page 1 6 of 8

Field	Description
Ts	Indication of the talking state of the endpoint – t, m, M, S, blank. ‣ t – At the time the command was invoked, voice energy (talking) was detected from the endpoint. ‣ m – At the time the command was invoked, the endpoint indicated to the MCU that it was muted. It is possible that an endpoint may mute, but not send any indication to the MCU. In this situation the MCU does not display a mute indication. ‣ M – At the time the command was invoked, the endpoint's audio was muted via UDD/CRCS Agent interface. M displays when both the endpoint and the UCC/CRCS Agent have muted the endpoint audio. ‣ S – At the time the command was invoked, the endpoint's audio was muted because of solo-audio state set by UCC/CRCS Agent. While in solo-audio state, new endpoints joining the conference are automatically muted. ‣ blank – At the time the command was invoked voice energy (talking) was not being detected from the endpoint.
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Table 27: status conference endpoint field descriptions, page 1 7 of 8

Field	Description
Vs	Indication of the MCU video state for this endpoint – a, b, B, c, i, r, R, s, S, u, U, v, blank. For quad-screen conferences an * is affixed before the value of Vs to indicate that an endpoint is currently part of the mixed image. A # may be affixed before the value of Vs to indicate that an endpoint was fixed to be in the mixed image (via administration or UCC/CRCS Agent), but instead, a Fill video is shown in its place. This occurs when the video of an endpoint that is fixed in a quadrant cannot be used as a video source because the endpoint is currently not joined to the conference, has suppressed its video, or has invalid video to be the video source. Notice that at most four endpoints have an * or # affixed before the Vs field value. For quad-screen conference in VAS mode, the mixed image is broadcast to every endpoint. For quad-screen conference in presentation mode, the mixed image is return video to the presenter. 1 a – This value applies only to quad-screen conferences. *a indicates that an endpoint is part of the current mixed image and is fixed in one of the quadrants via administration. *a indicates that the endpoint is fixed in a quadrant but is not currently connected (Fill image displays). 1 b – For full-screen conference it indicates that at the time the command was invoked, this endpoint's video was being broadcast to other sites. This conference was in VAS, broadcast, or presentation mode. For quad-screen VAS conference it is prefixed with an asterisk (*) and indicates that this endpoint's video is part of the mixed image because of VAS. For quad-screen presentation conferences, b (without an asterisk) identifies the presenter as the broadcaster. 1 c – At the time the command was invoked this endpoint's video was being broadcast to other sites. The conference was in chair mode and the broadcaster was designated by the chair. Chair features can only be performed in full-screen mode. 1 B – At the time the command was invoked the endpoint's video was being broadcast to other sites because of the UCC roll call feature. UCC roll call feature can only be performed in full-screen mode. 1 i – At the time the command was invoked the endpoint was not a valid video source. For continuous presence conference, if this endpoint is fixed in a particular quadrant, an asterisk (#) is affixed before i.
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Table 27: status conference endpoint field descriptions, page 1 8 of 8

Field	Description
Vs (cont'd.)	1 r – For full-screen conferences, at the time the command was invoked the endpoint's video was the return video to the broadcaster. For continuous presence conference in presentation mode, *r represents a VAS quadrant that is part of the mixed image. 1 R – At the time the command was invoked, the endpoint's video was the return video to the broadcaster because of the UCC browse feature. UCC Browse feature can only be performed in full-screen mode. 1 s – At the time the command was invoked this endpoint's video was suppressed at the request of the endpoint. For continuous presence conference with fixed quadrant participants, if this endpoint is fixed in a particular quadrant a # is affixed before s. 1 S – At the time the command was invoked this endpoint's video was suppressed via UCC/CRCS Agent interface. For continuous presence conference with fixed quadrant participants, if this endpoint is fixed in a particular quadrant, # is affixed before S. S displays when both the endpoint and the UCC/CRCS Agent have suppressed the endpoint video. 1 u – For full-screen conferences, at the time the command was invoked this endpoint's video was being broadcast to other sites. The conference was in VAS mode and the broadcaster was designated by the UCC/CRCS Agent interface. For quad-screen conferences, it indicates that UCC/CRCS Agent designated this endpoint as fixed in a quadrant. An asterisk (*) is affixed before u if the endpoint is currently part of the quad image, and # is affixed if the endpoint is not currently joined. 1 U – Applies only to quad-screen conference and indicates that UCC/CRCS Agent designated a quadrant as VAS. An asterisk (*) is affixed before U to indicate that this endpoint is part of the current quad image. 1 v – At the time the command was invoked this endpoint's video was being broadcast to other sites. The conference was in VAS mode but the endpoint has asked to be a broadcaster via "See-Me" request and was granted a MCV (Multipoint Command Visualize) token. The See-Me feature is only performed in full-screen mode. 1 blank – At the time of the request the endpoint's video was not broadcast, return, video, or part of the mixed-image, but it is a valid video source.
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Page 2 of **status conference x endpoint y** shows endpoint channel information.

status conference endpoint											page 2 of 6
ENDPOINT CHANNEL INFORMATION											
Chan.	Join	Drop	----	Drop----	AC	-----Ports-----					Fr
No.	Time	Time	Reason	Code	Num	Trunk	Video	Aud/ESM	BONDng	Err	Software
1:	_____	_____	_____	---	---	_____	_____	_____	_____	---	_____
2:	_____	_____	_____	---	---	_____	_____	_____	_____	---	_____
3:	_____	_____	_____	---	---	_____	_____	_____	_____	---	_____
4:	_____	_____	_____	---	---	_____	_____	_____	_____	---	_____
5:	_____	_____	_____	---	---	_____	_____	_____	_____	---	_____
6:	_____	_____	_____	---	---	_____	_____	_____	_____	---	_____
7:	_____	_____	_____	---	---	_____	_____	_____	_____	---	_____
8:	_____	_____	_____	---	---	_____	_____	_____	_____	---	_____
9:	_____	_____	_____	---	---	_____	_____	_____	_____	---	_____
10:	_____	_____	_____	---	---	_____	_____	_____	_____	---	_____
11:	_____	_____	_____	---	---	_____	_____	_____	_____	---	_____
12:	_____	_____	_____	---	---	_____	_____	_____	_____	---	_____

status conference endpoint field descriptions, page 2

status conference endpoint field descriptions, page 2 1 of 5

Field	Description
Join Time	Time (in 24-hour notation) when the channel joined the conference.
Drop Time	Time (in 24-hour notation) when the channel disconnected. If the first channel has a drop time, then it means that the endpoint is idle. If there is a drop time without a join time, it means that the call disconnected without being joined to the conference.
1 of 5	

status conference endpoint field descriptions, page 2 2 of 5

Field	Description
Drop Reason	The reason for the channel's disconnect: ‣ 2-pri - This drop reason occurs when an administration error causes a mismatch in primary-secondary designation for a cascade link. This mismatch shows that both MCUs are administered as primaries (see "Cascading" for a description of primary-secondary compatibility). ‣ 2-sec - This drop reason occurs when an administration error causes a mismatch in primary-secondary designation for a cascade link. This mismatch shows that both MCUs are administered as secondaries (see "Cascading" for a description of primary-secondary compatibility). ‣ Agent - The reservation agent has caused the call to disconnect (for example, the agent has changed a connected dial-out destination number). ‣ Bandwidth - Mismatch between a call and the conference it attempted to join. For example, a 56-kbps call attempted to join a 64-kbps conference that does not allow rate adaptation. ‣ BondHshake - BONDing handshake drop reason can be caused due to the following reasons: information channel parameter not supported or invalid, parameter negotiation terminated out of sequence, timer expired because of the secondary channels did not establish, or BONDing framing was not detected for one of the other channels. ‣ Busy - This dial-out drop reason occurs when the MCU detects that the conferee's terminal equipment is busy. This drop reason is detected by an ISDN cause value (for example h0). See "Dial-out" for a description of CPTR usage. ‣ Chair - disconnected the endpoint, using either Chair Command Disconnect (CCD) or Chair Command Kill (CCK) signals. ‣ Conf End - The conference was ended due to reaching stop time for a reserved conference or due to an active conference being converted to file.
2 of 5	

status conference endpoint field descriptions, page 2 3 of 5

Field	Description
Drop Reason (cont'd)	1 Endpoint Clearing received from DS1—The disconnect came from the endpoint. The endpoint notified the MCU that it intended to disconnect. 1 Far-end Clearing received from DS1—The disconnect came from either the network or the endpoint. 1 Handshake Either framing was never found (the endpoint could not complete initialization—Problems finding Frame Alignment Signal (FAS), Multi Frame Alignment (MFA) and getting a corrected coded cap-set) or framing was lost for some time (over 40 seconds) and the endpoint was disconnected. 1 IDtimeout—The MCU has not received response to the UIN/password Query from the H.320 user after three attempts. Each attempt has a system administered timeout period. 1 Internal MCU has a problem allocating trunk resources necessary to route the dial-out call for the specified dial-numbers. This problem can be associated with routing pattern or trunk associated translation (for example, TAC specified in the dial-out number or routing pattern points to a trunk group without members), or it can indicate a lack of trunk resources (for example, every trunk member is maintenance busy or every in-service member is busy on a call). 1 Network - Clearing received from DS1—The disconnect came from the network. The endpoint that had the disconnect notification capability disconnected without notifying the MCU. 1 Not-MCU - The dial-out destination number(s) of the “CAS” extension has terminated to a number that is not a dial-in cascade MCU extension. 1 No-ring - his dial-out drop reason occurs when the call has been up for 30 seconds and no ringing is detected. 1 Reorder - his dial-out drop reason occurs when the MCU detects that there are no available trunks in the network to place the call. This drop reason is detected by MCU CPTR resources. See “Dial-out” for a description of CPTR usage. 1 Pre-AnsDrop- The call disconnected before answer by an endpoint. The cause of the disconnect may be the network, an endpoint, or a terminal adapter. This drop reason is different from ‘No-answer,’ which indicates that a 60-second timeout occurred while alerting. In this case, the call drops before the 60-second timer has expired. Some busy endpoints connected through terminal adapters display this behavior.
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status conference endpoint field descriptions, page 2 4 of 5

Field	Description
Drop Reason (cont'd)	Resource - MCU could not provide resources (VC or MMI) when the call arrived or lost the resources during the call. This could be due to them being Out of Service, busied out by craft, or being used by system maintenance. This drop reason could also occur if the DS1/MMI cable is disconnected. If there was a resource problem when the call arrived, it would get reorder (fast busy) and not get disconnected by the MCU. Password - Either the user entered the wrong password or the audio add-on user did not enter it within the specified time period. Note that the audio add-on user gets one attempt to enter a correct password and inter-digit timing for each digit (that is, about 10 seconds between digits). System - An MCU restart (level 2) disconnected every call. UIN-Inv - The user entered an invalid User Identification Number. Unknown -The system could not determine the cause of the disconnect. Wrong-num - This dial-out drop reason occurs when the MCU detects the wrong destination number was dialed. This drop reason is detected by MCU CPTR resources SDN cause value. See "Dial-out" for details. UCC - controller intentionally disconnected the endpoint.
Drop Code	A detail code complementing the Drop Reason (see above). Additional bonding related information may be obtained from supplementary BONDing Drop Codes described above.
AC Num	Administered Connection Number - from 1 to 128. AC number can be used to further diagnose a problem by combining status conference information with status administered connection and data stored in the error and alarm logs.
Ports Trunk	The data endpoint that the channel is using.
Ports Video	The MMI port for the channel.
Ports Aud	If the endpoint type is not "UCC," the VC audio encoder port (which is always paired to a decoder port) for the channel (only the first channel). Because only one audio encoder port is allocated per endpoint, it appears together with the ESM data port in the endpoint's channel 1 port slot position of the Port Aud/ESM column. For "UCC" endpoint type, the channel 1 port slot position displays the allocated Call Classifier resource.
Ports ESM	The Expansion Service Module MMI data port. This field is always blank.
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status conference endpoint field descriptions, page 2 5 of 5

Field	Description
Ports BONDng	The MMI port used for BONDing for the channel.
Fr Err	Frame error counter. A circular hex counter (0-FF) to indicate the occurrence of framing errors.
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The following screen shows page 3 of **status conference x endpoint y**.

status conference endpoint

page 3 of 6

CONFERENCE INFO: Broadcaster: xx (See-Me)

Return Vid: xx

----- MODE COMMANDS/COMMUNICATION MODES -----				EPT MISC		----- FAW --	
CMD	STAT	CONF	EPT-IN	EPT-OUT	----- I O	CH1	CH2
----	----	-----	-----	-----	-----	---	---
XRATE:	y	384	384	384	AIM: y n		
AUDIO:	n	G728	neutral	G728	VIS y n	A-OUT:	y n
56/64:	y	derestrict	derestrict	derestrict	MIS: n	A-IN:	y n
VIDEO:	n	H.261	H.261	H.261	MCV: n	M-FRM:	y n
MLP:	y	MLP-off	MLP-off	MLP-off	-----	MFA:	y n
H-MLP:	y	H-MLP-off	H-MLP-off	H-MLP-off	TALK: y 05	MFN:	y n
LSD:	y	LSD-off	LSD-off	LSD-off	VFCV: y 01	FAS:	y n
HSD:	y	HSD-off	HSD-off	HSD-off	BCTK: n 02	MCUFAL:	00 00
CRYPT:	y	encrypt-off	encrypt-off	encrypt-off	RTTK: y 01	FEFAL:	00 00
S/M:	y	N-comp-6B-H0	N-comp-6B-H0	N-comp-6B-H0	BCLS: n		
					RTLS: n		
					HYPR: n 00		
					DMUTE: n 00		
					H.261: n 00		
					VFMT: n 00		

status conference endpoint field descriptions, page 3 Conference Info

status conference endpoint field descriptions, page 3 Conference Info

Field	Description
CONFERENCE INFO: Applies mostly to full-screen conferences.	
Broadcaster	Indicates the endpoint number that is the current broadcaster. Applies to full-screen and quad-screen presentation mode conferences. Broadcast: a broadcast mode broadcaster. Chair: the broadcaster was designated by the chair. See-Me: the broadcaster is a result of MCV request from an endpoint. Presenter: a presentation mode broadcaster. Rollcall: the broadcaster was designated by the UCC via the Rollcall feature. UCC: the broadcaster was designated by the UCC. VAS: Voice Activated Switching broadcaster.
Next Broadcaster	Indicates the endpoint number that is selected to be the next broadcaster.
Return Vid	Indicates the endpoint number that is the current return video. The return video can be qualified with the following keywords: blank: the return video is the previous broadcaster forced to be return video because of VAS, action by Chair, action by UCC, or endpoint MCV request. The broadcaster qualifier identifies which action forced this endpoint to become return video. Autoscan: auto scan return video. This is true only when conference mode is broadcast with auto scan. Browse: the return video was designated by the UCC via the Browse feature. VAS: a Voice Activated Switching return video.
Next Return Vid	Indicates the endpoint number that is selected to be the next return video. MCU

status conference endpoint field descriptions, page 3

Table 28: status conference endpoint field descriptions, page 3 MODE COMMANDS/ COMMUNICATION MODES 1 of 2

Fields	Description
MODE COMMANDS/COMMUNICATION MODES This is a collection of both incoming and outgoing bandwidth allocations for the multiplex. The Incoming data is the rate at which the MCU thinks the endpoint is communicating based on the Bit-rate Allocation Signal (BAS) codes received from the endpoint/codec and the capabilities the MCU has declared. The Outgoing data is the rate from the MCU toward the endpoint. The following are column definitions for this section of page 3	
CONF	The desired conference operating mode. This may be different from the endpoint in (EPT-IN) or endpoint out (EPT-OUT) modes.
CMD	labels for the various types of mode commands
STAT	y/n Compatibility of conference mode and the incoming mode. y indicates mode compatibility. n indicates that the modes are not compatible.
EPT-IN	Communication modes coming in from an endpoint.
EPT-OUT	Communication modes sent out to an endpoint based on the number of channels connected and the capabilities of the endpoint.
XRATE	One of the supported rates in Table 29: Supported Transfer Rates on page 193. XRATE may be 64 when the endpoint is just dialing in, or in the event of problems. It implies that only one B-channel is being used.
AUDIO	Audio rate (kbps bandwidth) of the conference and the endpoint must be the same but not necessarily their mode. When the audio rate of the conference and the endpoint are different the endpoint's audio will interwork but the endpoint's video will be invalid. MCU may or may not send video to such an endpoint. Table 30: Audio Mode Configurations on page 193 summarizes expected endpoint audio mode with different configurations of transfer rate, facility bandwidth, conference mode, and whether or not every endpoint supports the highest common audio mode (HC audio) when the administered mode is auto. The highest common conference mode is dependent on the administered bandwidth. A '—' in the table indicates 'does not apply.' Other possible AUDIO mode values include neutral (neutralized I-channel) and Au-off, Frm (no audio signal) which never match conference mode and are not supported by MCU.
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Table 28: status conference endpoint field descriptions, page 3 MODE COMMANDS/ COMMUNICATION MODES 2 of 2

Fields	Description
56/64	The 56/64 field is derestrict when operating at per-channel rates of either 64, 128, 192, 256, 320, 384, 512, 768, 1472, 1536, or 1920 kbps. It is restrict when operating at rates of either 56, 112, 168, 224, 280, 336, 448, or 672 kbps. Note that if the conference is configured for N x 56-kbps operation, the endpoint may signal either via capabilities or modes that is operating at the proper rate. In such a case, even when we receive derestrict command which does not match the conference communication mode of restrict, if the capability indicates restrict (MISC capability has restrict displayed on Page 4) the STAT 56/64 is y to indicate 56/64 compatibility between the conference and the endpoint.
VIDEO	The Video mode: H.261 (recommended), H.CTX (proprietary), H.CTX+ (proprietary), or SG4 (proprietary) indicate that video is on in the direction indicated; video-off when the video is off.
MLP	Multi Layer Protocol data mode. When Data Mode is administered as any-mlp or ww-pcs, the MLP mode should be var-MLP. Other values will affect video status. The MLP mode should be MLP-off when Data Mode is administered as none. Again, other values in this mode will affect video status.
H_MLP	The High Speed MLP mode. The HMLP mode should be H-MLP-off . Other values in this mode will affect video status.
LSD	Low Speed Data mode. The LSD mode should be LSD-off . Other values in this mode will affect video status.
HSD	High Speed Data mode. The HSD mode should be HSD-off . Other values in this mode will affect video status.
CRYPT	Encryption mode. The CRYPT mode should be encrypt-off . Other values in this mode will affect video status.
S/M	Single-/multi-channel interoperability mode. 6B-H0-comp indicates that the sender is interoperating multiple channels and a single channel (for example, 6B and H0). Not-comp-6B-H0 indicates that the sender is not interoperating between 6B and H0. Normally this value is Not-comp-6B-H0 . Other values in this mode will affect video status.
2 of 2	

Table 29: Supported Transfer Rates

XRATE	Bandwidth of the Call
2x64	2B (2x56 or 2x64)
128	112 or 128 kbps
196	168 or 196 kbps
256	224 or 256 kbps
320	280 or 320 kbps
384	336 or 384 kbps
512	512 kbps
768	768 kbps
1472	1472 kbps
1536	1536 kbps'
1920	1920 kbps

Table 30: Audio Mode Configurations 1 of 2

Admin Mode (HC Audio)	All Support HC Audio	Xfer Rate	Facility BW	Conf Mode	Expected Endpoint Mode
auto (G.728)	yes	<=128k	—	G.728	G.728
auto (G.728)	no	<=128k	64k	G.711-A-56k	G.711-A-56k B.711-Mu-56k
auto (G.728)	no	<=128k	56k	G.711-A-48k	G.711-A-48k G.711-MU-48k
auto (G.722)	—	>128k	64k	G.722-56k	G.722-56k G.711-A-56k G.711-Mu-56k
auto (G.722)	—	>128k	56k	G.722-48k	G.722-48k G.711-A-48k G.711-Mu-48k
G.728	—	—		G.728	G.728
1 of 2					

Table 30: Audio Mode Configurations 2 of 2

Admin Mode (HC Audio)	All Support HC Audio	Xfer Rate	Facility BW	Conf Mode	Expected Endpoint Mode
G.711	—	—	64k	G.711-A-56k	G.711-A-56k G.711-Mu-56k
G.711	—	—	56k	G.711-A-48k	G.711-A-48k G.711-Mu-48k
G.722	—	—	64k	G.722-56k	G.722-56k G.711-A-56k G.711-mu-56k
G.722	—	—	56k	G.722-48k	G.722-48k G.711-A-48k G.711-Mu-48k
2 of 2					

status conference endpoint field descriptions, page 3

status conference endpoint field descriptions, page 3 Endpoint Misc Info 1 of 2

Field	Description
EPT MISC	EPT MISC contains miscellaneous states and counters for an endpoint. The flags can be y or n . The counters start with initial value of 0x00 , they increment to 0xff , and then wrap around to 0x01 . AIM and VIS are BAS commands which can be sent as input (I) to MCU from an endpoint or as output (O) from MCU to an endpoint.
AIM	Audio Indicate Muted. y on input (I) indicates that this endpoint has muted its audio. MCU will not VAS to an endpoint displaying mute indicate. Value of n on input indicates that this endpoint has not muted (only if endpoint audio mode is turned on). y on output (O) indicates that every other endpoint in the conference has muted its audio (have sent AIM to MCU). MAC in turn tells this endpoint (by sending it AIM) that there is no audio output from MCU. n on output indicates that there is an audio path open across the bridge.
VIS	Video Indicate Suppressed. y on input (I) indicates that this endpoint has suppressed its video (indicated video is muted). y on output (O) indicates that the MCU is not sending video to this endpoint because there is no video broadcaster (broadcaster has not joined or broadcaster's video is not valid).
MIS	Multipoint Indicate Secondary-status. This command is only sent as output (O) to an endpoint. n indicates that the endpoint is viewed as capable of being a valid source (although not necessarily at this moment). n is correct for video. y indicates that MIS was sent to an endpoint and that this endpoint is viewed as a secondary endpoint. The endpoint is included in the audio portion of the conference but not the video portion. Video will not be sent.
1 of 2	

status conference endpoint field descriptions, page 3 Endpoint Misc Info 2 of 2

Field	Description
MCV	Multipoint Command Visualize. This command is only sent as input (I) from an endpoint. y indicates that an endpoint has requested to become a broadcaster. This is used during Still Frame Graphics and to force "presentation" mode.
TALK	y indicates that the VC board is detecting voice energy from the endpoint. The TALK counter indicates the number of times a start/stop was detected.
VRCV	y indicates if the endpoint is receiving video (MMCH is sending video to the endpoint). The VRCV counter indicates the number of times video was sent/not sent to this endpoint.
BCTK	Applies to single screen and quad-screen presentation mode conferences. y indicates that the endpoint is the video broadcast source. The BCTK counter indicates the number of times this endpoint was the video broadcast source.
RTTK	Applies to single screen conferences. y indicates that the endpoint is the return video source. The RTTK counter indicates the number of times this endpoint was the return video source.
BCLS	Applies to single screen and quad-screen presentation mode conferences. y indicates that the endpoint is watching the video of the broadcast source.
RTLS	Applies to single screen conferences. y indicates that the endpoint is watching the video of the return source.
HYPR	y indicates hyperactivity from an endpoint (MCU isolated endpoint from the MCU conference due to "thrashing" behavior) and affects endpoint's status as a video source (for 5 seconds of hyperactivity timer). The HYPR counter indicates the number of times this endpoint was hyperactive.
DMUTE	y indicates that the decoder was muted by the VC board or the software in the MCU. VC board mutes the decoder when it loses MMI or endpoint framing is lost, when it receives an invalid audio code word, and when endpoint is hyperactive. The only time that the MCU software mutes the decoder of an endpoint is to mute every endpoint, other than the broadcaster, when a mode of a conference is "broadcastw/scan" (broadcast with auto scan). The DMUTE counter indicates the number of times this endpoint's decoder was muted by the VC board.
VFMT	The video format applicable only to quad-screen conferences. Always n , indicating QCIF format.
H.261	y indicates video framing loss. The H.261 counter indicates the number of times the framing was lost.
2 of 2	

status conference endpoint field descriptions, page 3

status conference endpoint field descriptions, page 3 Frame Alignment Word Info

Field	Description
Frame Alignment Word (FAW) Information The FAW section of page 3 provides the channel Frame Alignment Word information for the communication paths labeled CHL 1 and 2. For 2B calls, both CHL 1 and 2 are used. For 1-channel calls (at rates of 112, 128, 168, 196, 224, 256, 280, 320, 336, 384, 768, 1472, 1536, and 1920 kbps), only CHL 1 is used. A-OUT, A-IN, M-FRM, MFA, and MFN are flags with values of y or n.	
A-OUT	MCU has endpoint framing.
A-IN	Endpoint has MCU framing
M-FRM	Multichannel frame alignment is present (alignment of both channels in 2B).
MFA	Multiframe alignment word is present (required in 2B call).
MFN	Multiframe numbering is present (required in 2B call).
FAS	Frame Alignment Signal (FAS) channel number (1 or 2). This number should match the column header.
MCUFAL	MCU Frame Alignment Loss (MCUFAL). A counter of the number of times the MCU indicates to the endpoint that it has lost endpoint FAW or multichannel synchronization (M-FRM). The MCU a-bit toggles when the MCU gains or loses endpoint multichannel synchronization. This counter starts with an initial value of 0x00, increments to 0xff, then wraps around to 0x01. The MCUFAL count is also shown in the Fr Err field on page 2.
FEFAL	Far End Frame Alignment Loss (FEFAL). A counter of the number of changes the MCU detects in the endpoint's a-bit (A-OUT). The endpoint a-bit toggles when an endpoint gains or loses MCU framing. This counter starts with an initial value of 0x00, increments to 0xff, then wraps around to 0x01.

The following screen shows page 4 of **status conference x endpoint y**.

status conference endpoint												
page 4 of 6												
ENDPOINT CAPABILITY INFORMATION												
VID		vfmt: QCIF		cfps: 30		H.CTX		SG4		imp		
		da_sfg		qfps: 7.5		H.CTX+		SG4_sfg				
MISC		derestrict		S/M		mbe		dcomp		cic		
XR		64	64x2	64x3	64x4	64x5	64x6	384	384x2	384x3	384x4	384x5
		128	192	256	320	512	768	1152	1472	1536	1920	
AUD		ntrl		711m		711a		g728		g722_64		
										g722_48		
LSD		var	300	1200	4800	6400	8000	9600	14.4k	16k	24k	32k
HSD		var	64k	128k	192k	256k	320k	348k	512k	768k	1152k	1536k
MLP		var	4k	6.4k	14.4k	16k	22.4k	24k	30.4k	32k	38.4k	40k
HMLP		var	62.4k	68k	128k	192k	256k	320k	384k			

status conference endpoint field descriptions, page 4,

Fields on this page appear only when an endpoint declares the specific capability. For example, if an endpoint does not declare the VID H.CTX capability, the **H.CTX** field does not appear.

status conference endpoint field descriptions, page 4 1 of 2

Field	Description
VID	Provides information about the type of video and frame rate the endpoint supports. vfmt - does not display if the endpoint has no video capability. Every value is blank if there is an active call or if this is an audio-only endpoint. Otherwise, values for this field include: ┆ FCIF for full CIF ┆ QCIF for quarter CIF. Support of CIF implies support of QCIF. In general, for larger screens, CIF displays sharper resolution video, which ZCIF is blocked, but may run at higher frame rates and less clear. The differences are less observable on very small displays. ┆ cfps and qfps are the maximum frame rate (frames/second) at which the endpoint can receive video for CIF and QCIF operating modes. CIF frame-rate values are 30 fps, 15 fps, 10 fps, and 7.4 fps. If the endpoint does not support CIF (that is, the vfmt field is QCIF), the cfps value should be blank. ┆ da_sfg indicates support for H.261 Still Frame Graphics transfers. ┆ H.CTX, H.CTX+ and SG4 are proprietary video format capabilities. ┆ SG4_sfg indicates support for SG4 Still Frame Graphics
MISC	The restrict field is one way for an endpoint to indicate that it is operating at 56 kbps per channel. Another way is the 56/64 command mode with restrict. An endpoint on a 56-kbps conference must send one or both of the 2 indications that they are operating at 56 kbps before they become a video source in a 56-kbps conference. If they signal either way that they are operating at 56 kbps in a 64- or 384-kbps conference, they are an audio-only source, but the MCU continues to send Selected Communication Mode (SCM) toward them when possible. A MISC capability of derestrict and a 56/64 command of derestrict together indicate that an endpoint is operating at 64 kbps. If either is restrict, the conference operates at 56 kbps. Other field values include: ┆ dcomp indicates support for WorldWorx PCS data compliance. ┆ mbe indicates support for Multi Byte Extension. MBE capability is used for the exchange of passwords, terminal names, and other special capabilities, such as, support of WorldWorx PCS specific features. ┆ cic (Chair Indicate Capability) indicates chair control capability.
1 of 2	

status conference endpoint field descriptions, page 4 2 of 2

Field	Description
XR	Transfer rate capabilities are statement about the speeds at which the endpoint can operate over the current connection and operate a Px64 Multiplex. For a 384-kbps (H0) call, the endpoint sends its capabilities to indicate 384-kbps support, which displays as 384 . On a 336-kbps call, the endpoint must signal 384-kbps support. If an endpoint does not indicate support for 384 kbps on a 384-/336-kbps conference, the MCU provides Audio Only Communications Mode (ACOM). For a 2B conference, the MCU sets the rate to 2x64, expecting the endpoints to do likewise (64x2 is displayed; if this is not displayed, there is no 64x2 capability). Endpoints may occasionally take 2x64 (or the current channel rate: 384, 768, 1472, 1536) out of their capability. This is Mode 0 forcing and is part of normal procedures. The MCU will provide AOCM if the endpoint does not signal support matching the configuration of the conference.
AUD	The audio fields are statements of the audio protocols that the endpoint supports. 711m and 711a are PCM (G.711) and support Mu and A-law, respectively, and at least one is required of endpoints. The g728 field indicates whether G.728 is supported (LB_CELP). This value depends upon the type of the endpoint and how that endpoint is currently configured. The g722_48 field indicates endpoint support for G.722 (7 kHz) at both 48 and 56 kbps. Therefore, g722_48 indicates that the endpoint supports G.722 audio at both rates. The g722_64 field indicates endpoint support for G.722 at 64 kbps in an unframed (not supported by the MCU) mode.
LSD	The LSD fields indicate the capabilities for Low Speed Data conferencing.
HSD	The HSD fields indicate the capabilities for High speed Data conferencing.
MLP	The MLP fields indicate the capabilities for Multi Layer Protocol Data capabilities.
HMLP	The HMLP fields indicate the conference's capability for High Speed MLP data conferencing.
2 of 2	

Page 5 - Endpoint Call Status Information

This page summarizes such call-related status as per-channel join counts, join/drop time, drop reason, drop code, and auxiliary bonding drop code. It also contains a drop code and software fields from the previous call. The data on the page is always retained. The Endpoint Call Status Information section groups together call-related fields. The Joint Count field is described below, and other fields are described in the following screens.

status conference endpoint

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ENDPOINT CALL STATUS INFORMATION

Chan	Join Count	Join Time	Drop Time	----- Reason	Drop Code	----- BondCode	--- Previous --- DropCode	----- Software
1:	---	---	---	-----	---	---	---	-----
2:	---	---	---	-----	---	---	---	-----
3:	---	---	---	-----	---	---	---	-----
4:	---	---	---	-----	---	---	---	-----
5:	---	---	---	-----	---	---	---	-----
6:	---	---	---	-----	---	---	---	-----
7:	---	---	---	-----	---	---	---	-----
8:	---	---	---	-----	---	---	---	-----
9:	---	---	---	-----	---	---	---	-----
10:	---	---	---	-----	---	---	---	-----
11:	---	---	---	-----	---	---	---	-----
12:	---	---	---	-----	---	---	---	-----

status conference endpoint field descriptions page 5

Field	Description
Join Count	Shows the number of times this endpoint joined this conference during this conference session. This counter starts with 0, can increment to 64, and wraps around back to 1.

Page 6 - Administered Connections

This page summarizes information about the administered connections associated with this endpoint. This data can be viewed while the conference is active.

status conference endpoint

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ADMINISTERED CONNECTIONS INFORMATION

Chan	AC Num	Dial-out Number	Connection State	Retry Count	Failure Cause
1:	---	-----	-----	---	---
2:	---	-----	-----	---	---
3:	---	-----	-----	---	---
4:	---	-----	-----	---	---
5:	---	-----	-----	---	---
6:	---	-----	-----	---	---
7:	---	-----	-----	---	---
8:	---	-----	-----	---	---
9:	---	-----	-----	---	---
10:	---	-----	-----	---	---
11:	---	-----	-----	---	---
12:	---	-----	-----	---	---

status conference endpoint field descriptions, page 6

status conference endpoint field descriptions, page 6 1 of 2

Field	Description
Dial-Out Number	The actual numbers that are dialed out by the administered connections for each channel in the call. Note that the dial Out #1 and #2 on page 1 of the forms display the DCP endpoint number. This is particularly useful with bonding dial-out calls.
Connection State	Indicates the current call state of the AC. The following are connection states associated with dial-out ACs: ▮ enabled—is transient in nature and indicates that an AC is about to enter the attempting to connect state. ▮ disabled—this may mean one of three things: - The AC has reached an administered retry threshold, and all retries are stopped. Verify this by checking the error log and checking whether an error type of 9 is logged against the AC. - The AC was in a connected state and the far end disconnected. - The initial channel call has not yet connected. No dial out call attempt is made for the additional channel(s) until the initial channel has reached a connected state. ▮ not scheduled—is transient in nature and indicates that an AC is about to enter the “attempting to connect” state. ▮ waiting to retry—means that the AC is inactive (sleeping) and waiting for the retry timer to expire. Once the timer expires, the AC sends a dial out call and enters the “attempting to connect” state. ACs in this state indicate that the dial out call has failed at least once. ▮ attempting to connect—means that the AC is active on a call, but the call has not yet connected. ▮ connected—means that the call associated with the AC has been answered and join cut-through to the conference.
1 of 2	

status conference endpoint field descriptions, page 6 2 of 2

Field	Description
Retry Count	Number of retries have been attempted for this AC during this join attempt. This field does not clear when the AC connects. This field clears when a new join attempt is made via a Redial feature. Note that this is different from the Join Count which counts the number of times the channel joined the conference during this conference session.
Failure Cause	ISDN or CPTR cause value (values lower than 0x7f) recorded when the last dial out call was dropped. Values above 0x7f are generated internally. Table 31: Status AC - Failure Cause Values on page 203 lists all possible failure cause values displayed by this field and its associated description. This value is logged in the error log and appears with display errors. Err Type appears as a decimal.
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Table 31: Status AC - Failure Cause Values 1 of 2

Failure Cause (hexadecimal)	Description
0x00 (0t0)	N/A
0x01 (0t1)	Incorrect destination address
0x02 (0t2)	Reason unknown
0x06 (0t6)	Reason unknown
0x10 (0t16)	Normal call clearing
0x11 (0t17)	Endpoint not available
0x12 (0t18)	ISDN timer expired
0x15 (0t21)	Reason unknown
0x12 (0t22)	Destination address changed
0x1C (0t28)	Bad destination or access denied
0x1D (0t29)	Access denied
0x1F (0t31)	Reason unknown
0x22 (0t34)	Trunks unavailable
0x26 (0t38)	Temporary or facility failure
0x29 (0t41)	Temporary or facility failure
1 of 2	

Table 31: Status AC - Failure Cause Values 2 of 2

Failure Cause (hexadecimal)	Description
0x2A (0t42)	Resources unavailable
0x2C (0t44)	Resources unavailable
0x32 (0t50)	Access denied
0x34 (0t52)	Access denied
0x36 (0t54)	Access denied
0x3A (0t58)	Resources unavailable
0x41 (0t65)	Required capability not implemented
0x42 (0t66)	Required capability not implemented
0x45 (0t69)	Required capability not implemented
0x51 (0t81)	ISDN protocol error
0x52 (0t82)	Required capability not implemented
0x58 (0t88)	Incorrect destination number
0x60 (0t96)	ISDN protocol error
0x61 (0t97)	ISDN protocol error
0x62 (0t98)	ISDN protocol error
0x64 (0t100)	ISDN protocol error
0x66 (0t102)	ISDN timer expired
0x7f (0t127)	Reason unknown
0xC2 (0t194)	Ring no answer
0xC8 (0t200)	Hi and dry – no feedback detected
0xC9 (0t201)	Cascade link administered wrong
0xCA (0t202)	CPTR not available to detect failure

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configuration

See:

[list configuration](#) on page 205

[list configuration media-gateway](#) on page 210
[list configuration power-supply](#) on page 211
[list configuration software-versions](#) on page 212
[list configuration stations](#) on page 214

list configuration

```
list configuration
[all | atm | board location | carrier c | circuit-pack <board code> |
control | ds1 | license | hardware-group | port network n | stations |
trunks] [schedule]
```

See also:

[list configuration media-gateway](#) on page 210
[list configuration power-supply](#) on page 211
[list configuration software-versions](#) on page 212
[list configuration stations](#) on page 214

Use **list configuration** to generate a hardware configuration report. The report includes the type, code, suffix, and vintage of the requested circuit packs as installed in the switch, and every assigned port on the circuit packs.

To display SN circuit packs, use the **all**, **carrier**, or **board** qualifiers.

Action/Object	Qualifier	Qualifier Description	Login	Default
list configuration	hardware-group			
	all	Displays every circuit pack administered and/or physically inserted in every port, switch node, and control carrier of the system.		
	atm	Displays all the ATM boards		
	board location	Displays every assigned port on a circuit pack specified by cabinet, carrier, and slot.		
	carrier c	Displays every circuit pack and assigned port on a specified carrier.		
	circuit-pack <board code>	Displays all the requested circuit packs in the system that are inserted. AWOH and unplugged circuit packs are not listed.		
	control	Displays every circuit pack located in the control complex.		
1 of 2				

Action/Object	Qualifier	Qualifier Description	Login	Default
	ds1	Displays every DS1 circuit pack (TN722, TN767, and TN464) administered and/or every physically inserted port carrier of the system.		
	port-network pn#	Displays every circuit pack located in a specified port network. However, Circuit packs in switch node carriers do not appear. list cabinet gives the port network number(s) associated with a particular cabinet. To display SN circuit packs, use the all , carrier , or board qualifiers.		
	stations	Displays every circuit pack that can be assigned stations, including DS1 circuit packs for remote stations. Every assigned port appears. See list configuration stations on page 214.		
	trunks	Displays every circuit pack that can be used for administering trunks. Every assigned port appears.		
	schedule	See Common Input Parameters on page 25.		
		Examples: list configuration carrier 2c schedule list configuration port-network 5 list configuration stations		
				2 of 2

The following display shows a typical result of **list configuration all**.

list configuration all										Page 1
SYSTEM CONFIGURATION										
Board Number	Board Type	Code	Vintage	Assigned Ports						
				u=unassigned	t=tti	p=psa				
01A01	CALL CLASSIFIER	TN744E	000002	01	02	03	04	05	06	07 08
01A02	IP SERVER INTFC	TN2312AP	HW32 FW042	01	02	03	04	05	06	07 08
01A05	IP MEDIA PROCESSOR	TN2302AP	HW03 FW034	01	02	03	04	05	06	07 08
01A06	CONTROL-LAN	TN799C	000003	u	u	u	u	u	u	u
				u	u	u	u	u	u	u
				17						
01A08	CO TRUNK	TN747B	000026	u	u	u	u	u	u	u
01A09	ANALOG LINE	TN793B	000005	u	u	u	u	u	u	u
				u	u	u	u	u	u	u
				u	u	u	u	u	u	u
01A10	DIGITAL LINE	TN2224B	000003	01	u	u	u	u	u	u
				u	u	u	u	u	u	u
				u	u	u	u	u	u	u
01A05	VAL-ANNOUNCEMENT	TN2501AP	HW01 FW111	01	02	03	04	05	06	07 08
				09	10	11	12	13	14	15 16
				17	18	19	20	21	22	23 24
				25	26	27	28	29	30	31 32
				33						

list configuration field descriptions

list configuration field descriptions 1 of 2

Field	Description
Board Number	Location of the circuit pack
Board Type	Type of board
Code	The TN or UN code and suffix of the circuit packs
Vintage	The vintage number, or the hardware (HW) and firmware (FW) vintages of the circuit pack. Also: no board - the circuit pack is administered but not physically installed conflict - the circuit pack administered to the slot differs from the circuit pack that is physically installed no link - the T1 link is down to a DS1 circuit pack
1 of 2	

list configuration field descriptions 2 of 2

Field	Description
Assigned Ports	Each port on the circuit pack is represented by a position corresponding to its circuit number in ascending order from left to right. Two rows appear for circuit packs with more than 8 ports. The assigned ports for list configuration ds1 do not appear. Identifies the current status of the port that corresponds to the position: 01 - 32 - the circuit number of an assigned port m - mj - the port is assigned as an external device major (mj) alarm port mn - the port is assigned as an external device minor (mn) alarm port p - psa (personal station access) t - the port is not assigned and is supported by Terminal Translation Initialization. Activate the port with the TTI association sequence. u - the port exists but is unassigned. Each port on a TN556 ISDN-BRI circuit pack can have two BRI endpoints. BRI ports appear once when assigned only one endpoint and twice when fully configured with two endpoints.
2 of 2	

The following display shows a typical result of **list configuration ds1**.

```
list configuration ds1
```

SYSTEM CONFIGURATION - DS1 Circuit Packs					
Location	Code	Vintage	Signaling	Name	CSU MOD
01B05	TN464F	000002	isdn-pri		120A1
01B06	TN464D	000002	isdn-pri		n/a
01B10	TN767C	000003	none		n/a
01B11	TN767E	000003	robbed-bit		120A1
01B12	TN767E	conflict	none		<blank>
01C06		no board	none		<blank>
01C13	TN464E	000003	common-channel		unknown
01C16	TN767D	000024	robbed-bit		unkonwn
01C18	TN464F	000002	isdn-pri		none

list configuration ds1 field descriptions

list configuration ds1 field descriptions

Field	Description
Location	Location of the DS1 circuit pack
Code	The TN or UN code and suffix of the DS1 circuit packs
Vintage	The vintage number, or the hardware (HW) and firmware (FW) vintages, of the circuit pack. Other values that may be shown: no board - The circuit pack is administered but not physically installed conflict - The circuit pack administered to the slot differs from the circuit pack that is physically installed no link - The T1 link is down to a DS1 circuit pack
Signaling	Appears for list configuration ds1 . Values are the same as the signaling mode administered for the ds1 circuit pack, or none if the circuit pack is not administered.
Name	Appears for list configuration ds1 . Values are the same as the signaling mode administered for the ds1 circuit pack, or none if the circuit pack is not administered.
CSU MOD	Appears for list configuration ds1 option. Contains the identification number of the Integrated CSU module present on the DS1 circuit pack (TN767E or later / TN464F or later), or none . unknown = the circuit pack is a TN464E or TN767D n/a = the circuit pack is a TN464D or TN767C or earlier suffix DS1 board

list configuration media-gateway

`list configuration media-gateway x`

Use `list configuration media-gateway x` to see all the assigned ports on the Media Modules for the specified Media Gateway.

Action/Object	Qualifier	Qualifier Description
<code>list configuration media-gateway</code>	<code>x</code>	media gateway number

This is an example of `list configuration media-gateway 1`

<code>list configuration media-gateway 1</code>									
SYSTEM CONFIGURATION									
Board				Assigned Ports					
Number	Board Type	Code	Vintage	u=unassigned	t=tti	p=psa			
001V1	ANA MM	MM711AP	HW00 FW001	p	p	p	p	p	p
001V2	ANA MM	MM711BP	HW00 FW007	p	p	p	p	p	p
001V3	DCP MM	MM712BP	HW00 FW003	p	p	p	p	p	p
001V4	DCP MM	MM712BP	HW00 FW003	p	p	p	p	p	p

list configuration media-gateway field descriptions

list configuration media-gateway field descriptions

Field	Description
Module Number	Physical location of the ports. <i>Vn</i> is the module number (V1-V4) or the virtual slots V8 or V9.
Module Type	Type of Avaya Media Module in the slot. If an administered Media Module is in conflict with the inserted Media Module, a pound sign (#) appears to the left of the Module Type field on the Media Gateway screen.
Code	Media Module code
Vintage	Hardware and firmware vintage of the module. No code or vintage is listed for the virtual media modules in slots V8 and V9.
Assigned Ports	Status of ports associated with Media Module/slot. Blank means no assigned port.

list configuration power-supply

list configuration power-supply <*cabinet*> <*carrier*>

Use **list configuration power-supply** to see information about the power supplies in a specified **G650** stack with a TN2312BP IPSI or later IPSI circuit pack.

Action/Object	Qualifier	Qualifier Description	Login	Default
list configuration power-supply	<i>cabinet</i> <i>carrier</i>	cabinet location carrier location	init super-user inads craft dadmin any login with Switch Circuit Pack Maintenance permissions	

The following display shows a typical result of **list configuration power-supply cabinet**.

```
list configuration power-supply 01
```

SYSTEM CONFIGURATION - 655A Power Supplies						
Power Supply		Power Supply		Power Supply		
Location	Serial Number	Make/Model	Number	SAP	Firmware	Version
01A00	03R405000165	Power Unit	655A Rev 03	700246671	02.15.05	
01A15	03R405130016	Power Unit	655A Rev 01	700246671	02.15.05	
01B00	03R404000120	Power Unit	655A Rev 03	700246671	02.15.05	
01B15	03R404000130	Power Unit	655A Rev 03	700246671	02.15.05	
01C00	03R404000144	Power Unit	655A Rev 03	700246671	02.15.05	
01C15	03R404000136	Power Unit	655A Rev 03	700246671	02.15.05	
01D00	03R404000125	Power Unit	655A Rev 03	700246671	02.15.05	
01D15	03R043270034	Power Unit	655A Rev 03	700246671	02.15.05	
01E00	03R404000133	Power Unit	655A Rev 03	700246671	02.15.05	
01E15	03R404000109	Power Unit	655A Rev 03	700246671	02.15.05	

list configuration power-supply field descriptions

list configuration power-supply

Field	Description
Location	The power supply cabinet/carrier/slot
Power Supply Serial Number	The serial number of the power supply
Power supply Make/Model Number	The apparatus code and hardware revision number of the power supply. If the system cannot communicate with the power supply, or if the power supply is removed from the carrier, this field contains the message "power supply not present."
SAP [®]	Part number SAP is a registered trademark of SAP America, Inc.
Power Supply Firmware Version	The version number of the power supply firmware (10 characters)

list configuration software-versions

`list configuration software-versions [memory-resident] [schedule]`

Use `list configuration software-version` to display:

- ┆ software version numbers and compatibility indexes of the software load modules stored in system memory (RAM)
- ┆ the dates and times when translation and announcement data were last saved
- ┆ information about any software update files that have been applied to the system

Action/Object	Qualifier	Qualifier Description	Login
<code>list configuration software-versions</code>	<code>memory-resident</code> <code>schedule</code>	Specifies display of RAM-resident files. See Common Input Parameters on page 25.	init inads craft

If the memory card contains a core dump file, fields for tape or memory card data display **coredump**. When a core dump is present, all other files on the device are marked invalid.

If the memory card cannot be read at the time the command is entered, the relevant fields display **no tape or memory card**. (This does not indicate that the system does not recognize the presence of the device.)

The following display shows a typical result of **list configuration software-version**.

```
list configuration software-versions

                                SOFTWARE VERSIONS

SOFTWARE VERSION
  Memory Resident: R015x.00.0.824.0
    Disk Resident: R015x.00.0.824.0

TRANSLATION DATA
  Memory Resident: 11:12 am  FRI OCT 19, 2007
    Disk Resident: 11:12 am  FRI OCT 19, 2007
  Disk Second Copy: good
```

list configuration software-versions

list configuration software-versions field descriptions

Field	Description
SOFTWARE VERSION	Information related to the current software-load module stored in memory
Memory Resident	Version number of the RAM-resident load module
Disk Resident	The last date and time that translation data was saved to disk. This date is read from disk, and is blank if the disk is not installed.
TRANSLATION DATA	Information related to the translation files as stored in memory and the disk.
Memory Resident	Date and time marked on the disk when translation data was last read into memory. This is stored in memory and is not modified by changes to translation data. Date invalid appears when the timestamp does not contain the expected information.
Disk Resident	The last date and time that translation data was saved to disk. This date is read from disk, and is blank if the disk is not installed.
Disk Second Copy	The last date and time that translation data was saved to disk. This date is read from the second copy of the file on the disk.

list configuration stations

list configuration stations

Use **list configuration stations** to see every circuit pack that can be assigned stations, including DS1 circuit packs for remote stations. Every assigned port appears.

Action/Object	Qualifier	Qualifier Description	Login	Default
list configuration stations				

This is an example of **list configuration stations**.

list configuration stations				
SYSTEM CONFIGURATION				
Board			Assigned Ports	
Number	Board Type	Code	Vintage	u=unassigned t=tti p=psa
02A03	DIGITAL LINE	TN754C	0000004	p p p p p p p

list configuration stations field descriptions

list configuration stations

Field	Description
Board Number	Physical location of the port.
Board Type	Type of circuit pack in the slot.
Code	Circuit pack TN code and suffix.
Vintage	Hardware and firmware vintage of the circuit pack.
Assigned Ports	Status of ports associated with the circuit pack/slot. Blank means no assigned port.

craft2

See:

[enable craft2](#)

[disable craft2](#)

enable craft2

Use **enable craft2 xyz** to create a second craft login assigned to profile 3. Only one login in addition to craft may be enabled to use profile 3 at any one time.

To change the name of the second craft login, disable the current login (**disable craft2**) and enable a new one.

Only logins assigned to profiles 0 (**init**), 1 (**inads**), and 2 (**dadmin**) can execute this command.

Action/Object	Qualifier	Qualifier Description	Login
enable craft2	xyz	The name of a second craft login	Profiles 0-2

disable craft2

Use **disable craft2** to remove the second craft login assigned to profile 3.

Only logins assigned to profiles 0 (**init**), 1 (**inads**), and 2 (**dadmin**) can execute this command.

Action/Object	Qualifier	Qualifier Description	Login
disable craft2			Profiles 0-2

cti-link

See:

[busyout cti-link](#) on page 216

[list cti-link](#) on page 217

[list usage cti-link](#) on page 218

[release cti-link](#) on page 218

[test cti-link](#) on page 218

busyout cti-link

busyout cti-link link

Use **busyout cti-link** to busyout a specified endpoint for a link that is administered on the AESVCS Administration page of the **ip-services** screen. An ASAI adjunct link provides connectivity to an ASAI adjunct (for example, CentreVu CT), which is connected to an Ethernet LAN.

See [status link](#) on page 358 for more details on links.

Action/ Object	Qualifier	Qualifier Description	Login	Feature Interaction
busyout cti-link	link	Link number (1- 8)	init inads craft customer -type login	See Feature interactions for busyout cti-link on page 216.

Feature interactions for busyout cti-link

- 1 All ASAI service is disabled.
- 1 A Warning alarm is generated even if more severe CTI link (for example, adj-ip) alarms are present.
- 1 Periodic and scheduled tests continue to run. No alarms more severe than a Warning are generated until the CTI link is released from busyout.
- 1 The release of CTI link from busyout retires all alarms.
- 1 If a problem still exists, background maintenance generates new alarms within a few minutes.

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

list cti-link

Use `list cti-link` to list the administered CTI links.

Action/Object	Qualifier	Qualifier Description	Login
<code>list cti-link</code>	<i>link number</i> <i>count</i>	Max # of links to list	init inads craft cust

See [status link](#) on page 358 for more details on links.

The following screen is an example of `list cti-link`.

list cti-link						
CTI LINKS						
Link	Ext	Type	Port	Name		COR
1	400123	ADJ-IP				1
2	400124	ASAI	01A0701	MAPD link to issak		1

list cti-link field descriptions

Field	Description
Link	The link number
Ext	The extension associated with the CTI link (the extension is required but not used)
Type	Link type: ASAI-IP, ADJ-IP, ASAI, ADJLK
Port	Port number
Name	Node name for this link
COR	Class of restriction number

list usage cti-link

list usage cti-link *link*

Use **list usage cti-link** to list vectors and IP services that use the specified CTI link, and indicate whether the link is currently used to monitor a hunt-group as a controlling link, and/or through an event notification or domain control association.

CTI links are identified by the CTI link number in Communication Manger administration screens, not by extensions. For CTI links, use **list usage cti-link** instead of **list usage extension**.

Action/Object	Qualifier	Qualifier Description	Login
list usage cti-link	<i>link</i>	Link number (1-64)	init inads craft customer-type login

release cti-link

release cti-link [link *n*]

Use **release cti-link** to release a busied-out endpoint for a link that is administered on the AESVCS Administration page of the ip-services form. An ASAI adjunct link provides connectivity to an ASAI adjunct (e.g., CentreVu CT), which is connected to an Ethernet LAN.

See [status link](#) on page 358 for more details on links. For more information, also see [Busyout and Release Commands](#) on page 33.

Action/Object	Qualifier	Qualifier Description	Login	Default
release cti-link	<i>link#</i>	Link number Example: release cti-link 1	init inads craft or any customer type login	

test cti-link

Use **test cti-link** to test the specified CTI link.

For more information on the CTI link, see [status firmware download](#) on page 293. See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>test cti-link</code>	<i>n</i> short long repeat clear	link number See Common Input Parameters on page 25.	init inads craft	short 1

customer alarm

test customer-alarm

```
test customer-alarm UUC [short | long] [repeat repeat# | clear]
[schedule]
```

Use `test customer-alarm` to test the customer provided alarm device by closing the alarm relay contact on the PN and EPN maintenance circuit pack in a specified cabinet, including the TN2312BP, for one minute and then restoring the alarm relay contact to its current state. Verify the test by checking the customer alarm attached to the specified circuit pack.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>test customer-alarm</code>	location short long repeat <i>n</i> clear	Extension of the data module or data channel to be tested, per dial-plan See Common Input Parameters on page 25. Examples: <code>test customer-alarm</code> <code>test customer-alarm 02 r 2</code> <code>test customer-alarm 01b r 25</code> <code>test customer-alarm 2a</code> <code>test customer-alarm 2a sh</code> <code>test customer-alarm 3 c</code>	init inads craft dadmin switch circuit pack maintenance permissions	1a 1

data-module

See:

[busyout data-module](#) on page 220

[release data-module](#) on page 221

[status data-module](#) on page 221

[test data-module](#) on page 223

busyout data-module

busyout data-module extension

Use **busyout data-module** to put a data module in a maintenance busy state, even an uninstalled data module.

Use **release data-module** to return the specified data module or data channel into service.

Action/Object	Qualifier	Qualifier Description
busyout data-module	extension	Extension number per dial plan Example: busyout data-module 31300

Use **list data-module** to see a list of every data module administered on the system, including the extension, port, type and other data for each data module. The maintenance object name for each data module in the **Type** field is:

Type of data module	Maintenance Object
adm-t	BRI-SET
announcement	DAT-LINE
dtdm	DIG-LINE
pdm	PDMODULE
system-port	DAT-LINE

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

release data-module

Use **release data-module** to activate the specified data module or data channel. Hardware tests are executed to verify that the equipment is functioning.

For more information see [Busyout and Release Commands](#) on page 33.

Action/Object	Qualifier	Qualifier Description	Login
release data-module	<i>extension</i>	Extension number associated with data module or data channel.	init inads craft cust nms

status data-module

status data-module *extension*

Use **status data-module** to see the internal software states of a specified data-module port. This information helps diagnose and locate facilities to which the data module is connected.

Action/Object	Qualifier	Qualifier Description	Login
status data-module	<i>extension</i>	Data module extension	init inads craft cust rcust bcms browse

```
status data-module 70058
                                DATA-MODULE STATUS

Data Ext/Stn Ext for Stn DM: 70058      Service State: in-service/idle
Port/Channel Number: 26A0817      Maintenance Busy? no
                                CF Destination Ext:

Connected Ports:
```

status data-module field descriptions

status data-module field descriptions

Field	Description
Data Ext/Sta Ext for Stn DM	The data module extension number. For DTDMs, the connected station extension is shown.
Port/ChannelNumber	The location of the port connected to the data module. For data channels, the channel number is shown.
Service State	The operational state of the data-module: in-service/idle The data module is connected but idle. in-service/active The data module is connected and in use. out-of-service The data module has been removed from service. disconnected The data module no longer appears to be present

If the specified port is administered as a system port, the following fields will be for more information.

status data-module system port field descriptions

Field	Description
CF Destination Ext	The call-forwarding destination, if any, of the station.
Maintenance Busy	Whether the object is busied out for testing.
Connected Ports	Locations of ports to which the data module is currently connected.
Service State	The operational state of the associated port.

test data-module

test data-module *extension* [short | long] [*repeat#* | clear] [schedule]

Use **test data-module** to perform hardware diagnostic tests on a data module or a data channel. Test results are determined by the interface to the digital switch-data line port, digital line port, or network control data channel.

Action/Object	Qualifier	Qualifier Description	Login	Default
test data-module	extension short long repeat <i>n</i> clear	Extension of the data module to be tested (per dial-plan) Examples: test data-module 30000 1 test data-module 30000 test data-module 32000 sh r 2 test data-module 33000 l r 25 test data-module 30000 c	init inads craft cust nms	short 1

dialplan

display dialplan

For information about **display dialplan**, see *Administrator Guide for Avaya Communication Manager (03-300509)*.

directory

list directory

list directory *board location* | *PPCSS*

Use **list directory board** to list every file in the specified board's memory filesystem.

The forward slash (/) is the default path for listing files in the root directory. To list the files in a directory other than the "/" root directory, specify the complete path.

Action/Object	Qualifier	Qualifier Description
list directory	<i>PPCSS</i> [<i>full path</i>]	board location file/directory name

The following is an example of **list directory board 1C12**.

list directory board 1C12				Page	1
LIST DIRECTORY					
Board	File/Directory	Creation		Size	
Location	Name	Date	Time	Kb	
01C12	F:fwdlimg464gv01	2007/01/01	00:00:00	367	
01C13	F:fwdlimg2302av01	2007/02/29	23:59:59	493	
D = Directory F = File					

disabled-MOs

list disabled-MOs

list disabled-mos [schedule]

Use **list disabled-mos** to list the maintenance objects that have been disabled with **disable mo**, **disable all**, or **disable mo-all**, as well as whether or not the command has been run.

Use **display disabled-tests** for numbers of tests that have been disabled.

Action/Object	Qualifier	Qualifier Description
list disabled-mos	schedule	See Common Input Parameters on page 25.

disabled-tests

display disabled-tests

This command lists the numbers for all maintenance tests that have been disabled by INADS. These tests are not be available for background or demand testing.

Action/Object	Qualifier	Qualifier Description	Login
display disabled-tests			init inads craft cust rcust

ds1-echo-cancellation

change ds1-echo-cancellation

pin-cancellation xx

Use **change ds1-echo-cancellation** to change the plan number of the echo cancellation circuitry.

Communication Manager allows 10 different sets of parameters (plans) to be administered. Each plan contains approximately 120 parameters. Initially, all 10 plans are identical (all 120 fields on each plan have the same default values). Plan 1 is display only. Plans 2 - 10 can be changed.

Echo cancellation is a software, right-to-use feature that is intended for channels supporting voice. It is not intended for channels that support data. Echo Cancellation on the TN464GP/TN2464BP is selectable per channel. The TN464GP/TN2464BP has the capability to detect modem tone and to turn off echo cancellation accordingly.

Echo cancellation is turned on or off on a trunk group basis using **change trunk-group**. If **DS1 Echo Cancellation** is **y** on the **TRUNK GROUP** form, echo cancellation is applied to every TN2405AP trunk member in that trunk group. The echo cancellation parameters used for a given trunk member are determined by the Echo Cancellation Plan number administered on the DS1 CIRCUIT PACK form for that specific trunk's board. If **DS1 Echo Cancellation** is **n** on the **TRUNK GROUP** form, echo cancellation is turned off for every TN2405AP trunk member in that trunk group.

Action/Object	Qualifier	Qualifier Description	Login
change ds1-echo-cancellation	xx	plan number to change Example: change ds1-echo-cancellation 05	init inads craft

change ds1 01c0401	Page 1 of 1
DS1 CIRCUIT PACK	
Location: 01C04	Name:
Bit Rate: 1.544	Line Coding: ami-zcs
Line Compensation: 1	Framing Mode: esf
Signaling Mode: common-chan	
Idle Code: 11111111	
DMI-BOS? y	
Slip Detection? n	
Echo Cancellation? y_	
EC Direction: inward_	
EC Configuration: 1_	

change ds1-echo-cancellation field descriptions

change ds1-echo-cancellation field descriptions

Field	Description
Echo Cancellation	y/n y = echo cancellation is activated.
EC Direction	the direction that echo is being cancelled
EC Configuration	Determines which set of echo cancellation defaults will be administered. Configuration 1 provides the most rapid adaptation in detecting and correcting for echo at the beginning of a call, regardless of the loudness of the talker's voice. Configurations 5-15

ds1-facility

See:

[busyout ds1-facility](#) on page 227

[test ds1-facility](#) on page 228

busyout ds1-facility

busyout ds1-facility location [override]

Use **busyout ds1-facility** to put a DS1 facility of a DS1C complex into a maintenance busy state. Each DS1C complex uses from 1 to 4 DS1 facilities.

- 1 The packet facility carries the control channel for every facility in the complex, all packet traffic, and some circuit connections.
- 1 The other facilities carry circuit connections only.

Action/Object	Qualifier	Qualifier Description
busyout ds1-facility	location override	Location of the ds1-facility All packet and circuit traffic on the packet facility is switched to another facility, and all traffic that was on the destination facility before the switch is dropped. Example: busyout ipserver-interface 6b

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

Whenever the circuit pack resets, the packet facility is set on the “a” facility. If system software detects a problem with this facility, it switches the packet and control traffic to another facility. The **busyout** command is not allowed on the packet facility without **override**. When **override** is used, all packet and circuit traffic on the packet facility is switched to one of the other three facilities, and all traffic that was on the destination facility before the switch is dropped.

There is no way to tell which facility is carrying the packet and control traffic without attempting to busy it out. If there is only one facility left in service on the circuit pack, it cannot be busied out. In this case, the circuit pack must be busied out.



CAUTION:

Busying out a non-packet facility disrupts all traffic carried on that facility. Using **override** to busy the packet facility disrupts all traffic on the facility to which the packet and control traffic is moved. This facility cannot be determined in advance.

On critical-reliability systems (duplicated PNC) a facility on the active PNC cannot be busied out. Use **busyout pnc** to busyout a standby PNC, and then busyout a facility on the standby PNC.

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

test ds1-facility

```
test ds1-facility location [short | long | external loopback]
[repeat#] [schedule]
```

Use `test ds1-facility` on **S8700 MC** to perform a series of tests on the specified facility. Each test runs diagnostics on the facility and returns results of the test along with any possible error codes. The `long` test is destructive and is not allowed unless the facility has been busied out.

Action/Object	Qualifier	Qualifier Description
test ds1-facility	location	The location of the DS1 Converter circuit pack plus a letter (a to d) corresponding to the four facilities connected to the circuit pack.
	short	
	long	This initiates a destructive test that sends a test pattern to an external device and returns it for comparison to the original. Configure the external device to loop back the signal. See DS1-FAC (DS1 Facility) on page 728 in <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430)</i> (formerly 03-300190) and DS1-BD (DS1 Interface Circuit Pack) on page 717 in <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430)</i> (formerly 03-300190).
	external loopback	
	repeat#	See Common Input Parameters on page 25.
	schedule	Examples: <code>test ds1-facility 04a01d</code> <code>test ds1-facility 03a01a sh c</code>

ds1-loop

test ds1-loop

```
test ds1-loop location [cpe-loopback-jack-test-begin [number-of-bits
bit-pattern] | far-csu-loopback-test-begin | one-way-span-test-begin |
end-loopback/span-test | inject-single-bit-error | ds1/
csu-loopback-tests]
```

For TN464F or TN767E or later suffix DS1 Interface circuit packs, use **test ds1-loop** for loopback and one-way span testing of the DS1 span.

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test ds1-loop	<i>location</i> <i>cpe-loopback-jack-test-begin</i> <i>number-of-bits bit-pattern</i> <i>far-csu-loopback-test-begin</i> <i>one-way-span-test-begin</i> <i>end-loopback/span-test</i> <i>inject-single-bit-error</i> <i>ds1/csu-loopback-tests</i>		system technician inads init super-user logins with Maintain Switch Circuit Packs permissions	ds1/ csu-loop back-	See Feature Interactions for test ds1-loop
		See Parameters for test ds1-loop on page 230 . Examples: <pre>test ds1-loop 01c08 test ds1-loop 1-3c03 cpe test ds1-loop 10c03 end test ds1-loop 02d12 fa test ds1-loop 02d12 inj test ds1-loop 1-3c03 cpe-loopback-jack</pre>			

Use **test ds1-loop** to validate that the board exists at the specified location, that the board is a TN464F or TN767E or later suffix DS1 Interface board. Based on the command parameter, a long-duration loopback/span test or series of short-duration loopback tests will be executed.

Long-duration loopback tests execute for an extended period of time until the system technician terminates it. Short-duration loopback tests return the result of the test to the screen when finished executing. Use **list measurements ds1 summary** to monitor the status of a long-duration loopback/span test.

If the **[inject-single-bit-error]** parameter is used, but no CPE loopback jack, far-end CSU, or one-way span test is active on the DS1 circuit pack, the following error message appears:

Parameter valid only if a loopback/span test is active on the DS1

Parameters for test ds1-loop

Parameters for test ds1-loop

location	A <i>location</i> represents the physical position of the board to be tested. It is represented by the cabinet number, the carrier, and the slot position. A 1-digit cabinet (1-3) is entered with or without a leading zero (0).
cpe-loopback-jack-test-begin [number-of-bits bit-pattern]	For TN464F or TN767E or later suffix DS1 boards, this causes a long-duration loopback test to be setup through the CPE (customer-premises equipment) loopback jack. The command allows you to specify a loop-up code for the CPE loopback jack if it differs from the default of 0x47F. Specify the <i>number-of-bits</i> in the loop-up code as well as the actual <i>bit-pattern</i> (in hexadecimal). The test aborts if the <i>busyout</i> command has not been set
far-csu-loopback-test-begin	For TN464F or TN767E or later suffix DS1 boards, this causes a long-duration loopback test to be setup through the far-end CSU (channel service unit).
one-way-span-test-begin	For TN464F or TN767E or later suffix DS1 boards, this begins execution of a long-duration one-way span test.
end-loopback/span-test	For TN464F or TN767E or later suffix DS1 boards, this parameter terminates long-duration one-way span and loopback testing.
inject-single-bit-error	For TN464F or TN767E or later suffix DS1 boards, this parameter causes a single bit error to be sent within an active framed 3-in-24 test pattern used in long-duration loopback and span testing.
ds1/csu-loopback-tests	For TN464F or TN767E or later suffix DS1 boards, this parameter executes the following loopback tests: DS1 Board LoopBack, CSU Module Equipment LoopBack, and CSU Module Repeater LoopBack. These tests are performed sequentially for a short duration each, and individual PASS/FAIL/ABORT test results are reported following each test.

Feature Interactions for test ds1-loop

Loopback or span tests are allowed only on DS1 boards that are busied out.

Only one of the CPE loopback jack, far-end CSU, one-way span, or DS1/CSU loopback tests may be active at any given time on a DS1 span.

eda-external-device-alm

See:

[list eda-external-device-alm](#) on page 231

[test eda-external-device-alm](#) on page 231

list eda-external-device-alm

For detailed information about `list eda-external-device-alm`, refer to EXT-DEV in *Maintenance for Avaya Communication Manager and DEFINITY® Server CSI* (555-233-119).

test eda-external-device-alm

```
test eda-external-device-alm all | physical-location [repeat repeat#  
| clear] [schedule]
```

Use `test eda-external-device-alm` to perform hardware diagnostic tests on the alarm port for either an individual device, or every external device.

If `all` is entered, `test eda-external-device-alm` performs a hardware diagnostic test on every administered external device's alarm port. If an administered external device's alarm port is entered, this command performs a hardware diagnostic test on that port.

The test PASSES if the external device is not reporting an external device alarm and FAILS if the external device is reporting an external device alarm. If the technician specifies a port, it must be administered as an external device's alarm port either on a maintenance board or on an analog line board.

Note:

If you enter `test eda-external-device-alm` on an IPSI-connected port, an error message appears. The IPSI circuit pack contains maintenance board functionality.

Action/Object	Qualifier	Qualifier Description	Login	Default
test eda-external-device-alm	all	test every administered external device's alarm port on analog line boards and maintenance boards. See Parameters for test eda-external-device-alm on page 232 .	init inads craft	1
	physical-location repeat repeat# clear schedule	See Common Input Parameters on page 25. Examples: test eda-external-device-alm all test eda-external-device-alm all schedule test eda-external-device-alm physical 1major r 10 test eda-external-device-alm physical 2c1101 c		

Parameters for test eda-external-device-alm

Parameters for test eda-external-device alarm

physical location	For an administered external device alarm analog line port, the physical location represents the physical position of the port to be tested. Since the "maintenance board" alarm connections connect to control carrier boards that are in unnumbered slots, the standard port format cannot be used to designate these alarm connections. The special ports UUmajor and UUminor are used designate the major or minor maintenance board alarm connection for cabinet UU. The special locations <i>UUmajor</i> and <i>UUminor</i> designate the name of the major or minor Maintenance circuit pack alarm connection for cabinet UU (depends upon the auxiliary connector of the Port Network). Thus, both a "major" and "minor" port can be administered with major, minor, or warning alarms.
-------------------	---

emergency

set emergency

set emergency on | off | auto <cabinet>

Use **set emergency** to manually set the state of emergency transfer on a TN2312BP in a media gateway or Compact Modular Cabinet (CMC). **set emergency** generates a major alarm if emergency transfer is set to **on** and generates a warning alarm if emergency transfer is set to **off**.

Use **status health** (all cabinets) or **status cabinet** (individual cabinets) to see the state of emergency transfer.

Action/Object	Qualifier	Qualifier Description	Login
set emergency	on off auto cabinet	activates emergency transfer deactivates emergency transfer the server controls emergency transfer specify the cabinet location (1-64)	init super-user inads craft dadmin switch circuit pack maintenance permissions

environment

See:

[status environment](#) on page 234

[test environment](#) on page 238

status environment

`status environment <cabinet> <carrier>`

Use `status environment` to see status information for the 655A power supplies in a specified **G650** or **G650** stack.

Action/Object	Qualifier	Qualifier Description	Login
<code>status environment</code>	<i><code>cabinet</code></i> <i><code>carrier</code></i>	cabinet location	init super-user inads craft dadmin switch circuit pack maintenance permissions

Note:

The microcontroller on the power supply might provide data for diagnostic tests and `status environment`, even if the power supply itself fails. The microcontroller can get input power from three sources, the supply output voltage, backplane power, or its own power supply, and might work even though the power supply fails. If the power supply is in a control carrier without a redundant power supply and the carrier fails, then communication with the power supply is not available.

Note:

If the system cannot communicate with the power supply, or if the power supply is removed from the carrier, all fields except **Pow Loc** and **Alm Cnt** contain a single dash (-).

The following display shows a typical result of **status environment**.

status environment 01														
CABINET POWER SUPPLY STATUS (655A)														
Pow	Alm	Temp(F/C)		Hot	Voltage			FAN		Ring Voltage			Input	
Loc	Cnt	InLet	Exhst	Spot	+5	-5	-48	Ctrl	Alm	Stat	Ctrl	Set	Det	Power
01A00	0	64/18	66/19	ok	5.05	5.08	48.5	mid	N	ok	actv	20HZ	Y	AC
01A15	0	64/18	66/19	ok	5.10	5.13	49.3	mid	N	ok	stby	20HZ	Y	AC
01B00	0	66/19	64/18	ok	5.08	5.10	48.8	mid	N	ok	actv	20HZ	Y	AC
01B15	0	62/17	64/18	ok	5.08	5.13	48.5	mid	N	ok	stby	20HZ	Y	AC
01C00	0	64/18	66/19	ok	5.10	5.10	49.0	mid	N	ok	actv	20HZ	Y	AC
01C15	0	62/17	64/18	ok	5.08	5.10	48.5	mid	N	ok	stby	20HZ	Y	AC
01D00	0	62/17	64/18	ok	5.10	5.10	48.8	mid	N	ok	actv	20HZ	Y	AC
01D15	1	147/64		ok	5.08	5.05	48.8	mid	N	ok	stby	20HZ	Y	AC
01E00	0	64/18	64/18	ok	5.08	5.08	48.5	mid	N	ok	actv	20HZ	Y	AC
01E15	0	64/18	64/18	ok	5.10	5.08	48.8	mid	N	ok	stby	20HZ	Y	AC

status environment field descriptions

status environment field descriptions 1 of 3

Field	Description
Pow Loc	Location of the 655A power supply (cabinet/carrier/slot)
Alm Cnt	Number of active major and minor alarms for the maintenance objects, MO_E_I2C_BUS, MO_E_POW_SUP, MO_E_CAB_TEMP, MO_E_RING_GEN
Temp (F/C) In	The inlet air flow temperature (Fahrenheit is on the left and Celsius is on the right)
Temp (F/C) Ex	The outlet air flow temperature (Fahrenheit is on the left and Celsius is on the right)
Hot Spot	The status of the temperature at the power supply's hot spot: - ok - wn (warning) - sh (shutdown)
1 of 3	

status environment field descriptions 2 of 3

Field	Description
Voltage	The three voltages monitored are: ┆ +5VDC Primary logic control ┆ -5VDC Logic support ┆ -48VDC Telephone support (Talk Battery)
Fan Ctrl	The speed at which the fans are running. Fan voltage is: ┆ udr = under 12VDC ┆ mid = +12VDC ┆ hgh = +14VDC ┆ ovr = above +14
Fan Alm	A fan alarm occurs when one or more fans fail.
Ring Voltage Stat	Status of the ringer on the associated power supply. See Ring Status and Ring Control states on page 237 for the valid states for Ring Stat and Ring Ctrl: ┆ ok ┆ over (overloaded) ┆ shrt (shorted) ┆ fault ┆ cmd (commanded off)
Ring Voltage Ctrl	Indicates if the associated power supply is providing ringing voltage for the G650 . Only one power supply can provide ringing voltage to the carrier. See Ring Status and Ring Control states on page 237 for the valid states for Ring Ctrl and Ring Stat: ┆ actv (active) ┆ stby (standby) ┆ dsbl (disabled, see Ring Set field values) ┆ off (due to short or internal failure)
Ring Voltage Set	Indicates the ringing voltage frequency. The ringing voltage frequency is set via a physical switch on the 655A power supply: ┆ 20 Hz (North American Ringer Signal) ┆ 25 Hz (European/International Ringer Signal) ┆ off (The ringer switch on the power supply is set to <i>off</i>.)
2 of 3	

status environment field descriptions 3 of 3

Field	Description
Det	y - backplane ringing is detected n - backplane ringing is not detected
Input Power	Type of current (active input voltage) that is being used on the power supply and an alternate source that can be used. Lower case letters indicate that an input source is present but not being used. Upper case letters indicate the input source that is being used. - ı AC (Alternating Current) - ı DC (Direct Current)
3 of 3	

Ring Status and Ring Control states

Stat/Ctrl	Ring Generator State
ok/actv	The ring generator on this power supply is the active ringer.
ok/stby	The ring generator on this power supply is the standby ringer
ok/dsbl	The ring generator on this power supply is OK, but is disabled with the ringer select switch on the power supply. This is done when an external ringer is used, for example the TN2202 French Ringing circuit pack.
over/actv	The ringer voltage on this power supply is overloaded, but the ring generator on this power supply is still active.
shrt/off	The ring generator on this power supply is off due to a short on its output.
fault/off	The ring generator on this power supply is off due to a failure detected by an internal power supply audit.
cmd/off	The ring generator on this power supply is off due to a software command.

test environment

```
test environment UU [short | long] [repeat# | clear] [schedule]
```

Use **test environment** to perform hardware diagnostic tests of the environment monitoring and control, and emergency transfer functions of a specified cabinet. This command tests PN cabinets. Circuit packs involved are the PN's maintenance and tone-Clock (for the ring generator test).



CAUTION:

The **long** test recycles power on every port circuit pack carrier and is destructive. It does not recycle power on active or standby servers. When a port carrier is recycled, all service and links to ports on the carrier are dropped. If a carrier containing an active EI or Tone-Clock is recycled, all service to that cabinet is disrupted.

Action/Object	Qualifier	Qualifier Description	Login
test environment	UU short long repeat# clear schedule	cabinet location See Common Input Parameters on page 25.	init super-user inads craft dadmin switch circuit pack maintenance permissions

In **test environment**, there are 6 maintenance objects involved on **S8700 IP** servers, and 10 maintenance objects involved on **S8700 MC** servers.

Maintenance Objects reported with the test environment command 1 of 2

Maintenance Object	Notes
AC-POWER	
CABINET	
CARR-POW	
CUST-ALARM	CUST-ALARM is part of the environment functionality but is not tested with test maintenance . See test customer-alarm on page 219.
DC-POWER	
EMG-XFER	
1 of 2	

Maintenance Objects reported with the test environment command 2 of 2

Maintenance Object	Notes
EXT-DEV	Appears when the External Device Alarm Admin field is n on the <code>change system-parameters customer-options</code> screen.
POWER	
RING-GEN	
RMV-GEN	Appears when the rack mount cabinet is used on S8700 IP-PNC .
2 of 2	

errors

See:

[clear errors](#) on page 239

[display errors](#) on page 239

clear errors

`clear errors`

Use `clear errors` to move every error and resolved alarm to the cleared errors list, to make room for new incoming error messages that might otherwise be dropped. `Clear errors` does not clear active alarms from the alarm log. Cleared error entries are the first entries overwritten when additional room is needed to log new entries.

Use `display errors clear` to list the cleared errors.

**WARNING:**

Use `clear errors` with care. Cleared data is lost when the logs fill up.

Action/Object	Qualifier	Qualifier Description	Login
<code>clear errors</code>			init inads craft

display errors

`display errors [high-resolution] [schedule]`

Use **display errors** to select the errors that appear on the hardware error report.

Errors can result from in-line firmware errors, periodic tests, failures detected while executing a test command, software inconsistency, or a data audit discrepancy. The error log is restricted in size. A new entry overwrites the oldest unalarmed entry. The overwritten entry must be at least six minutes old, or the new entry is dropped.

Action/Object	Qualifier	Qualifier Description
display errors	high-resolution schedule	Include high resolution time stamps for the first occurrence and last occurrence of the error. This shows seconds and a sequence count within a second. The sequence count starts over for each second. See Error Log Report High Resolution on page 243. See Common Input Parameters on page 25.

Help Messages

- 1 When the first page of a multiple page list of alarms/errors or after the **Prev Page** key is pressed:

Press CANCEL to abort or NEXT PAGE for next page

- 1 After the **Next Page** key is pressed and there are more pages of alarms/errors to be displayed:

Press CANCEL to abort, NEXT PAGE for next page, PREV PAGE for previous page

- 1 After the **Next Page** key is pressed and there are no more alarms/errors to be displayed:

Press CANCEL to abort, NEXT PAGE to complete, PREV PAGE for previous page

System Reboots and the Error and Alarm Logs

Avaya™ Communication Manager software attempts to save the error and alarm logs to the disk when any of the following events take place:

- 1 The **save translation** command is executed.
- 1 Translations are saved as part of scheduled maintenance (as administered on the Maintenance-Related System Parameters screen).
- 1 A demand or software-escalated system reboot takes place.

Whenever the Communication Manager software reloads, the error log is restored from the disk. Since the logs are saved to the disk, the versions restored at reload time may not be current. This occurs when either:

- 1 The attempt to save at reload did not succeed.
- 1 The server that is active coming out of reload is not the same one to which the logs were last saved.

In such a case, the logs will not show the errors and alarms that have been logged since the last time a save was made to the server that became active with the reboot. When looking at errors that precede the last reload, look for indications preceding the reload to determine whether the logs restored at reboot are complete.

System resets less severe than a reload rarely affect the error and alarm logs.

Note:

If there are SYSTEM errors in the error log, use [display initcauses](#) on page 315 for more information. Information that could not be logged during a system reset may be found here.

display errors input form

This screen specifies which errors display on the report. When every selection has been made, press **ENTER**. If no selections are made or if the schedule option is specified, every error from the last day that are associated with active alarms display.

display errors	Page 1 of 1
ERROR REPORT	
The following options control which errors will be displayed.	
ERROR TYPES	
Error Type: _____	Error List: active-alarms
REPORT PERIOD	
Interval: _	From: __/__/__:__ To: __/__/__:__
EQUIPMENT TYPE (Choose only one, if any, of the following)	
Media Gateway: _____	
Cabinet: _____	
Port Network: _____	
Board Number: _____	
Port: _____	
Category: _____	
Extension: _____	
Trunk (group/member): _____/_____	

display errors input field descriptions

display errors field descriptions

Field	Description
Error Type	The report can be restricted to specific error codes. Default is every error.
Error List	The report can be restricted to errors from one of three lists described below: active-alarms, errors, or cleared-errors. Default is active-alarms.
Interval	Specifies error records for the last month, hour, day, week, or all errors (m , h , d , w , a). The default is all.
From	Specifies error records starting from the time specified by mm/dd/hh/mm (month/day/hour/minute). If no From date is entered, errors from the earliest record in the log are displayed.
To	Specifies every error record up to the time specified by mm/dd/hh/mm . If no To date is entered, every error up to the current date appears.
Equipment Type	To limit the report to a specific group of components, enter the location of a type of equipment in one of the following fields. If no entry is made, errors for the entire system are displayed. 1 Media Gateway: Enter the media gateway number. 1 Cabinet: Enter the cabinet number. 1 Port Network; Enter the port network number. 1 Board: Enter the cabinet-carrier-slot address of the circuit pack (for example, 11c04). If the cabinet number is omitted, it defaults to 1. 1 Port: Enter the cabinet-carrier-slot-circuit address of the port (for example, 11c0408). If the cabinet number is omitted, the system will default to 1. 1 Category: Enter a category to restrict the report to maintenance objects in a specific category. The HELP key displays a list of categories. 1 Extension: Enter the extension number of a port. 1 Trunk (group/member): Enter a trunk-group number, or a trunk-group and member number separated by a slash (for example, 78 or 78/1).

The following Hardware Error Report shows a typical result for **display errors** with default input settings.

Error Log Report Without High Resolution

The following example shows a typical result when **display errors** is entered with the default input settings.

display errors											Page 1 of x
HARDWARE ERROR REPORT - ACTIVE ALARMS											
123456789	12345678	123456789012345	12345	12345	12/12/12:12	123	123	123	1	1	
Port	Mtce	Alt	Err	Aux	First/Last	Err	Err	Rt/	Al	Ac	
	Name	Name	Type	Data	Occurrence	Cnt	Rt	Hr	St		
01A0302	MEDPROPT		1025		10/11/10:23	137	5	3	a	y	
					10/12/10:09						
01A03	IPMEDPRO		2305	2801	10/11/10:22	1	0	0	a	y	
					10/11/10:22						

Error Log Report High Resolution

The following example shows a typical result when **display errors high-resolution** is entered with the default input settings.

display errors high-resolution											Page 1 of x
HIGH RESOLUTION HARDWARE ERROR REPORT - ACTIVE ALARMS											
Port	Mtce	Alt	Err	Aux	First/Last	Sq	Err	Al			
	Name	Name	Type	Data	Occurrence	Ct	Cnt	St			
006	MED-GTWY		1	0	11/22/14:42:48	1	1	a			
					11/22/14:42:48	1					
007	MED-GTWY		1	0	11/22/14:42:48	2	1	a			
					11/22/14:42:48	2					
008	MED-GTWY		1	0	11/22/14:42:48	3	1	a			
					11/22/14:42:48	3					
009	MED-GTWY		1	0	11/22/14:42:48	4	1	a			
					11/22/14:42:48	4					
010	MED-GTWY		1	0	11/22/14:42:48	5	1	a			
					11/22/14:42:48	5					
011	MED-GTWY		1	0	11/22/14:42:48	6	1	a			
					11/22/14:42:48	6					
012	MED-GTWY		1	0	11/22/14:42:48	7	1	a			
					11/22/14:42:48	7					

display errors output field descriptions

display errors output field descriptions 1 of 2

Field	Description
Port	The physical location of the alarmed object. For circuit pack based MOs, the location is cabinet-carrier-[slot]-[circuit]. For PN-based objects, such as TDM-BUS, the location displays as 3PN xx , where xx is the PN number. For Fiber Link-based objects, the location displays as x a,b-PNC where x is the Fiber Link number and a- or b-pnc indicates one of the PNC pair. Always a-pnc for a high-reliability system with an unduplicated PNC.
Maintenance Name	The name of the MO as it appears in the alarm and error logs.
Alt. Name	The alternate name depends upon the type of the object. For example: - Station MO, Alternate Name = nnnnn (extension) - Trunk MO, Alternate Name = nn/n (trunk-group#/member #) - Personal CO line MO, Alternate Name = P/xx (P/personal CO line group #)
Error Type	Numerical error code that identifies the type of problem. The meanings of these codes are explained under the name of the MO in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)</i> .
Aux Data	Additional numerical information about the error type. Only the most recent auxiliary data for each error type appears.
First/Last Occurrence	First line: Month, day, hour, and minute (and second, if the high-resolution command-line option is used) that the error was first recorded. Second line: The month, day, hour, and minute (and second, if the high-resolution command-line option is used) of the most recent error. If the system is unable to retrieve the time of day when the error occurred, a "dummy" date will be stamped in the log so as to distinguish it from reliable data. It appears as "00/00/01:07"
Seq Cnt	Sequence Count. These numbers give the order in which the errors were logged. Each sequence covers a period of one second. Sequence numbers are assigned to the first and last occurrences of a given error within the one second period given in the time stamp. There may be gaps in the sequence numbers within a given second because the last occurrence of an error may replace an existing entry and because sequence numbers are also assigned to software events not shown in the hardware error log. This information appears when the high-resolution option is specified on the command line.
Err Cnt	The total number of times that the error type has occurred. The maximum entry is 999.
1 of 2	

display errors output field descriptions 2 of 2

Field	Description
Err Rt	Average hourly rate at which the error has occurred from the first occurrence to the present. The maximum entry is 999.
Rt/Hr	An approximation of the rate at which this error occurred in the last hour. The maximum entry displayed is 999.
Al St	Alarm Status – A character indicating the status of this MO in the error and alarm logs. a — active alarm entry r — resolved alarm entry c — resolved alarm entry due to long clear option of test s — resolved alarm entry due to a software-requested (non-demand) system restart t — resolved alarm entry due to a technician-requested system restart n — not alarmed
Ac	y/n The maintenance object is still under active consideration by the maintenance subsystem.
2 of 2	

ess

See:

[change system-parameters ess](#)[display system-parameters ess](#)[disable ess](#)[enable ess](#)[status ess clusters](#)[status ess port-networks](#)

change system-parameters ess

`change system-parameters ess`

Use `change system-parameters ess` to administer each Enterprise Survivable Server.

Action/Object	Qualifier	Qualifier Description	Login
<code>change system-parameters ess</code>			

This is an example of `change system-parameters ess`, pages 1 through 5.

change system-parameters ess											Page 1 of 7
ENTERPRISE SURVIVABLE SERVER INFORMATION											
C1 ID	Plat Type	Server ID	A Node Name	Server ID	B Node Name	Pri Scr	Com	Sys Prf	Loc Prf	Loc Only	

MAIN SERVERS											
1	Duplex	1	135.9 .77 .60	2	135.9 .77 .61						
ENTERPRISE SURVIVABLE SERVERS											
54	Simplex	56	ESS_\$8500			10	1	y	n	n	
2	Duplex	3	ESS_\$8700_1	4	ESS_\$8700_2	20	1	y	n	n	
							1	y	n	n	
							1	y	n	n	
							1	y	n	n	
							1	y	n	n	
							1	y	n	n	
							1	y	n	n	

ESC-x=Cancel Esc-e=Submit Esc-p=Prev Pg Esc-n=Next Pg Esc-h=Help Esc-r=Refresh											

From the ESS that is to be monitored, use the Maintenance Web Interface and the **Configure Server** command to display the Configure ESS page. Note the IP Address that is configured as the Main server Primary Address.

change system-parameters ess, pages 1 through 5

`change system-parameters ess` field descriptions pages 1 - 5 1 of 3

Field	Description
ENTERPRISE SURVIVABLE SERVER INFORMATION	
1 of 3	

change system-parameters ess field descriptions pages 1 - 5 2 of 3

Field	Description
CI ID	Cluster ID (MID from the RFA license file). Use <code>statuslicense -v</code> to see the RFA Module ID (MID) number.
Plat Type	simplex = S8500 server (no data needed for Server B column) duplex = S8700 series server
Server A ID	Server ID as entered on the Set Server Identities web page during server configuration. For S8700 series server, this is the Server ID of the A-side server For S8500 server, this is the Server ID of the only server
Server A Node Name	Node Name of the media server. For S8700 series server, this is the Node Name of the A-side server For S8500 server, this is the Node Name of the only server
Server B ID	Server ID as entered on the Set Server Identities web page during server configuration. For S8700 series server, this is the Server ID of the B-side server For S8500 server, this is blank
Server B Node Name	Node Name of the media server. For S8700 series server, this is the Node Name of the B-side server For S8500 server, this is the Node Name of the only server
Pri Scr	1 - 100 The Priority Score (plus community and preference) helps determine the position of the ESS on an IPSI's Priority Score List. The Port Network IPSI chooses the ESS with the highest priority score in the event of a failover. An IPSI uses only the Priority Score to prioritize an ESS when the server is assigned a priority score and no preferences.
Com	Community number identifies a virtual group of one ESS and one or more Port Networks. Assigning an ESS to a community associates the ESS with the IPSI in the Port Networks for that community. The Port Networks are assigned to Communities in the system-parameters ess form.
Sys Prf	y = the System Preferred (Sys Prf) ESS has a higher value than any other Local Preferred server (independent of Community or Priority Score). Use y to keep as much of the system network intact as possible, allowing one ESS to replace the Main server. When multiple System Preferred servers are administered, the server with the highest administered priority value has the top priority on the IPSI Priority List. n = Loc Prf and Loc Only may be y or n .
2 of 3	

change system-parameters ess field descriptions pages 1 - 5 3 of 3

Field	Description
Loc Prf	y = the Local Preferred (Loc Prf) ESS has the second highest value within an IPS community, after a System Preferred ESS. Use y to have the ESS accept the request for service from IPSIs co-located in the same geographical region, WAN/LAN segment, district, business unit, etc. When multiple Local Preferred servers are administered within the same community, the server with the highest priority score has the higher priority on the IPSI Priority List. n = default
Loc Only	y = the Local Only (Loc Only) preference has no priority value. A Local Only ESS advertises only to the IPSI within its community. A Local Only server can also use the Local Preferred setting to increase its priority on a local IPSI's Priority List. Use y to have the ESS accept the request for service only from an IPSI in the same community as the ESS. If a Local Preferred server (outside its administered community) advertised to an IPSI in the same community as a Local Only server, the rank on the IPSI's Priority List is determined by the priority score of each server. n = default
3 of 3	

This is an example of `change system-parameters ess`, page 6.

change system-parameters ess					Page 6 of 7
COMMUNITY ASSIGNMENTS FOR PORT NETWORKS					
PN Community	PN Community	PN Community	PN Community	PN Community	
1: 1	14: 1	27: 1	40: 1	53: 1	
2: 1	15: 1	28: 1	41: 1	54: 1	
3: 1	16: 1	29: 1	42: 1	55: 1	
4: 1	17: 1	30: 1	43: 1	56: 1	
5: 1	18: 1	31: 1	44: 1	57: 1	
6: 1	19: 1	32: 1	45: 1	58: 1	
7: 1	20: 1	33: 1	46: 1	59: 1	
8: 1	21: 1	34: 1	47: 1	60: 1	
9: 1	22: 1	35: 1	48: 1	61: 1	
10: 1	23: 1	36: 1	49: 1	62: 1	
11: 1	24: 1	37: 1	50: 1	63: 1	
12: 1	25: 1	38: 1	51: 1	64: 1	
13: 1	26: 1	39: 1	52: 1		
ESC-x=Cancel Esc-e=Submit Esc-p=Prev Pg Esc-n=Next Pg Esc-h=Help Esc-r=Refresh					

change system-parameters ess, page 6 field descriptions

change system-parameters ess, field descriptions page 6

Field	Description
COMMUNITY ASSIGNMENTS FOR PORT NETWORKS	
PN Community 1 - 65	Assign a community number to each Port Network (1 - 65). Match the Port Network community number and the ESS community number (also assigned on system-parameters ess) to place them in the same community.

This is an example of **change system-parameters ess**, page 7.

```

change system-parameters ess                                     Page 7 of 7

      ENTERPRISE SURVIVABLE SERVER OPTIONAL FEATURES

FAILOVER PARAMETERS                                           FALLBACK PARAMETERS
No Service Time Out Interval: 5                               Auto Return: no

ESC-x=Cancel Esc-e=Submit Esc-p=Prev Pg Esc-n=Next Pg Esc-h=Help Esc-r=Refresh

```

change system-parameters ess, page 7 field descriptions

change system-parameters ess, field descriptions page 7

Field	Description
ENTERPRISE SURVIVABLE SERVER OPTIONAL FEATURES	
1 of 2	

change system-parameters ess, field descriptions page 7

Field	Description
No Service Time Out Interval	Number of minutes that the IPSIs wait before requesting service from the highest ESS on the priority list. 3-15 minutes
Auto Return	no = The Main server does not automatically regain control of all Port Networks after a failover occurs. scheduled = additional fields are displayed to schedule the Day and Time for all Port Networks to return to the control of the Main server after a failover occurs. yes = The Main server automatically regains control of all Port Networks after a failover occurs. An additional field, IPSI Connection up time, is displayed. Valid values are 3 - 120 minutes. This is the time the IPSI's connection with the main must remain up (stable) before the Auto Return takes effect. In the case on an unstable network, this prevents an IPSI from prematurely returning to the main. If a value required is greater than 120, then scheduled should be used.
2 of 2	

display system-parameters ess

See: [change system-parameters ess](#)

disable ess

```
disable ess [ all | cluster n <1-999> ]
```

Use **disable ess** to disable an ESS or main server from connecting to IPSIs in a port network. The **disable ess cluster n** command allows an ESS cluster to be disabled (taken out of service).

Note:

A server cluster is either a **S8500** or **S8700 series**.

The enabled / disabled status of ESS and Main servers is preserved across server power down, restarts, and reboots.

A cluster may be disabled if and only if it is not controlling any IPSIs. A disabled ESS will not connect to IPSIs.

A disabled ESS remains registered and receives file sync translation updates.

Execute **disable ess** from either a main or ESS. An ESS may disable only its own cluster ID. When **disable ess** is run from the main server, any and all clusters may be disabled including the main server itself.

 CAUTION:

Use caution when using **disable ess all**. Since the main typically controls IPSIs and a cluster may not be disabled when it controls IPSIs, it is generally safe to use **disable ess cluster all** to disable only the ESS clusters.

Be aware that if the main is not controlling IPSIs and **disable ess cluster all** is used, the main will also be disabled.

When an ESS is disabled, it reboots. After the reboot, the server is in the ESS disabled state and will not connect to any IPSIs. If the cluster involves duplicated servers, this process may take slightly longer while the active server informs the standby of its new ESS disabled state.

When a valid **disable ess** command is run from an ESS:

- ┆ the server reboots
- ┆ no SAT screen is displayed
- ┆ Once the server has rebooted, use **status ess cluster** to confirm that the disable operation succeeded.

When a valid **disable ess** command is run from a main server:

- ┆ a TEST RESULTS screen appears
- ┆ If the **disable ess** command specifies the cluster ID of the main itself, the server reboots and no SAT screen is displayed.
- ┆ Use **status ess cluster** to confirm that the disable operation succeeded.

Action/Object	Qualifier	Qualifier Description	Login
disable ess	all cluster n	disable all ESS servers Number (1 - 999) of the cluster ID for the target ESS or Main. Examples: disable ess all disable ess cluster 9	init inads craft cust su

Maintenance SAT Commands

The following shows a typical result for **disable ess all**.

disable ess all					
TEST RESULTS					
Port	Maintenance Name	Alt. Name	Test No.	Result	Error Code
CL 001	ESS		1607	ABORT	1993
CL 009	ESS		1607	IN PROGRESS	
CL 013	ESS		1607	IN PROGRESS	
CL 044	ESS		1607	ABORT	1992
CL 064	ESS		1607	IN PROGRESS	
CL 100	ESS		1607	IN PROGRESS	
CL 200	ESS		1607	IN PROGRESS	
CL 306	ESS		1607	IN PROGRESS	
CL 500	ESS		1607	IN PROGRESS	
CL 850	ESS		1607	IN PROGRESS	

In the example above, the **disable ess all** command was issued from a main server, and 10 clusters were administered. The disable operation for cluster 1, which happens to be the main, aborted because the main was in control of IPSIs (Error Code 1993). The attempt to disable cluster ID 44 also aborted because the cluster was not registered with the main (Error Code 1992). Otherwise, the disable request was sent to each respective cluster and the result is IN PROGRESS.

Use the **status ess cluster** command to check whether or not the disable operation succeeded for the IN PROGRESS clusters. The complete operation may take several minutes since the request is first sent in a message from the main to the ESS. Once the ESS receives the message, it changes to the ESS disabled state and reboots. If duplicate ESS, the standby also is updated and reboots. After the reboot, the ESS re-registers with the main. It is not until the ESS re-registers that the main receives the results of the disable request.

Error Codes

The following table describes the Error Codes that may be returned from the **disable/enable ess** commands:

disable/enable ess Error Codes

Error Code	Description
1991	Requested ESS cluster is not administered
1992	Requested ESS cluster is not registered
1993	Requested ESS is controlling an IPSI PN

disable/enable ess Error Codes

Error Code	Description
1994	An ESS cluster may not enable/disable other clusters.
2500	Internal operation failed

enable ess

```
enable ess [ all | cluster n <1-999> ]
```

The **enable ess** command allows an ESS cluster to be enabled (put into service). Once an ESS cluster is enabled, it attempts to connect to IPSIs.

Note:

A server cluster is either a [S8500](#) or [S8700 series](#).

Use **enable ess** from either a main or an ESS. An ESS may enable only its own cluster ID. When **enable ess** is run from the main server, any and all cluster IDs may be enabled including the main itself. Care should be taken when using **enable ess all**

When an ESS is enabled, it removes its translations and reboots. The TEST RESULTS screen is not displayed.

When a main server is enabled, it reboots but does not remove its translations. A TEST RESULTS screen is displayed. The exception is when the **enable ess cluster** command specifies the cluster ID of the main itself. In that case, the server reboots and no screen is displayed.

After the reboot, the server is in the ESS enabled state and will attempt to connect to IPSIs. If the cluster involves duplicated servers, this process may take slightly longer while the active server informs the standby of its new ESS enabled state.

Action/Object	Qualifier	Qualifier Description	Login
enable ess	all cluster n	disable all ESS servers Number (1 - 999) of the cluster ID for the target ESS server or Main server. Examples: <code>enable ess all</code> <code>enable ess cluster 9</code>	init inads craft cust su

The following display shows the typical result for **enable ess all**.

enable ess command TEST RESULTS example

enable ess all					
TEST RESULTS					
Port	Maintenance Name	Alt. Name	Test No.	Result	Error Code
CL 001	ESS		1606	PASS	
CL 009	ESS		1606	IN PROGRESS	
CL 013	ESS		1606	IN PROGRESS	
CL 044	ESS		1606	PASS	
CL 064	ESS		1606	IN PROGRESS	
CL 100	ESS		1606	IN PROGRESS	
CL 200	ESS		1606	IN PROGRESS	
CL 306	ESS		1606	IN PROGRESS	
CL 500	ESS		1606	IN PROGRESS	
CL 850	ESS		1606	IN PROGRESS	

In the above example, the command was issued from a main server and 10 clusters were administered. The enable operation for cluster 1, which happens to be the main, PASSED immediately because the main knows its own status. The attempt to enable cluster ID 44 also PASSED because the ESS can enable its own cluster ID. Otherwise, the enable request was sent to each respective cluster and the result is IN PROGRESS.

Use the **status ess cluster n** command to check whether or not the enable operation succeeded for the IN PROGRESS clusters. The complete operation may take several minutes while the following events occur:

- 1 The request is sent from the main to the ESS.
- 1 Once the ESS receives the message, it changes to the ESS enabled state, removes its translations, and reboots.
- 1 After the reboot, the ESS re-registers with the main.
- 1 Since the ESS now has no translations, this triggers a translation filesync and a second reboot.
- 1 The ESS again re-registers with the main. It is not until the ESS re-registration that the main receives the results of the enable request.

Error Codes

See [disable/enable ess Error Codes](#) for a description of possible error codes returned from the **enable ess** command.

status ess clusters

status ess clusters

Note:

A server cluster is either a [S8500](#) or [S8700 series](#).

Use **status ess clusters** to see the state of the Main server and all administered ESS. Under normal conditions, with full network connectivity, all ESS's should register with the main.

Action/Object	Qualifier	Qualifier Description	Login
status ess cluster	<i>none</i>	Examples: status ess cluster	init inads craft cust su

When **status ess clusters** is run on a Main server (Cluster ID 1), the Main server:

- ┆ knows the identities of all of its associated ESS from the translations input to the Main
- ┆ knows the state of all of the ESS that have successfully registered with it
- ┆ shows its own state

This is a typical example of **status ess clusters** executed on a Main server (Cluster ID 1).

```
status ess clusters
```

Cluster ID		ESS CLUSTER INFORMATION				
		Active Server		Translations		Software
Cluster ID	Enabled?	ID	Registered?	Updated		Version
1	y	1	y	11:02	10/25/2007	R015x.00.0.824.0
10	y	91	y	11:02	10/25/2007	R015x.00.0.824.0
20	y	97	y	11:02	10/25/2007	R015x.00.0.824.0
30	y	96	y	11:02	10/25/2007	R015x.00.0.824.0
40	n	95	y	11:02	10/25/2007	R015x.00.0.824.0
50	y	94	y	11:02	10/25/2007	R015x.00.0.824.0
60	y	90	y	11:02	10/25/2007	R015x.00.0.824.0
70	y	88	y	11:02	10/25/2007	R015x.00.0.824.0
80	n	8	y	11:02	10/25/2007	R015x.00.0.824.0
90	y	9	y	11:02	10/25/2007	R015x.00.0.824.0

See [status ess clusters field descriptions](#) on page 256.

This is a typical example of **status ess clusters** executed on an ESS (Cluster ID 60). The ESS knows only its own state. It takes time for this state to be propagated to the Main server via the

registration link, and for a short time (minutes) there may be a discrepancy between the state displayed by the ESS and the equivalent state displayed for the ESS on the Main server.

```
status ess clusters
```

Cluster ID	60	ESS CLUSTER INFORMATION			
Cluster ID	Enabled?	Active Server ID	Registered?	Translations Updated	Software Version
60	y	90	y	11:02 10/25/2007	R015x.00.0.824.0

status ess clusters field descriptions

Note:

The field definitions are the same whether the **status ess** command is executed on a Main server or ESS.

status ess clusters 1 of 2

Field	Description
Cluster ID (title line)	Cluster Identifier (1 - 999). The cluster identifier of the server where status ess was run. In a duplex server environment (S8700 series) both the active and the standby server have the same cluster ID. The cluster ID is initially obtained from the license file (where it is called the Module ID or MID). Once save translation is executed, the cluster ID is saved in translations.
Cluster ID (detail line)	Cluster Identifier (1 - 999). The cluster ID of a server who's state is known to the server where status ess was run. The detail lines are shown in cluster ID order. When status ess is issued on a Main server there is one detail line for the Main server itself and a detail line for every ESS that is registered with the Main. When status ess is issued on an ESS there is only one detail line since an ESS only knows its own state.
1 of 2	

status ess clusters 2 of 2

Field	Description
Enabled	The ESS enabled / disabled state of the server. y = enabled. This server will connect to administered IPSIs n = disabled. This server will not connect to administered IPSIs unknown = the Main does not yet know the maintenance state of the ESS. This may be because: - the ESS is not registered with the Main - the ESS has not yet acknowledged a maintenance state change request from the Main via an enable ess or disable ess command
Active Server ID	The server identifier of the active server for each cluster, ESS or Main (1 - 99). This is the Server ID that was entered for this server in the Set Server Identities web page during configuration. - If the server is a simplex configuration (S8500) there is only one Server Identifier. - If the server is a duplex configurations (S8700 series) the A and B servers each have unique server identifiers. Because in a duplex configuration only the active server registers with the Main, only its server identifier is displayed. Only server IDs for registered ESS's are displayed.
Registered	The registration state of the server. y = registered n = not registered The Main server does not register with itself, but always displays its own registration as y.
Translations Updated	For an ESS: - The time and date of the latest translation update reported by the ESS to the Main server over the registration link. For a Main server (Cluster ID 1): - The time and date of the latest successful save translation command of any kind. Note: For a Main server this time stamp may be later than those shown for ESS's. A save translation on the Main updates its time stamp. A save translation [ess all] updates the ESS translations and time stamp.
Software Version	The software version of Avaya Communication Manager running on the server. For an ESS, this is reported to the Main server over the registration link.
2 of 2	

status ess port-networks

status ess port-networks

Use **status ess port-networks** to see the status of all administered Port Networks on ESS and non-ESS systems.

- For ESS and Main servers, on IP Port Network Connectivity (PNC) and Asynchronous Transfer Mode (ATM) PNC systems, **status ess port-networks** shows the status of all of the administered Port Networks.
- For Center Stage Switch (CSS) PNC systems, only the IPSI equipped Port Networks are known to the ESS, because only the Main server has access to the CSS. The information displayed is very dynamic and may, for brief periods, appear inconsistent.

Action/Object	Qualifier	Qualifier Description	Login
status ess port-networks		Example: status ess port-networks	init inads craft cust su

[status ess port-networks](#) on page 259 is an example of **status ess port-networks** executed on a server that is controlling five Port Networks in a system. This server is a Main server, but other than the cluster identifier, the display looks exactly the same for an ESS controlling all five Port Networks.

In addition to the Main, seven other ESSs are connected to each IPSI in every Port Network. Each IPSI may be connected to the same, some of the same, or completely different servers.

status ess port-networks

```

status ess port-networks

Cluster ID 1                ESS PORT NETWORK INFORMATION

      Com  Intf  Intf  Ntwk  Gtway  Pri/  Pri/  Cntl  Connected
      PN  Num  Loc  Type  Ste  Loc   Loc  Sec  State  Clus  Clus(ter)
                               ID  IDs

  1    1  1B01  IPSI  up    1B01  1AXX  standby  1    1    44  64  13  9    200 100 500
                               1B01  actv-aa  1    1    44  64  13  9    200 100 500

  2    1  2AXX  IPSI  up    2AXX  2AXX  actv-aa  1    1    44  64  13  9    200 100 500
                               2B01  standby  1    1    44  64  13  9    200 100 500

  3    2  3AXX  IPSI  up    3AXX  3AXX  actv-aa  1    1    44  64  13  100 500 850 9
                               3B01  standby  1    1    44  64  13  100 500 850 9

  4    2  4A01  IPSI  up    4A01  4A01  actv-aa  1    1    44  64  13  100 500 850 9
                               4B01  standby  1    1    44  64  13  100 500 850 9

  5    1  5A01  EI    up    3AXX

Command successfully completed
Command:

```

status ess port-networks field descriptions**Status ess port-networks field descriptions 1 of 4**

Field	Description
Cluster ID (title line)	Cluster Identifier (1 - 999). The cluster identifier of the server on which status ess port-networks was run. In a duplex server pair (S8700 series), both the active and the standby server should have the same cluster identifier. Each server initially learns its own cluster ID from its license file (where it is called the Module Identifier or MID). After save translations is executed, the cluster identifier is saved in translations. However, the cluster identifier is always overridden by the license file as long as the license file is present and readable. The example above status ess port-networks on page 259 shows a cluster identifier of one (1).
PN	The number that identifies the Port Network (PN). This is the same number that identifies the Port Network in the list cabinet command.
1 of 4	

Status ess port-networks field descriptions 2 of 4

Field	Description
Com Num	The community number of the Port Network (1 - 64) assigned to the Port Network on display system-paramters . Port networks have a natural attraction for local preferred servers in the same community. In the event of loss of connectivity with their server, they prefer to be controlled by a server in their community if possible.
Intf Loc	Interface Location. Board location of the most recent interface in the Port Network with which the system tried to control the Port Network. The interface may be any circuit pack through which the Port Network may be controlled, such as a TN2312 IP Server Interface (IPSI), a TN2305B or TN2306B ATM Expansion Interface (ATM EI), or a TN570D Expansion Interface (CSS EI) ┆ blank = there is no interface
Intf Type	The type of interface whose location is shown in the Intf Loc field. ┆ IPSI = IP Server Interface ┆ EI = either type of Expansion Interface (TN570 or TN2305/2306) ┆ UNKN = the interface type cannot be determined ┆ blank = there is no interface
Port Ntwk Ste	The Port Network state from the point of view of the server on which status ess port-networks is run. ┆ up = the Port Network is up ┆ down = the Port Network is down ┆ unkn = the state is unknown ┆ blank = there is no Port Network state The Port Network is up from the perspective of the server that is controlling the Port Network. The Port Network is down from the perspective of all other servers.
IPSI Gtway Loc	IPSI Gateway Location. The location of the IPSI whose Packet Interface (PKTINT) is being used to deliver packet traffic to the packet bus in this Port Network. The IPSI may be in this Port Network (this location is the same as Intf Loc), or it may be in a different Port Network.
Pri / Sec Loc	The location of the Primary and Secondary IP Server Interface (if any) in this Port Network. ┆ If the Port Network has a single IPSI, only one line is displayed. ┆ If the Port Network has duplicated IPSIs equipped, each is displayed on successive lines. ┆ blank = the Port Network has only an Expansion Interface from which it is controlled
2 of 4	

Status ess port-networks field descriptions 3 of 4

Field	Description
Pri / Sec State	The state of the Primary and Secondary IPSIs whose locations are shown in the Pri / Sec Loc field. actv-aa = the IPSI is both active and is controlling the Port Network (hosting the Arch Angel). active = the IPSI is active but not controlling the Port Network. In this case the Port Network may not be controlled or is being controlled through an Expansion Interface (EI). standby = the IPSI is in standby mode (duplex Port Network connectivity). unknown = the IPSI state is unknown - blank = there is no IP Server Interface.
Cntl Clus ID	Control Cluster IDentifier. The cluster identifier of the server that was last known to be controlling this Port Network through this IPSI. If there are duplicate IPSIs in this Port Network, they should show the same Cluster ID Cluster ID (1 - 999) * (asterisk) - The server where status ess port-networks is run cannot connect to the IP Server Interface in this Port Network. This may be because: the IPSI is being reset the IPSI rejected the connection request from the server, perhaps because it is already connected to its limit (8) of servers. - The controlling Cluster ID reported for the IPSI is not known to the server (in its translations) where status ess port-networks was run. . (period) - The controlling Cluster ID reported by this interface is not known to the server on which this command is executed given its own translations. This can occur when a new ESS is brought on-line and translated on the main server but the translations have not yet been file synchronized to every other ESS. The server on which this command is being executed cannot map from the Server ID reported by the interface to a Cluster ID known to the server in its translations. ! (exclamation) - The Cluster ID reported by this interface is not in the valid range of values. - blank - There is no IPSI in this Port Network. - There is no controlling server.
3 of 4	

Status ess port-networks field descriptions 4 of 4

Field	Description
Connected Clus(ter) IDs	Connected Cluster IDentifiers. The list of cluster identifiers that were last known to be connected to this IP Server Interface. These servers are candidates to control the Port Network through the IPSI if connectivity to the current controlling server is lost. If a server was rejected by an IPSI, the information displayed here may be stale. This information will be updated periodically as each server attempts to connect or reconnect to the IPSI. The Cluster ID of the controlling server should always be displayed in the list of Cluster IDs. Cluster ID (1 - 999) - (dash) - A dash indicates that the server whose Cluster ID would have been in this position has lost the socket connection to this duplicated IPSI but not the connectivity to the IPSI's pair interface in the same port network. The server in question should appear in the same relative position in the list of Connected Clusters for the IPSI's pair interface. . (dot) - The controlling Cluster ID reported by this interface is not known to the server on which the command was executed given its own translations. This can occur when a new ESS is brought on-line and translated on the main, but the translations have not yet been file synchronized to every other ESS. The server on which this command is being executed cannot map from the Server ID reported by the interface to a Cluster ID known to the server in its translations. ! (exclamation) - There is no IP Server Interface in this port network - There is no connected Cluster ID. * (asterisk) - The Cluster ID reported by the IPSI is not known to the server (in its translations) where status ess port-network was executed. - blank - There is no IPSI in this Port Network. - There is no controlling server.
4 of 4	

ethernet-options

See:

[get ethernet-options](#) on page 263

[list ethernet-options](#) on page 264

[set ethernet-options](#) on page 264

get ethernet-options

get ethernet-options *location*

Use **get ethernet-options** to generate a report about a specific Ethernet connection.

Use **list ethernet-options** to see a list of ethernet-enabled circuit packs.

Action/Object	Qualifier	Qualifier Description	Login	Default
get ethernet-options	<i>location</i>	The physical location of the circuit pack	init inads craft cust	

```
get ethernet-options 1C07
                                GET ETHERNET OPTIONS
                                Administered Value      Actual Value
Auto Negotiation:  Yes                               Yes
                   Speed:  N/A                        10Mbps
                   Duplex:  N/A                        Full
Link Integrity:    Link Integrity:                    Active
```

get ethernet-options field descriptions

get ethernet-options field descriptions 1 of 2

Field	Description
Auto Negotiation	Enter y for the system to automatically negotiate the highest possible network speed. Enter n to manually assign the Speed and Duplex fields.
Speed	10 Mbps 100 Mbps N/A (not available)
1 of 2	

get ethernet-options field descriptions 2 of 2

Field	Description
Duplex	Half Full N/A (not available)
Link Integrity	Active Inactive
2 of 2	

list ethernet-options

Use **list ethernet-options** to see locations and settings for ethernet-enabled ports.

This is a typical display for **list ethernet-options**.

```
list ethernet-options
```

Eth Pt	Type	Slot	Code	Sfx	Auto	Speed	Duplex
-----	----	----	----	---	----	-----	-----
y	C-LAN	01B09	TN799	C	n	10Mbps	Half
y	C-LAN	01E13	TN799	C	n	10Mbps	Half
y	MEDPRO	02B07	TN2302		y		
y	C-LAN	01E05	TN799	C	n	10Mbps	Half
y	MEDPRO	01D11	TN2302		y		

set ethernet-options

set ethernet-options location

Use **set ethernet-options** to manually or automatically set the ethernet connection parameters.

Note:

The Ethernet port must be administered and busied out before you can issue **set ethernet-options**.

Action/Object	Qualifier	Qualifier Description
set ethernet-options	<i>location</i>	The physical location of the circuit pack

```

set ethernet-options 1C07
                                SET ETHERNET OPTIONS
Auto Negotiation:  y
    Speed:
    Duplex:

```

set ethernet-options field descriptions

set ethernet-options field descriptions

Field	Description
Auto Negotiation	y = the system automatically negotiates the highest possible network speed. n = you must manually assign the Speed and Duplex fields. If n , the Speed and Duplex fields do not appear.
Speed	10 Mbps/100 Mbps Appears when Auto Negotiation is y
Duplex	Half/Full Appears when Auto Negotiation is y

events

display events

display events

Use display events to see a log that shows A vector event is the occurrence of something unexpected during a vector-routed call due to resource exhaustion or faulty vector

programming. For example, route-step failures are typically due to the programming of an invalid extension. These types of failures are not due to faulty hardware or system software error and do not constitute incorrect feature operation.

An IP event occurs when an IP endpoint registration is denied.

Use **display events** to diagnose and correct IP registration denials, and vectoring problems due resource exhaustion or faulty vector programming. See *Avaya Call Center Release 4.01 Call Vectoring and Expert Agent Selection (EAS) Guide, 07-600780 (formerly 07-300477, 07-300186, 555-230-714)*, to see how to interpret vectoring fields on this report.

Action/Object	Qualifier	Qualifier Description	Login
display events			init inads craft cust rcust

display events input form

Use the Event Report to request events of a certain type or from a certain time period. Enter the desired parameters and press **ENTER**.

The following example shows the input screen for **display events**:

display events	Page 1 of 1
EVENT REPORT	
The following options control which events will be displayed.	
EVENT CATEGORY	
Category: denial	
REPORT PERIOD	
Interval: From: To:	
SEARCH OPTIONS	
Vector Number:	
Event Type:	
Extension:	

display events field descriptions

display events input field descriptions

Field	Description
Category	Enter the type of event to display: all contact-cl data-error denial meetme vector
Report Period	Select the time period for the vector events you want to see. If fields are blank, every recorded vector event is reported.
Interval	The time period for which events are reported: <i>m</i> (month), <i>d</i> (day), <i>h</i> (hour), <i>m</i> (minute), or <i>a</i> (all).
Start/Stop Time	Enter the date and time of day when you want to start and end the search.
Vector Number	Enter a specific vector number to include in the report. If blank, events for every vector are reported. If the category field is meetme , this field is ignored.
Event Type	Enter a specific event type to include in the report. If blank, all event types are reported.
Extension	Enter a specific event type to include in the report. If blank, all events for all extensions are reported.

See *Avaya Call Center Release 4.01 Call Vectoring and Expert Agent Selection (EAS) Guide*, 07-600780 (formerly 07-300477, 07-300186, 555-230-714) to see how to interpret this report. In particular, the Event Data 2 field is associated with possible causes and repair strategies for the event.

The following example shows an IP denial event report.

display events					Page	1	of	1
EVENTS REPORT								
Event Type	Event Description	Event Data 1	Event Data 2	First Occur	Last Occur	Evnt Cnt		
1012	Destination Unavailable	71	5A	01/09/09:44	01/09/09:54	8		
1012	Destination Unavailable	65	22	01/09/09:45	01/09/09:45	1		
1012	Destination Unavailable	6E	2D	01/09/09:46	01/09/09:47	3		
1012	Destination Unavailable	1EA	4A	01/09/09:47	01/09/09:51	2		
1934	IP RRJ - Ext already reg	6c	8709D26D	01/09/09:47	01/09/09:51	1		
1012	Destination Unavailable	8E	32	01/09/09:48	01/09/09:48	1		
1643	Off-hook dialing time out	46	58	01/09/09:49	01/09/09:53	2		
1012	Destination Unavailable	AE	3A	01/09/09:49	01/09/09:49	1		
1012	Destination Unavailable	55	41	01/09/09:50	01/09/09:50	2		
1012	Destination Unavailable	222	48	01/09/09:51	01/09/09:51	1		
1012	Destination Unavailable	1D4	50	01/09/09:52	01/09/09:52	1		
1012	Destination Unavailable	46	5E	01/09/09:52	01/09/09:54	2		
1012	Destination Unavailable	412	54	01/09/09:52	01/09/09:52	1		
1012	Destination Unavailable	72	57	01/09/09:53	01/09/09:53	1		

display events field descriptions

display events output field descriptions 1 of 2

Field	Description
Event Type	The event identification number that points to a specific piece of software code. See Chapter 2: Denial Events in <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430)</i> (formerly 03-300190).
Event Description	A 25-character string describing the problem See Chapter 2: Denial Events in <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430)</i> (formerly 03-300190).
Event Data 1	The station UID that is attempting to register See Chapter 2: Denial Events in <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430)</i> (formerly 03-300190).
Event Data 2	The IP address of the station that is attempting to register See Chapter 2: Denial Events in <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430)</i> (formerly 03-300190).
1 of 2	

display events output field descriptions 2 of 2

Field	Description
First Occur	The time and date when this event first occurred
Last Occur	The time and date when this event last occurred
Evnt Cnt	The number of occurrences of the event between the First Occur and Last Occur times
2 of 2	

See [Chapter 2: Denial Events](#) in *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)* lists the event type, the text that appears in the **Event Description** field, a further explanation of the condition, and the type of data in the **Event 1** and **Event 2** fields.

extended-user-profile

See

[change extended-user-profile](#) on page 269

[display extended-user-profile n](#) on page 270

change extended-user-profile

Use **change extended-user-profile** to administer detailed access permissions for the vector and station forms.

The screen name is **Extended User Profile**.

Action/Object	Qualifier	Qualifier Description
change extended-user-profile	n	The number of the extended profile to change.

change extended-user-profile screen display

```
change extended-user-profile 37
                               Extended User Profile 37

User Profile Name: Example Profile

      Form                      Allow Only

R:vector                        1,9,16,23,125-206,302,800-803,804-810,813
M:station                       all
```

change extended-user-profile screen field descriptions

change extended-user-profile field descriptions

Field	Description
User Profile Name	The name of the standard profile for which this is the extended profile. Display only.
Form	Category and type of form (SAT screen) that are administered for extended permissions. Display only.
Allow Only	Specify access to all, certain, or no instances of the form. all = access to all instances of the form blank = no access to the form List specific instances in a valid format as: - list separated by commas (1,2,3) - one or multiple pair separated by a dash (1000-2000). As many combinations can be administered as can fit in the field.

display extended-user-profile *n*

Use **display extended-user-profile** to see the access permissions on an existing Extended User Profile.

The screen name is **Extended User Profile**.

Action/Object	Qualifier	Qualifier Description
display extended-user-profile	<i>n</i>	Number of the extended user-profile to display.

See [change extended-user-profile](#) on page 269 for screen and field descriptions.

extension-type

list extension-type

Use `list extension-type` to see the type of stations associated with specific extensions.

Action/Object	Qualifier	Qualifier Description
<code>list extension-type</code>	<i>n</i>	extension number
	<i>partial string*</i>	list all extensions that begin with the partial string, as in searching for all numbers that begin with a specific area code
	<code>all</code>	
	<code>type</code>	list extensions of type: See table list extension-type type entries .

list extension-type type entries

access endpoint	data-extension	page-line
administered NCA TSC	data-module	paging
agent-loginid	feature-name-extension	personal-CO-line
announcement	group-page	phantom-user
attendant	hunt-group	pickup
attendant-user	inter-g/w alt routing	pri-endpoint
barrier-code	internal originations	QSIG-Path-Rep endpoint
button-press-extension	ldn	QSIG/ETSI-TSC endpoint
code-calling	masi-terminal	r2-mfc-test-call
conn-manager	mobile-feature-extension	radio-paging
coverage	modem-pool	remote-access
CTI Link	mcu-user	remote-user
h		
station-user	term-trunk-transmission	trunk-user
system-parameters sccan	terminating-ext-group	VDN-extension
telecommuting-access	trunk	voice-synthesis
term-masi-path-call		

The following is an example of **list extension-type**.

```
list extension-type 90000 Count 1
```

		EXTENSION TYPE				COR/	Cv1
Ext.	Type	Name		COS	TN		Cv2
---	----						
90001	feature-name-extension	Exclusion (Toggle On/Off)			1		

failed-ip-network-region

See:

[display failed-ip-network-region](#) on page 272

[test failed-ip-network-region](#) on page 273

display failed-ip-network-region

display failed-ip-network-region

Use **display failed-ip-network-region** to see a list of the worst, first 100 network regions with broken connectivity rank ordered by the worst to least worst.

To troubleshoot broken connectivity, see [status ip-network-region](#) on page 328 and [test failed-ip-network-region](#) on page 273.

Action/Object	Qualifier	Qualifier Description	Login
display failed ip-network-region			

```
display failed-ip-network-region
```

WORST NETWORK REGIONS							
Network Region: Number of Broken Paths							
5:9	:	:	:	:	:	:	:
4:5	:	:	:	:	:	:	:
2:4	:	:	:	:	:	:	:
1:2	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:

The network regions are ordered from worst to best, for example:

- ┆ 5:9 (Region 5 has 9 broken paths)
- ┆ 4:5 (Region 4 has 5 broken paths)
- ┆ 2:4 (Region 2 has 4 broken paths)
- ┆ 1:2 (Region 1 has 2 broken paths)

test failed-ip-network-region

test failed-ip-network-region [all | x]

Use **test failed-ip-network-region** to initiate a real-time **ping** test for failed network-region connections.

The default is that all connections that failed the last background maintenance **ping** test are tested. If **network region x** is specified, then just failed connections from region x are tested. If a previously failed connection passes the **ping** test, then the associated minor alarm is cleared.

To troubleshoot broken connectivity, also see [display failed-ip-network-region](#) on page 272 and [change ip-network-region](#) on page 326.

The following display shows a typical result for **test failed-ip-network-region**.

test failed-ip-network-region all						
TEST RESULTS						
Region	Dest. Region	Maintenance Name	Test No.	Result	Error Code	
2	1	NR_CONN	1417	FAIL	2805	
3	1	NR_CONN	1417	FAIL	1007	

test failed-ip-network-region field descriptions

test failed-ip-network-region field descriptions 1 of 2

Field	Description
Region	Network region that had a connection failure to "Dest. Region".
Dest. Region	A network region to which "Region" is connected, where the connection between the two regions is previously failed the ping test
Maintenance Name	The name of the MO as it appears in the alarm and error logs.
1 of 2	

test failed-ip-network-region field descriptions 2 of 2

Field	Description
Test No.	Test Number used to run <code>ping</code> test
Result	Result of <code>ping</code> test. May be PASS or FAIL. If test failed, follow troubleshooting procedures in NR-CONN (Network-Region Connect) , <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)</i>
Error Code	<code>ping</code> test error code
2 of 2	

fiber-link

See:

[add fiber-link](#) on page 274

[busyout fiber-link](#) on page 276

[change fiber-link](#) on page 277

[display fiber-link](#) on page 280

[list fiber-link](#) on page 280

[reset fiber-link](#) on page 283

[test fiber-link](#) on page 283

add fiber-link

add fiber-link *fiber#* [*a-pnc* | *b-pnc*]

Use **add fiber-link** to create a fiber link. A fiber link is a connection carrying all circuit and packet traffic between two port networks, two switch nodes, or a port network and a switch node. A fiber link may contain a DS1 converter complex used to provide connectivity to a remote PN. On critical-reliability systems (duplicated PNC), each fiber link is duplicated and exists as a pair. When PNC duplication is enabled, only the DS1 Converter complex attributes fields can be changed.

Before Avaya Communication Manager Release 2.0, **add fiber-link** restricted the placement of an expansion interface (EI) circuit pack to slot A01 in the A carrier of a port network. In Communication Manager Release 2.0, the TN2312BP resides in slot A01 of a [G650](#) media gateway.

Slot B01 of a port network can be used for a duplicate fiber connection when IPSI duplication is not active. When IPSI duplication is required, the duplicate IPSI must reside in slot B01 and any fiber connection there must be moved.

add fiber-link next		Page 1 of 1
FIBER LINK ADMINISTRATION		
Fiber Link #: 6		
Is one endpoint remotod via DS1 Converter Complex? no		
ENDPOINT-1 (A-PNC)	ENDPOINT-2 (A-PNC)	
Board Location:	Board Location:	
Board Type:	Board Type:	
ENDPOINT-1 (B-PNC)	ENDPOINT-2 (B-PNC)	
Board Location:	Board Location:	
Board Type:	Board Type:	
Fiber Translation:	Converter?	
Type of Transceivers:		

add fiber-link field descriptions

add fiber-link field descriptions page 1 1 of 2

Field	Description
Fiber Link #	Identifying number of the fiber link.
Is one endpoint remotod via DS1 Converter Complex	y/n y indicates that a DS1C converter complex is used on this link to remotely locate a port network. If y , a second page appears for administering the DS1C complex attributes.
Board Location	The physical address (cabinet-carrier-slot or gateway:module) of the circuit packs comprising the two endpoints (ENDPOINT-1 and ENDPOINT-2) of the fiber link.
Board Type	ei or sni , the type of circuit pack administered at each endpoint.
Fiber Translation	multi-mode or single-mode Use for faster remote diagnosis.
1 of 2	

add fiber-link field descriptions page 1 2 of 2

Field	Description
Converter	y/n Use for faster remote diagnosis.
Type of Transceivers	A/B Use for faster remote diagnosis.
2 of 2	

busyout fiber-link

busyout fiber-link *fiber#* [a-pnc | b-pnc]

Use **busyout fiber-link** to put a fiber link into a maintenance busy state. A fiber link is a connection carrying all circuit and packet traffic between two port networks, two switch nodes, or a port network and a switch node. A fiber link may contain a DS1 converter complex used to provide connectivity to a remote PN.

**CAUTION:**

On a standard- or high-reliability system (unduplicated PNC), **busyout** is destructive. Every call and application link carried on the busied-out fiber link will be torn down, and new calls will not be established over the link.

On a critical-reliability system with duplicated PNC, **busyout fiber-link**:

- ┆ is allowed only on a fiber link on the standby PNC
- ┆ does not impact service
- ┆ requires that the standby PNC be busied first

Use **list fiber-link** to see a list of every fiber link administered on the system, including its number, endpoint, and other useful information.

For more information on busyout, see [Busyout and Release Commands](#) on page 33. See [status link](#) on page 358 for more details on links. For more information about fiber links, see [FIBER-LK \(Fiber Link\)](#) on page 833 of the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)*. See [Common Command Output Screens](#) on page 28 for output screen field descriptions.

Action/Object	Qualifier	Qualifier Description	Login	Default
busyout fiber-link	fiber #	The administered number assigned to the fiber link. In a system with duplicated PNC, this represents a fiber link pair.		a-pnc
	a-pnc	For an unduplicated PNC, a-pnc is the only valid qualifier. Use on a system with duplicated PNC, to distinguish between the two fibers of a duplicated pair.		
	b-pnc	Use on a system with duplicated PNC, to distinguish between the two fibers of a duplicated fiber pair.		
	Examples: Critical-Reliability (duplicated PNC): busyout fiber-link 01 b-pnc busyout fiber-link 03 (defaults to a-pnc)			

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

change fiber-link

change fiber-link *fiber#*

Use **change fiber-link** to change the translation data associated with an existing fiber link. On critical-reliability systems (duplicated PNC), each fiber link is duplicated and exists as a pair. When PNC duplication is enabled, only the DS1 Converter complex attributes fields can be changed.

Translation data changes after the **ENTER** key is pressed. Press **CANCEL** any time before pressing ENTER to return to the command line without changing any translation data.

Action/Object	Qualifier	Qualifier Description
change fiber-link	<i>fiber#</i>	The administered number associated with a fiber link or, on a duplicated PNC, with a fiber link pair. Example: change fiber-link 21

To change the endpoint board locations, remove a fiber and add it again for either a:

- 1 High-reliability system, an unduplicated PNC
- 1 Critical-reliability system with a fully operational duplicated PNC

See [status link](#) on page 358 for more details on links.

Maintenance SAT Commands

The following display shows a typical result for **change fiber-link 1** on a standard- or high-reliability system (unduplicated PNC and CSS).

```
change fiber-link 1                                     Page 1 of 1

                                FIBER LINK ADMINISTRATION

Fiber Link #: 1

      ENDPOINT-1                                ENDPOINT-2
      (A-PNC)                                    (A-PNC)

Board Location: 01E01                                Board Location: 01E02
Board Type: ei                                    Board Type: sni

Fiber Translation:                                Converter?
Type of Transceivers:                            Converter Type:

Is one endpoint remotored via DS1 Converter Complex? n
```

change fiber-link field descriptions, page 1

change fiber-link field descriptions page 1

Field	Description
Fiber Link #	Display-only. Identifying number of the fiber link.
Board Location	The physical address (cabinet-carrier-slot or gateway:module) of the circuit packs comprising the two endpoints (ENDPOINT-1 and ENDPOINT-2) of the fiber link.
Board Type	ei or sni , the type of circuit pack administered at each endpoint. Display-only.
DS1 Converter	y indicates that a DS1C converter complex is used on this link to remotely locate a port network. If y , a second page appears for administering the DS1C complex attributes.
Fiber Translation	multi-mode or single-mode Use for faster remote diagnosis.
Converter	y/n Use for faster remote diagnosis.
Type of Transceivers	A/B Use for faster remote diagnosis.
Converter Type	Avaya/other . Appears when Converter on the Fiber Link Administration screen is y .

change fiber-link field descriptions, page 2

The following fields appear when a DS1 converter complex is administered on the fiber link. DS1 CONV complex attributes are administered here. The circuit pack is administered by **change circuit-packs**. Use page 2 for the A-PNC. If the PNC is duplicated, the fields are repeated as display-only on page 3 for the B-PNC. Page 3 fields change when their counterpoints on page 2 are changed.

change-fiber link field descriptions page 2

Field	Description
Board Location	Under DS1C-1, the physical location of the converter board connected to ENDPOINT-1. When the location is entered, validation is performed to ensure that the board has been administered and is of the correct type (DS1 CONV).
DS1 Converter Facilities	Attributes of the four DS1 facilities (A, B, C, D) that can be connected to the DS1 CONV.
Facility Installed	y/n Specifies whether the indicated facility has been provided and installed. Facility A is required for the DS1 CONV complex. See Table 32: DS1 Line Equalization Settings on page 280. The line equalization setting defaults to the median value of 3. This setting remains in effect until changed by administration. Incorrect equalizer settings may cause a higher error rate on the DS1 facility.
DS1 CONV-2 Line Compensation	Same as for ENDPOINT-2 of the DS1 CONV complex.
Zero Code Suppression	zcs/b8zs specifies the line coding format for each facility. There are 2 line coding options supported by the DS1 Interfaces to meet the density requirements in the data stream. Zero Code Suppression (ZCS) line coding is in place following an initialization until changed by administration. Either line coding option may be used on the DS1 Interface that carries the packet time slots.
Framing Mode	esf/d4 specifies the data framing format used on the facility. When esf , an automatic selection process is executed until the DS1 Interface is brought into frame, or until an Options CCMS message is received by the framing options master. Once options are set by administration, they remain fixed on the framing option master until the board is again initialized, reset, or sent new options. The framing option on the framing option slave converter board can change to track the framing option master's option.

The line equalization setting defaults to the median value of 3. This setting remains in effect until changed by administration. Incorrect equalizer settings may cause a higher error rate on the DS1 facility.

Table 32: DS1 Line Equalization Settings

Equalizer Setting	Distance to DSX-1 Interface (feet)	
	22 AWG ABAM and 24 AWG PDS	26 AWG PDS
1	1 to 133	0 to 90
2	133 to 266	90 to 180
3	266 to 399	180 to 270
4	399 to 533	270 to 360
5	533 to 655	360 to 450

display fiber-link

display fiber-link *fiber#* [*schedule*]

Use **display fiber-link** to see the translation data associated with an existing fiber link.

The output for **display fiber-link** is the same as that for **change fiber-link**.

Action/Object	Qualifier	Qualifier Description	Login	Default
display fiber-link	<i>fiber#</i>	The administered number associated with a fiber link, or fiber link pair in a duplicated PNCs.		
	<i>schedule</i>	See Common Input Parameters on page 25.		

See [status link](#) on page 358 for more details on links.

list fiber-link

list fiber-link [*schedule*]

Use **list fiber-link** to list every fiber link in the system, and to see a summary of data entered on the fiber link screen (**add**, **display**, **change**, or **remove fiber-link**).

Action/Object	Qualifier	Qualifier Description	Login	Default
list fiber-link	schedule	See Common Input Parameters on page 25.		

See [status link](#) on page 358 for more details on links.

The following display shows a typical result for **list fiber-link**.

list fiber-link												Page 1
FIBER LINK ADMINISTRATION												
FIBER LINK#	TYPE	ENDPOINT 1				ENDPOINT 2						
		A-PNC LOC	DS1 CONU LOC	B-PNC LOC	DS1 CONU LOC	TYPE	A-PNC LOC	DS1 CONU LOC	B-PNC LOC	DS1 CONU LOC	DS1 CONU TYPE	
1	ei	01A01		01B02		sni	01E02		01D02			
2	sni	13E02	13B05	13D02	13C05	ei	05A01	05A02	05B02	05B03	TN1654	
Primary Facility:A B												
5	sni	12E17		12D17		ei	04E01		04D02			
6	sni	01E07		01D07		sni	12E07		12D07			
7	sni	01E13		01D13		sni	13E13		13D13			
8	sni	01E09		01D09		sni	12E09		12D09			
press CANCEL to quit -- press NEXT PAGE to continue												
ESC-x=Cancel Esc-e=Submit Esc-p=Prev Pg Esc-n=Next Pg Esc-h=Help Esc-r=Refresh												

list fiber-link field descriptions

list fiber-link field descriptions 1 of 2

Field	Description
FIBER LINK #	The administered number used to identify the fiber link (1 to 27).
TYPE	The types of circuit packs that constitute endpoint 1 and endpoint 2 of the fiber link (ei or sni).
A-PNC LOC	The physical locations (cabinet-carrier-slot number) of the circuit packs that constitute the endpoints.
1 of 2	

list fiber-link field descriptions 2 of 2

Field	Description
DS1 CONV LOC	Location of the DS1 Converter.
B-PNC LOC	In a system with duplicated PNC, the physical location (cabinet-carrier-slot number) of the circuit packs that constitute the endpoints of the link in the B-PNC.
DS1 CONV TYPE	Whether or not an endpoint of the link is remotely located by means of a DS1C Converter complex.
2 of 2	

Fiber mismatch

Even though a DS1-fed EPN is in service with no complaints, **list fiber-link** can report a “MISMATCH” for the Primary Facility. The following example shows this condition:

list fiber-link											Page 2
FIBER LINK ADMINISTRATION											
FIBER	-----	ENDPOINT 1				-----	ENDPOINT 2				
LINK#	TYPE	A-PNC	DS1	B-PNC	DS1	TYPE	A-PNC	DS1	B-PNC	DS1	DS1
		LOC	CONV	LOC	CONV		LOC	CONV	LOC	CONV	CONV
			LOC		LOC			LOC		LOC	TYPE
27	ei	27A01				sni	27E02				
28	sni	27E03	27E01			ei	28A01	28A02			TN1654
Primary Facility:B								B			
29	sni	27E20	27E21			ei	29A01	29A02			TN1654
Primary Facility:B								B			
30	sni	27E19	27A02			ei	30A01	30A02			TN1654
Primary Facility:B								B			
31	sni	27E04	27A18			ei	31A01	31A02			TN1654
Primary Facility:A								A			
32	sni	01E05	01D10			ei	32A01	32A02			TN1654
Primary Facility:B								A			
MISMATCH											

This “MISMATCH” indicates that the two ends of the DS1 fiber do not agree which DS1 facility is carrying the Primary Facility, or control channels of the fiber. This indicates that the two DS1 spans are crossed, that is, the A-facility in PPN is connected to the B-facility in the EPN. The EPN DS1C board searches both spans for the control channel, and when it finds it, the system link comes up on either A or B facility. This then becomes fiber group 1 and the other span is fiber group 2. The end result is that the system link is up, all timeslots are mapped correctly, and there are no end-user problems. This is only a problem when there are DS1 problems. To fix this problem flip the A and B spans at one end, either PPN or EPN.

reset fiber-link

```
reset fiber-link fiber# [a-pnc | b-pnc]
```

**CAUTION:**

The **reset fiber-link** command is destructive on a high-reliability system (unduplicated PNC), and may cause an entire port network to be removed from service.

Use **reset fiber-link** to reset the Expansion Interface and/or Switch Node Interface circuit packs that are endpoints of a specified fiber link, dropping the link in the process.

A fiber link must be busied out before being reset. To busyout a fiber on critical-reliability systems, the fiber must be on the standby PNC and the standby PNC must first be busied out. See **busyout fiber-link**.

Use **list fiber-link** to see a list of fiber links and their locations. See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
reset fiber-link	<i>fiber#</i>	The administered number of the fiber link (1-44). On a critical-reliability system (duplicated PNC), this number designates a fiber link pair; the following qualifier specifies which fiber in the pair is to be reset			
reset fiber-link	a-pnc b-pnc	For a critical-reliability system (duplicated PNC), this distinguishes between the two fibers in a duplicated pair. On a high-reliability system (unduplicated PNC) this is always a-pnc and need not be specified.			

test fiber-link

Use **test fiber-link** to validate that the optical fiber connection between switch node interfaces (SNI) and expansion interfaces (EI), or a combination thereof, are administered. If the fiber link is administered, a series of hardware diagnostic tests are performed on the specified fiber link. The test results along with any possible error codes are displayed on the MT. The long test sequence includes destructive tests. Every destructive test aborts unless the fiber link is first busied out. The short test sequence is non-destructive and can be performed regardless of whether the fiber link is busied out.

A fiber link is a connection between port networks (PNs), switch nodes (SNs), or between a PN and the Center Stage Switch (CSS). This connection is comprised of a bi-directional optical fiber connection (optionally extended via a DS1 Converter complex), with each end terminated on either an Expansion Interface (EI) or a Switch Node Interface (SNI). Fiber links provide the medium for circuit and packet connections between PNs.

Maintenance SAT Commands

The **long** sequence includes destructive tests and requires that the fiber link be busied out first. When a fiber is busied out, every call over that fiber is dropped.

clear firmware-counters clears the firmware counters of specified SNI, SNC, ATM-EI or DS1C circuit packs, or of an the entire PNC (A or B).

See [status link](#) on page 358 for more details on links.

Action/ Object	Qualifier	Qualifier Description
test fiber- link	link# a-pnc b-pnc short long repeat repeat# clear schedule	The number associated with a fiber link or fiber link pair (on duplicated PNCs). List fiber-link displays the location of endpoints for each fiber link On critical-reliability systems (duplicated PNC) this identifier is used to distinguish between the two fibers of a duplicated fiber pair. For details, see Common Input Parameters on page 25. Examples: Critical-reliability system: test fiber-link 1 a-pnc schedule test fiber-link 03 b-pnc sh r 3

The following display shows a typical result with **test fiber-link 1 b-pnc**.

test fiber-link 1 b-pnc						
TEST RESULTS						
Port	Maintenance Name	Alt.	Name	Test No.	Result	Error Code
1 B-PNC	FIBER-LK			777	PASS	
1 B-PNC	FIBER-LK			759	PASS	
1 B-PNC	FIBER-LK			989	PASS	
1 B-PNC	FIBER-LK			237	PASS	
1 B-PNC	FIBER-LK			238	PASS	

Port	On critical-reliability systems (duplicated PNC) there are two fibers associated with every fiber link number. A-PNC and B-PNC distinguish one from the other.
------	--

file

remove file

`remove file path board location`

Use `remove file` to request the board *location* to remove the file given by *path*. If the file does not exist on the source board's filesystem, an error message, **file not found**, appears on the SAT.

To remove a file in a subdirectory, specify the entire path starting at `/`.

Action/Object	Qualifier	Qualifier Description
remove file	<i>PPcss</i>	board location
	<i>path</i>	file location (using the entire path starting at <code>/</code>)

filexfer

See:

[enable filexfer](#)

[disable filexfer](#)

enable filexfer

enable filexfer location

Use **enable filexfer** to enable Secure Shell (SSH) and Secure FTP (SFTP) remote access protocols through login/password authentication on C-LAN and VAL circuit packs. FTP capabilities remain enabled.

Action/Object	Qualifier	Qualifier Description	Login
enable filexfer	<i>location</i>	location of the circuit pack	

Enable filexfer enables the C-LAN and VAL circuit packs as SSH/SFTP servers (not clients) that prefer the following symmetric algorithms in decreasing order:

- | AES
- | Arcfour
- | Blowfish
- | CAST128
- | 3DES

Note:

To ensure that technicians can access the relevant circuit packs using SSH or SFTP, technician laptops must have SSH and SFTP clients that use the same algorithms installed.

This is an example screen for **enable filexfer**.

<pre>enable filexfer a03</pre>	Page 1 of 1
ENABLE FILE TRANSFER	
Login: _____	
Password: _____	
Reetner Password: _____	
Secure? y	
Board Address: _____	

enable filexfer field descriptions

enable filexfer field descriptions

Field	Description
Login	3 - 6 alphabetic characters
Password	7 - 11 characters containing at least one letter and one number.
Reenter Password	Reenter the password.
Secure	y = enable SFTP n = enable FTP
Board Address	location of the circuit pack

disable filexfer

disable filexfer location

Use **disable filexfer** to disable Secure Shell (SSH), and Secure FTP (SFTP) remote access protocols through login/password authentication on C-LAN and VAL circuit packs. **Disable filexfer** also disables FTP sessions.

Action/Object	Qualifier	Qualifier Description	Login
disable filexfer	<i>location</i>	location of the circuit pack	

firmware-counters

clear firmware-counters

clear firmware-counters location | a-pnc | b-pnc

Use **clear firmware-counters** to clear the firmware error counters on the specified circuit packs. This command is valid only for SNI, SNC, and DS1C and ATM-EI board locations. When **a-pnc** or **b-pnc** is specified, every such circuit pack in a single PNC can be cleared at once. On a critical-reliability system (duplicated PNC), only circuit packs on a standby PNC that is busied out can be cleared.

Use `clear firmware-counter` to quickly clear lingering alarms after a hardware problem has been fixed. Test `clear` commands do not clear alarms on SNI, SNC, and DS1C circuit packs.



WARNING:

Clear `firmware-counters` can mask actual hardware problems, because firmware is cleared and appears as if no problems were ever encountered.

Action/Object	Qualifier	Qualifier Description	Login
<code>clear firmware-counters</code>	<i>location</i> <code>a-pnc</code> <code>b-pnc</code>	The specified location must be occupied by an SNI, SNC, or DS1C circuit pack. Every circuit pack in the standby PNC can be cleared at once by specifying <code>a-pnc</code> or <code>b-pnc</code>. To do so, the standby PNC must first be busied out.  WARNING: Clear <code>firmware-counters</code> can mask actual hardware problems because firmware is cleared and appears as if no problems were ever encountered.	<code>init</code> <code>inads</code> <code>craft</code> <code>cust</code> <code>rcust</code>

For more information, see [Common Command Output Screens](#) on page 28.

firmware download

See:

[change firmware download](#) on page 288

[disable firmware download](#) on page 291

[display firmware download](#) on page 291

[status firmware download](#) on page 293

[test firmware download](#) on page 295

change firmware download

`change firmware download schedule-number`

Use `change firmware download schedule-number` to schedule a C-LAN-distributed download or a self-download firmware download, immediately or at a later date and time.

schedule-number is a value between 1 and 4.

For information regarding firmware station downloads, see [FW-STD L \(Firmware Station Download\)](#) on page 850 in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)*. To update firmware on Avaya equipment:

1. Open a browser window on your computer and go to <http://www.avaya.com/>.
2. Select **Support**.
3. Select **Software and Firmware Downloads**.

If a firmware download schedule is already pending or active, **change firmware download** is blocked.

Note:

It is highly recommended that you execute [test ipserver-interface](#) after scheduling a download but before the download begins.

Note:

If you receive an error message asking you to use [test ipserver-interface](#), there was a problem with a previous firmware download. Run the test before proceeding.

This is the Firmware Download screen that appears when running **change firmware download 1**

change firmware download 1				Page 1 of 1
FIRMWARE DOWNLOAD				Schedule 1
Source Board Location:	File Server:			
File Retrieval Protocol: SCP	Login:	Password:		
Firmware Image File Name:				
Target Board Code:	Suffix:	Firmware Vintage: 167		
Schedule Download? y	Remove Image File After Successful Download? y			
Start Date/Time: / /	:	Stop Date/Time: / /	:	
Target Location	Target Location	Target Location	Target Location	Target Location
1.	11.	21.	31.	41.
2.	12.	22.	32.	42.
3.	13.	23.	33.	43.
4.	14.	24.	34.	44.
5.	15.	25.	35.	45.
6.	16.	26.	36.	46.
7.	17.	27.	37.	47.
8.	18.	28.	38.	48.
9.	19.	29.	39.	49.
10.	20.	30.	40.	50.

change firmware-download field descriptions

change firmware-download field descriptions 1 of 2

Field	Description
Source Board Location	The board location where the firmware image resides. For “remote downloads”, this location is a C-LAN board. For “self-downloads”, this location is the same as the target board location. The value for this field can be self (download of multiple boards) or auto (Communication Manager chooses the correct C-LAN board to do the download).
File Server	The IP address of the File Server.
File Retrieval Protocol	Display-only field.
Login	Login for the file server.
Password	Password for the file server.
Firmware Image File Name	The firmware image file name, including the file extension, to download.
Target Board Code	The TN-code of the target board to be downloaded, such as TN799.
Suffix	The suffix of the target board to be downloaded. For example, AP, DP, GP.
Firmware Vintage	Display-only, the firmware vintage of the entered image file. This field is always blank for a change firmware download . This field contains a value with display firmware download while a download is in progress, and with status firmware download after a download is complete.
Schedule Download	y/n Specify whether to run the download immediately or at some future time. If y , Start Date/Time and Stop Date/Time appear. If n the download begins when the screen is submitted.
Remove Image File After Successful Download	y/n Specify whether to automatically remove the firmware image file on the source board after the download is successful for the specified target boards. If y and every board was successfully downloaded, the image file is removed, and the file system on the source board is disabled.
Start Date/Time	The date and time to begin the firmware download (mm/dd/yyyy, 2 digits for month, 2 digits for day, and 4 digits for year, and hh:mm, 2 digits for hour, and 2 digits for minutes) This field appears when Schedule Download field is y .
1 of 2	

change firmware-download field descriptions 2 of 2

Field	Description
Stop Date/ Time	Appears when the Schedule Download field is y . It indicates the date and time to end the firmware download to end. If the scheduled stop time is reached before the new firmware image file has been downloaded to every circuit pack, the system finishes downloading to the circuit pack in progress and then aborts the remainder of the download schedule. If this field is blank, the download continues until completion. The field is formatted: mm/dd/yyyy (2 digits for the month, 2 digits for the day, and 4 digits for the year). and hh:mm (2 digits for the hour, and 2 digits for the minutes).
Target Location	These fields contain the target board locations of the boards that will receive the download file image. For a self-download, the target location is the same as the source location.
2 of 2	

disable firmware download

disable firmware download *schedule-number*

Use **disable firmware download** to stop the firmware download for a specified schedule (1 - 4). If a target board is currently downloading, the download is first completed for the current board, but the remaining boards are not downloaded. Run [status firmware download](#) on page 293 to determine how far along the current download is.

Action/Object	Qualifier	Qualifier Description	Login	Default
disable firmware download	<i>n</i>	schedule number		

display firmware download

display firmware download *schedule*

Use **display firmware download** to see the status of the specified download schedule. Use [change firmware download](#) on page 288 to schedule a download. If a scheduled download has not yet occurred or is currently in progress, use **display firmware download** to view the settings for the scheduled downloads. If all downloads have finished, the fields are blank.

See [status firmware download](#) on page 293, [disable firmware download](#) on page 291, and [test ipserver-interface](#) on page 347, and the MO [FW-STD L \(Firmware Station Download\)](#) on page 850 in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)* for more information.

Maintenance SAT Commands

Here is an example of **display firmware download**.

display firmware download 1

Page 1 of 1

FIRMWARE DOWNLOAD

Schedule 1

Source Board Location: 1C02

File Server: 127.34.5.83

File Retrieval Protocol: SCP

Login:

Password:

Firmware Image File Name: usdlv22r1

Target Board Code: TN464

Suffix: FP

Firmware Vintage: 22

Schedule Download? y

Remove Image File After Successful Download? y

Start Date/Time: 10/02/2007 13:30

Stop Date/Time: 10/02/2007 15:30

Target Location	Target Location	Target Location	Target Location	Target Location
1. 01C04	11.	21.	31.	41.
2. 01C06	12.	22.	32.	42.
3. 01C08	13.	23.	33.	43.
4.	14.	24.	34.	44.
5.	15.	25.	35.	45.
6.	16.	26.	36.	46.
7.	17.	27.	37.	47.
8.	18.	28.	38.	48.
9.	19.	29.	39.	49.
10.	20.	30.	40.	50.

display firmware download field descriptions

See [change firmware-download field descriptions](#) for the field descriptions for **display firmware download**.

status firmware download

status firmware download [*schedule#* | *last schedule#*]

Use **status firmware download** to see the download status for each board that is scheduled, or was scheduled, to receive new downloaded firmware as requested by **change firmware download**. Use **last** to see the download schedule of the last completed download for a particular schedule. If there is no active download schedule and there was no previous schedule for the **last** qualifier to invoke, **status firmware download** shows a blank download schedule. The following status flags are shown for each target board:

P	The download to the board is pending.
C	The download to the board was completed successfully.
F	The download to the board failed. Look into the error logs for firmware download for more information about the failure.
S	The board was skipped (the board requires manual intervention to busy-out).
A	The download to the board was aborted.

Action/Object	Qualifier	Qualifier Description	Login	Default
status firmware download	<i>last</i>	last completed or aborted download schedule		

The **status firmware download** screen is display only.

```

status firmware download
                                STATUS FIRMWARE DOWNLOAD                Schedule 3
Source Board Location: 01C02                                File Server: 134.6.94.12
File Retrieval Protocol: SCP      Login: labtest            Password:
Firmware Image File Name: usdlv22r1
    Target Board Code: TN464  Suffix: FP Firmware Vintage: 22
    Schedule Download? y      Remove Image file After Successful Download? n
Start Date/Time: 10/12/2007 13:30      Stop Date/Time: 10/14/2007 16:30

    Target          Target          Target          Target          Target
    Location St     Location St     Location St     Location St     Location St
1.  01C04    C    11.  _____ -    21.  _____ -    31.  _____ -    41.  _____ -
2.  01C06    C    12.  _____ -    22.  _____ -    32.  _____ -    42.  _____ -
3.  01C08    P    13.  _____ -    23.  _____ -    33.  _____ -    43.  _____ -
4.  _____ -    14.  _____ -    24.  _____ -    34.  _____ -    44.  _____ -
5.  _____ -    15.  _____ -    25.  _____ -    35.  _____ -    45.  _____ -
6.  _____ -    16.  _____ -    26.  _____ -    36.  _____ -    46.  _____ -
7.  _____ -    17.  _____ -    27.  _____ -    37.  _____ -    47.  _____ -
8.  _____ -    18.  _____ -    28.  _____ -    38.  _____ -    48.  _____ -
9.  _____ -    19.  _____ -    29.  _____ -    39.  _____ -    49.  _____ -
10. _____ -    20.  _____ -    30.  _____ -    40.  _____ -    50.  _____ -
20
21
Status: Pending(P) Completed(C) Failed(F) Aborted (A)

```

status firmware download field descriptions

The field values are the same as for [change firmware download](#), except:

status firmware download field descriptions

Field	Description
Firmware Vintage	Vintage of the firmware
Start Date/Time Stop Date/Time	If the last parameter was used, this actual dates and times at which the download was started and stopped appear. Otherwise, scheduled dates and times appear.
St	The download to that board is pending (P), completed (C), failed (F), or aborted (A). If a download fails, enter test ipserver-interface to see the error code. See Troubleshooting procedures for each error code in Firmware Download Test (#1413) on page 2014 in <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)</i> .

For more field descriptions, see [change firmware download](#) on page 288.

test firmware download

`test firmware download n`

Run `test firmware download` when there is a download scheduled or there are errors or alarms against the FW-DWNLD maintenance object from a previous download. If there is a download scheduled, then this command verifies the Firmware Download screen entries. If there are FW-DWNLD errors or alarms, then this test resolves the errors and clears the alarms. See [Firmware Download Test \(#1413\)](#) on page 2014 in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)* for more information about the test that is run and the troubleshooting procedures to use if the test does not pass.

It is highly recommended that you execute `test firmware download` after scheduling a download with `change firmware download`, but before the download begins. The test is blocked if a download is in progress. If a download is in progress or has already completed, use `status firmware download` to view progress and status.

For the complete download procedure:

1. Open a browser window on your computer and go to <http://www.avaya.com/>.
2. Select **Support**.
3. Select **Software and Firmware Downloads**.

firmware station-download

See:

[change firmware station-download](#) on page 296

[disable firmware station-download](#) on page 296

[display firmware station-download](#) on page 297

[status firmware station-download](#) on page 297

[test firmware station-download](#) on page 300

change firmware station-download

change firmware station-download

Use **change firmware station-download** to select the range of stations for download and schedule the start/stop time. When there is an active scheduled download, **change firmware station-download** is blocked.

Action/Object	Qualifier	Qualifier Description	Login	Default
change firmware station-download				

This is an example of the **change firmware station-download** screen.

```

change firmware station-download
                        FIRMWARE STATION-DOWNLOAD

Source File: 2420v01.bin

Schedule Download?
Start Date/Time:  /  /      :      Stop Date/Time:  /  /      :
Continue Daily Until Download Complete?

Station Type:

Beginning Station:      Ending Station:

```

disable firmware station-download

disable firmware station-download

Use **disable firmware station-download** to disable a currently running download schedule and allow any active station downloads to complete.

Action/Object	Qualifier	Qualifier Description	Login	Default
disable firmware station-download				

display firmware station-download

display firmware station-download

Use **display firmware station-download** see information for the currently scheduled download.

Action/Object	Qualifier	Qualifier Description	Login	Default
display firmware station-download				

status firmware station-download

status firmware station-download

Use **status firmware station-download** to see the status of the currently scheduled download.

Action/Object	Qualifier	Qualifier Description	Login	Default
status firmware station-download				

This is an example of the **status firmware station-download** screen.

```

status firmware station-download
                STATUS FIRMWARE STATION DOWNLOAD

Image File: 2420v01.bin
Schedule Download? n                Continue daily until completed?: n
Start Date/Time:  /  /              :  Stop Date/Time:  /  /              :
                                         Status of download: Idle

Terminal type for download:
Ext Range:          to:              Number of stations in range:

Stations completed:                  Stations unsuccessful:

Extension Status Err      Extension Status Err      Extension Status Error
12345      ABORT  513
12346      ACTV
12347      ACTV

```

Table 33: Schedule States of status firmware station-download command

State	Schedule Done?	Description
Idle	No	No downloads Pending or Active and there are no unresolved errors/alarms for the last download
Pending	No	Download has been scheduled but not yet started. Check the start time to see when it is scheduled to start.
Active	No	Download is currently active. Actively downloading terminals should be listed with a status of ACTV. If the schedule has just started and no downloads are listed, the system may be waiting for a FAC requested or terminal requested download to complete before it begins.
Resume-pending	No	Download was stopped at the Stop Date/Time but not all of the terminals have been attempted. Downloading will resume at the scheduled Start Date/Time listed on the screen.
Aborted	Yes	Download was aborted for the entire range of terminals. This could happen if the firmware image was bad, damaged or lost.
Failed	Yes	At least two terminals rejected the firmware as invalid. As a result, the download was aborted to avoid problems with any further terminals. Check the Reason Codes of the failed terminals in the list to find the reason why the download failed. See Table 34: Reason Codes for status firmware station-download command on page 299.
Completed	Yes	The scheduled download has completed either due to all terminals in the range of extensions having completed or due to the stop timer.
Disabled	Yes	An Active schedule was disabled with the disable firmware station-download command. After an active schedule is disabled, the Schedule state remains Active until all currently active terminal downloads have completed.
No Image	Yes	The download was stopped because there was no firmware image present in memory.
Restart	Yes	The download was stopped due to a system restart. You must schedule a new download for any Aborted terminals.
Sys Fail	Yes	The download was stopped due to a system error.
Sys Occ	No	The download has been suspended due to the system's occupancy level. The schedule resumes when the occupancy level drops to a safe level.
Dnld Timeout	Yes	While the scheduled download was running, two or more consecutive terminals failed to respond to the download process.

Table 34: Reason Codes for status firmware station-download command 1 of 2

Reason Code	Status	Description
1	ABORT	The firmware image that was noted in the change firmware station-download form has disappeared. The download schedule had to be stopped.
2	ABORT	The terminal could not be downloaded due to a discrepancy relating to the maximum number of downloads allowed.
3	ABORT	The terminal was not downloaded before the scheduled stop time occurred. Schedule a new download with adequate time for the downloads to complete, or select the continue daily option to allow the schedule to resume the following day.
4	ABORT	The terminal could not be downloaded because the schedule aborted for an unknown reason.
5	ABORT	The terminal did not respond to the download request.
6	ABORT	The terminal that was added to the download list at the scheduled start time no longer exists. This can occur when a station is removed during an active download schedule. Download to this terminal was aborted.
18	ABORT	The terminal was busied out by craft and could not be downloaded.
32	ABORT	Download to the terminal timed out due to an internal error in the station firmware download process.
1000	ABORT	Terminal was in use at the time that it was to be downloaded. Download to this terminal was aborted.
1012	ABORT	An internal error occurred while preparing to download to this station.
3841	ABORT or FAIL	The system restarted during an active download. As a result, all terminals that were not downloaded are marked with a status of ABORT with this reason code. All terminals that were actively downloading when the reset occurred are marked with a status of FAIL with this reason code.
128	FAIL	The terminal rejected the firmware because the firmware image failed the checksum test.
129	FAIL	The terminal rejected the firmware because the firmware image failed the image validity test. The firmware image may not be the right image for the hardware being downloaded to.
130	FAIL	The terminal being downloaded could not write its flash memory.
131	FAIL	The translated terminal type is valid, however the actual terminal type of the hardware is not valid for this download schedule.
1 of 2		

Table 34: Reason Codes for status firmware station-download command 2 of 2

Reason Code	Status	Description
513	FAIL	The terminal was not in service at the time that it was to be downloaded. Download to this terminal failed.
3584	FAIL	The terminal rejected the firmware image.
2 of 2		

test firmware station-download

`test firmware station-download`

Use `test firmware station-download` to resolve any alarms or errors associated with the firmware station-download. See also [FW-STD L \(Firmware Station Download\)](#) on page 850 in *Maintenance Alarms for Avaya Communication Manager 4.0, Media Gateways and Servers (03-300430)*.

Action/Object	Qualifier	Qualifier Description	Login	Default
test firmware station-download				

hardware-group

See:

[cancel hardware-group](#) on page 300
[resume hardware-group](#) on page 301
[status hardware-group](#) on page 302
[test hardware-group](#) on page 304

cancel hardware-group

`cancel hardware-group`

Action/Object	Qualifier	Qualifier Description	Login	Feature Interaction
<code>cancel hardware-group</code>		Example: <code>cancel hardware-group</code>	init inads	See below.

Use `cancel hardware-group` to temporarily or permanently abort the execution of `test hardware-group`. Use `resume hardware-group`, to resume the same test, or start another test with `test hardware-group`. Press **CANCEL** to cancel a hardware group test executing in the foreground.

The status of a canceled `test hardware-group` appears as **canceled** on the `status hardware-group` screen.

When a hardware group test is executing in the foreground with the `continuously` option and **CANCEL** is pressed or `cancel hardware-group` is entered, the hardware group test is canceled, and for security reasons the MT running the hardware group test is logged off. Use `resume hardware-group` to restart the canceled hardware-group test after logging back on.

Scheduled and Periodic Maintenance

When `test hardware-group` is entered, all activity related to scheduled background maintenance, periodic background maintenance, and data audits is suspended for the duration of the execution of `test hardware-group`. All activity related to scheduled background maintenance, periodic background maintenance, and data audits will restart if `test hardware-group` is canceled.

All-Ports Option

When `test hardware-group all-ports` is canceled, the internally generated port translations for ports that are otherwise untranslated are removed. If `resume hardware-group` is then entered, only customer-administered ports will subsequently be tested. `Resume` does not reinstate the port translations that were removed by the `cancel`.

If `test hardware-group` running in the foreground is successfully canceled with `cancel hardware-group` from another terminal, the following message appears on the terminal where the hardware group command was executing: **Hardware-group command aborted with cancel; command entered from another terminal.**

resume hardware-group

`resume hardware-group`

Use `resume hardware-group` to restart a hardware group test at the point where it was canceled. This capability is not available if another hardware group test has been started.

Halt a hardware group test (`test hardware-group`) temporarily or permanently with `cancel hardware-group` for a background test, or by pressing **CANCEL** for a foreground test. Use `status hardware-group` to see the status of a hardware group test.

When `test hardware-group all-ports` is canceled, the internally generated port translations for previously untranslated ports are removed. If `resume hardware-group` is

then entered, only customer-administered ports are tested. **Resume** does not reinstate the port translations that were removed by cancellation of **test hardware-group all-ports**.

Action/Object	Qualifier	Qualifier Description	Login	Default
resume hardware-group			init inads	

When a test that was executing in the background is resumed, a success message appears. When a test that was executing in the foreground is resumed, test results appear.

status hardware-group

status hardware-group

Use **status hardware-group** to see summary information about the active or last hardware group tests.

The information includes the number and percentage of maintenance objects tested, the percentage of tests passed/failed/aborted, the time elapsed since initiating the hardware group test, the specific hardware group **test** command (see [test ipserver-interface](#) on page 347) initiated, and the state (active/canceled/complete) of the hardware group test.

Action/Object	Qualifier	Qualifier Description	Login
status hardware-group			init inads craft cust rcust bcms browse

The following display shows the output of **status hardware-group**.

status hardware-group	page 1 of 1
HARDWARE GROUP STATUS	
Hardware Group Command State:	active
Number of MOs Tested:	11070
Total Number of MOs to be Tested:	12300
Percent Complete:	90%
Elapsed Test Time (hr:min:sec):	4:15:30
Repetition Number:	1
Percentage of Tests Passed:	82%
Percentage of Tests Failed:	11%
Percentage of Tests Aborted:	7%
ENTERED HARDWARE GROUP Command	
Command:	test hardware-group system
Test sequence:	short
Test repetition:	repeat 3
Output Options:	failures
Hardware Options:	all-ports

status hardware-group field descriptions

status hardware-group field descriptions 1 of 2

Field	Description
Hardware Group Command State	The state of a hardware-group command: active: testing is in progress; canceled: testing has been canceled; complete the command has completed and there is no testing going on.
Number of MOs Tested	The number of MOs in the specified group (see test ipserver-interface on page 347) that have had been tested by current hardware-group . This includes every MO that either was actually tested or was aborted due to resource contention.
Total Number of MOs to be Tested	The total number of MOs in the group that was specified in test hardware-group .
Percent Complete	A ratio of the number of MOs completed and the total number of MOs to test in the command.
Elapsed Test Time	The duration of the hardware-group test. If a test was canceled and then restarted this time excludes the cancel period. If hardware-group has finished it indicates the length of time it took to complete the command. The time appears as HH:MM:SS where HH is hours, MM is minutes, and SS is seconds.
1 of 2	

status hardware-group field descriptions 2 of 2

Field	Description
Repetition Number	The number of iterations that have been completed corresponding to the 'repeat' or the 'continuously' option.
Percentage of Tests Passed	The percentage of tests that passed.
Percentage of Tests Failed	The percentage of tests that failed.
Percentage of Tests Aborted	The percentage of tests that were aborted.
Command	The hardware-group action/object and qualifiers that were entered.
Test sequence	short/long.
Test repetition	Displays either continuously or the keyword repeat along with the repeat value entered.
Output options	Displays the selections that were chosen on the input screen: auto-page, background, or failures.
Hardware options	Displays the selections that were chosen on the input screen (all-ports).
2 of 2	

test hardware-group

```
test hardware-group [system | carrier UUC | cabinet UU |
port-network PN# | pnc a-pnc | b-pnc | board location] [schedule]
```

Use **test hardware-group** to run a series of demand maintenance tests on all hardware in a specified group: a carrier, cabinet, port network, PNC (A or B), circuit pack or the entire system. The tests executed vary depending on the options chosen and types of hardware in the group. Some tests are run concurrently to speed execution, so test results for several maintenance objects may be intermixed.

A **hardware-group** command running in the foreground can be aborted by pressing **CANCEL** or by entering **cancel hardware-group** at another terminal. Use **cancel** for a test running in the background. You can restart a canceled hardware-group test at the point it left off by entering **resume hardware-group**. Hardware group tests started with the all-ports option can be resumed, but they will not always test every port that originally would have been tested.

Action/ Object	Qualifier	Qualifier Description	Login	Feature Interaction
test hardware -group	system carrier <i>UUC</i> cabinet <i>UU</i> port-network <i>PN#</i> pnc a-pnc b-pnc board location schedule	Every maintenance object included in the specified hardware group is tested, including every circuit pack and port. When a cabinet or larger entity is specified, environmental MOs are tested. See test environment on page 238.		see test hardware-group feature interactions on page 305
		See Common Input Parameters on page 25. Examples: test hardware-group system test hardware-group port-network 11 test hardware-group pnc a-pnc test hardware-group board 01c07		

test hardware-group feature interactions

test hardware-group feature interactions 1 of 2

Test hardware-group	Only one test hardware-group command can be active at any given time.
TTI	If test hardware-group is issued with the all-ports option while the TTI background task is active, some unadministered ports may not be tested. In addition, active alarms on line ports may be cleared by this task. The status tti command may be used to determine the state of the TTI background task.
Add Station	If add station is entered for an untranslated port at the same time as it is being tested by test hardware-group with the all-ports option, the request to add station will fail and the following message appears: Object in use; please try later
Trunk Administration	If an attempt is made to add an unadministered trunk port to a trunk group at the same time as it is being tested because of test hardware-group with the all-ports option, the request will fail, and the following message appears: Object in use; please try later
Save Translation	If test hardware-group is issued with the all-ports option when a translation save operation is active, some unadministered ports may not be tested. All other hardware will be tested normally.
1 of 2	

test hardware-group feature interactions 2 of 2

Hardware Alarms	When a hardware error is detected by test hardware-group , the hardware goes through the standard escalation strategy. Alarms will be raised on hardware that manifest hard errors. This alarming strategy is the same, regardless of whether the ports are translated or not.
System Interaction	The performance of test hardware-group is affected by call processing traffic, administration activity, choice of the short or long option, whether the all-ports option was chosen and other demand maintenance activity.
Scheduled and Periodic Maintenance	When test hardware-group is entered, all activity related to scheduled background maintenance, periodic background maintenance, and data audits is suspended for the duration of the execution of test hardware-group . When test hardware-group is canceled or when test hardware-group completes, all suspended periodic, scheduled, and data audits background maintenance activity will be restarted where it left off.
2 of 2	

The following is a typical input form for **test hardware-group**.

<pre> test hardware-group system Page 1 of 1 TEST HARDWARE-GROUP SELECTIONS Select the desired options for the specified test. Test sequence: <u>short</u> Test repetition: <u>repeat</u> count: <u>1</u> Output OPTIONS: HARDWARE OPTIONS: Auto-page? <u>n</u> All-ports? <u>n</u> Background? <u>n</u> Failures? <u>n</u> </pre>

test hardware-group field descriptions

test hardware-group field descriptions

Field	Description
Test sequence	short / long. long is more comprehensive and is not destructive.
Test Repetition	Enter repeat to enter a number of times that the entire test sequence is to be repeated. Enter continuously to cause the test sequence repeat until the command is canceled.
count	When Test repetition is set to repeat , specify the number of repetitions.
Auto-page	y/n Enter y to display a new screen when the screen fills up with results. This option is incompatible with the background option. If n , once the screen fills with results, testing stops until you press PAGE or CANCEL.
Background	Enter y to run the tests in the background and free up the terminal for other tasks. Error results are logged in the error log but not displayed on the screen. This option is incompatible with the auto-page and “continuously” options.
Failures	Enter y to see failure results only on the screen.
All-ports	Enter y to test all customer-translated line and trunk ports and, for the following circuit packs, untranslated ports as well:

When **test hardware-group** is run in the foreground, test results appear in the normal format. The message line shows a running count of the number of maintenance objects already tested, the total number included in the tests, percent completed, and repetition count.

The following screen shows a typical result for **test hardware-group system**.

```
test hardware-group system                                     Page 1 of 1

                        TEST HARDWARE-GROUP SELECTIONS

Select the desired options for the specified test.

      Test sequence: short
      Test repetition: repeat          count: 1

OUTPUT OPTIONS:                HARDWARE OPTIONS:

      Auto-page? n                All-ports? n
      Background? n
      Failures? n
```

health

See:

[monitor health](#) on page 308

[status health](#) on page 309

monitor health

monitor health

Use **monitor health** to show the current system alarm summary, maintenance busy summary, user summary, critical system status, and cabinet status, that are updated every minute.

See the same information with **status health**. Press **CANCEL** to end **monitor health** and drop the management terminal login.

Note:

monitor health is not available in ASA.

Action/Object	Login	Feature Interaction
monitor health	init inads craft cust nms browse	If standby Emergency Transfer Select Switches change and handshakes are down, the displayed Emerg Trans field is incorrect until handshake re-initializes. When monitor health terminates, users are logged off of the system.

This is an example output screen for **monitor health**.

```

monitor health
                                                    Page 1 of 1
                OCC: St:  4%   Sm:   3%   Cp:  21% Idl:  72%
            ALARMS:Maj:  62  Min:  15   Wrn:  37
            Logins:3 BUSYOUT:Trk:   2   Stn:   1 Oth:  39

Cab EmTr  Maj Min Wrn PNC
1  auto-   2|  1| 25 up
4  auto-   2|  1| 25 up/up
5  n.a.    0|  0|  4 up/up
3  auto-   0|  0|  3 up/up
6  auto-   0|  0|  3 up/up
7  auto-   0|  0|  4 up
8  auto-   0|  0|  0 up

Use 'Status Media-Gateways' for H.248 Gateway status    9:53 THU AUG 16 2007

```

See [status health](#) on page 309 for field descriptions.

status health

status health

Use **status health** to list various performance measurements in the system. Measurements include the current system alarm summary, maintenance busy summary, user summary, critical system status, and cabinet status.

Action/Object	Qualifier	Qualifier Description	Login
status health		See Common Input Parameters on page 25.	init inads craft cust nms browse

Maintenance SAT Commands

The following example shows the output for **status health**.

```
status health

                                OCC: St: 4%   Sm:  4%   Cp: 22% Idl: 70%
                                ALARMS:Maj:  0   Min:  9   Wrn: 61
                                Logins:3 BUSYOUT:Trk: 0   Stn:  0 Oth:  0

Cab EmTr  Maj Min Wrn PNC                                Cab EmTr  Maj Min Wrn PNC
1  auto-   0|  1| 41 up
2  auto-   0|  1|  5 up/up
3  auto-   0|  0|  5 up/up
4  auto-   0|  0|  0 up/up
5  auto-   0|  0|  0 up/up

Use 'Status Media-Gateway' for H.248 Gateway status      9:51 THU AUG 16 2007
```

status health field descriptions

status health field descriptions 1 of 3

Field	Description
St	Percentage of CPU time currently dedicated to high priority items such as the operating system, rounded to the nearest whole number
Sm	Percentage of CPU time currently dedicated to system management or periodic and scheduled maintenance, rounded to the nearest whole number If a large amount of periodic or scheduled maintenance testing is being performed, this number can be high without affecting service.
Cp	Percentage of CPU time currently dedicated to call processing, rounded to the nearest whole number Call processing has priority over system management and will draw occupancy from the SM or IDLE categories.
Idl	Percentage of CPU time currently idle and available for use, rounded to the nearest whole number
Maj	Number of major alarms logged
Min	Number of minor alarms logged
Wrn	Number of warning alarms logged
Logins	Number of current users
Trk	Number of maintenance busied-out trunks
1 of 3	

status health field descriptions 2 of 3

Field	Description
Stn	Number of maintenance busied-out stations
Oth	Number of busied-out maintenance objects, excluding trunks and stations
Cab	Cabinet number Use list cabinet to relate cabinet numbers to port network numbers.
EmTr	Emergency Transfer shows the current setting of the switches on the PN's Maintenance circuit packs that control Emergency Transfer. See EMG-XFER (Emergency Transfer) on page 778 in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430)</i> (formerly 03-300190). The following states are available: auto- Emergency Transfer is under system control and is not currently activated (normal operating state). auto+ Emergency Transfer is under system control and is in effect. on Emergency Transfer has been manually activated. This setting should only be in effect during an emergency. off Emergency Transfer is manually prevented from occurring. This setting should only be in effect when a technician is on site. n.a. The setting of the switch in this PN is not available to the switch. The Expansion Archangel Link (EAL) may be down. NoEqp means that the cabinet has circuit packs that do not support Emergency Transfer.
2 of 3	

status health field descriptions 3 of 3

Field	Description
Maj, Min, Wrn	Number of major, minor or warning alarms associated with the cabinet An asterisk indicates that the number exceeds 99 or 999.
PNC	Current Port Network Connectivity (PNC) status for each of the port networks in the cabinet When multiple port networks exist within a cabinet, Carriers A, B, and C are listed first and separated from Carriers D and E by a slash (e.g., up/up). aa Points to a problem with the archangel. The control is up, but the archangel is not functioning and is not available. up Both the Expansion Archangel Link (EAL) and the Indirect Neighbor Link (INL, if applicable) are available. dn Both EAL and INL (if applicable) are not available. ne (Near End) The EAL is available but the INL is not available. fe (Far End) The INL is available but the EAL is not available. up/up: 2 port networks share a cabinet. The first up is associated with the PN contained in A, B, and C carriers, and the 2nd up in D and E. up/up/up: 3 port networks share a cabinet. The first is in carrier A, the second in B and C, and the third in D and E. up/up/up/up: 4 port networks share a cabinet. The first is in carrier A, the second in B, the third in C, and the fourth in D and E. up/up/up/up/up: 5 (the maximum allowed) port networks share a cabinet. The first is in A, the 2nd in B, the 3rd in C, the 4th in D, and the 5th in E. Use list cabinet to see the carriers and port networks in each cabinet in the system.
3 of 3	

history

list history

```
list history [date] [time] [login x] [action x] [object x] [qualifer x]
[schedule]
```


list history with no options generates a log of the most recently completed data-affecting administration and maintenance commands. This includes the history of ACTR moves, which can be used to track moves and help reduce fraud.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list history	date time login action object qualifier schedule	MM or MM/DD HH or HH:MM login-id action performed object acted on extension, etc. See Common Input Parameters on page 25.	init inads craft cust browse rms		See list history feature interactions on page 313

list history feature interactions

The translation log is written to memory as translation data when **save translation** is executed. The translation data is time stamped when saved. This time stamp is noted when translation is loaded from memory and included in every recent change history report.

When a user requests a recent change history report, there could be other users concurrently issuing data commands and altering the contents of the transaction log. Therefore, if the user pages the entire way through the report, the oldest entries in the transaction log (maximum 250 commands) may have been overwritten by data commands issued by these other users. If this occurs, the final entries of the report show the data commands issued by the other users since the recent change history report was originally requested.

Also, using **set time** to alter the system clock could make it look as if the recent change history report is not in true LIFO order.

list history						Page 1
HISTORY						
Date of Loaded Translation: 1:02am FRI OCT 19, 2007						
Date	Time	Port	Login	Actn Object	Qualifier	
10/25	13:46	MAINT	init	save translation		
10/25	13:35	MAINT	init	logn		
10/25	13:29		maint	save translation		
10/25	13:27	S01505	ip-u	cha sta	21466	
10/25	13:24	S01506	ip-u	cha sta	21467	
10/25	13:19	S01507	ip-u	cha sta	21468	
10/25	13:17	MAINT	init	logn		
10/25	11:21	MAINT	init	logf		
10/25	11:20	MAINT	init	logn		
10/25	11:20	MAINT	init	logf		
10/25	10:13	MAINT	init	logn		
10/25	9:35	MAINT	init	save translation		

list history field descriptions

list history field descriptions

Field	Description
Date	The date list history was issued (mm/dd).
Time	The time list history was issued (hh:mm).
Port	The port type to which the user was connected when list history was issued. - TTI, PSA, CTA and ACTR moves are recorded when the CTA/PSA/TTI Transactions in History Log field is y on the Feature-Related System Parameters screen. These transactions appear as two separate records: one recording the moved-from port, and the other one recording the moved-to port. - IP station registrations and unregistrations are recorded when the Record IP Registrations in History Log field is y on the Feature-Related System Parameters screen.
Login	User login
Actn	The action part of the command, specifying the operation to be performed. This field is truncated after 4 characters to allow enough space for objects and qualifiers and to uniquely identify each action.
Object	The qualifier (12 characters) specifying the object of the command. Where the object is multiple words in length, only the first word appears in the object field; every succeeding word is treated as a qualifier.
Qualifier	One or more qualifiers describing the characteristics of the Action/Object pair. This field is truncated after 31 characters to keep information for a command on a single line.

Communication Manager events are also logged in the Linux syslog. Syslog is a standard Linux service that supports storing event information in local files as well as sending events to an external syslog server. Syslog supports storing events in different files or 'logs' depending on the nature of the event.

Access the Communication Manager web interface log pages through **Select Diagnostics > System Logs**. For more information on Communication Manager web interface System Logs, see *Maintenance Procedures for Avaya Communication Manager, Media Gateways and Servers (03-300432) (formerly 03-300192)*.

The following types of activities are logged:

- 1 Security-related events: Communication Manager logs all events related to security to the secure log. An administrator cannot disable or change parameters related to security events.
- 1 System Administration Terminal (SAT) interface logging: Administration changes are logged to the command history log with the date and time, the unique identify of the person making the change, the value of the parameter that is changing and the status of the operation (successful or not). The administrator can configure the level of detail that is logged.

Communication Manager logs attempts by users to view information to which they are not permitted access or attempts to submit forms with invalid or non-acceptable values.

- 1 Web page logging: Attempts to access the Avaya server's web pages and changes to a value in a web page are logged. Changes to a web page are logged only if the page is submitted, either successfully or unsuccessfully.

initcauses

display initcauses

| `schedule`]

Use `display initcauses` to see a history of recovery steps taken by the system. `Display initcauses` shows information for restarts of the active processor only. When the processor resets and the system is restarted, either by a technician command or by system software, information about the recovery is stored. If the reset is escalated, only the reset that successfully completes is recorded. The error log contains information about the reset. When a reset 4 (reload) occurs, the error log is saved on the disk.

Records of the last 16 restarts are retained in the `initcauses` log in chronological order.

Action/Object	Qualifier	Qualifier Description
<code>display initcauses</code>	<code>schedule</code>	See Common Input Parameters on page 25

```
display initcauses
```

INITIALIZATION CAUSES				
Cause	Action	Escalated	Mode	Time
Interchange-Craft	4	yes	Active	11/02 17:17
Craft Request	4	no	Active	11/06 17:04
Initialized	4	no	Active	11/06 22:15
Internal Request	1	no	Standby	11/06 22:16
Craft Request	4	no	Active	11/08 11:20
Craft Request	4	no	Active	11/08 11:33
Craft Request	4	no	Active	11/08 11:38
Craft Request	4	no	Active	11/08 15:07
Craft Request	4	no	Active	11/08 16:14
Craft Request	4	no	Active	11/08 16:39
Craft Request	4	no	Active	11/08 16:55
Initialized	4	no	Active	11/08 23:06
Craft Request	4	no	Active	11/10 14:24
Initialized	4	no	Active	11/13 23:02

display initcauses field descriptions

display initcauses field descriptions 1 of 2

Field	Description
Cause	This gives the reason for the system reset, as follows: Craft Request:= The reset was manually initiated using reset system. Initialized = A power-up. Always the first entry in the log unless more than 15 restarts have occurred since the last power up. Interchange = A State of Health change caused the arbiter process to initiate the restart. Interchange-Craft = An administrative session (session -i command, on-demand interchange) caused the arbiter process to initiate the restart. Internal Request = Software requested the restart, usually in response to a server interchange. Internal request restarts are not initiated in direct response to an error and are non-escalating. Software Request = Software requested the system restart.
Action	The level of recovery performed by the system. 1 Reset system 1 (Warm): Communication Manager software is restarted, and active calls remain up. 2 Reset system 2 (Cold): Communication Manager software is restarted, translations are preserved, and all calls are dropped. 4 Reset system 4 (Reload): Communication Manager software is completely reloaded, and the hardware is reinitialized.
1 of 2	

display initcauses field descriptions 2 of 2

Field	Description
Escalated	y/n y = the restart was escalated to a higher level than originally attempted. The system's software escalation strategy can perform a higher level restart than the one initiated if problems prevent or conditions interfere with normal execution.
Mode	State of the server immediately after the interchange, at the time of the restart. Look for a change of mode to help determine when an interchange occurred. Active = Mode of a simplex server and for a duplex server that is the active server. Standby = Mode of a standby server in a duplex configuration BUSY OUT = Mode of a standby server that has been placed out-of-service with a busyout command.
Time	The month, day and time of the restart.
2 of 2	

See also [reset system](#) on page 571.

integ-annc-board

list usage integ-annc-board

`list usage integ-annc-board location`

Use `list usage integ-annc-board` to see information on the announcements and audio groups on an announcement circuit pack.

For more information on Announcements/Audio Sources screens and integrated announcement boards, see *Administrator Guide for Avaya Communication Manager (03-300509)*.

Action/Object	Qualifier	Qualifier Description
<code>list usage integ-annc-board</code>	<code>location</code>	board location

The following screen shows a typical result for `list usage integ-annc-board`.

list usage integ-annc-board 01B18				Page 1
ANNOUNCEMENT GROUP BOARD USAGE				
USED BY				
Audio Group	Group	4	Member	28
Audio Group	Group	23	Member	101
Announcement	Announcement	2087	Extension	9876543210

list usage integ-annc-board field descriptions

list usage integ-annc-board field descriptions

Field	Description
USED BY	The type of announcement source on the announcement circuit pack Audio Group with Audio Group number and Member number Announcement with Announcement number and Extension

ip-board

status ip-board

`status ip-board location`

`Status ip-board` has the same syntax and output as `status clan-ip` except the list of allowed boards is larger.

Note:

`status ip-board location` is a SAT command that cannot be run on the MAPD board.

Use `status ip-board location` to see the data in the first two columns of the following table. The screen also shows the time of the last port reset, the last hour start time and end time for the error counter statistics.

Action/Object	Qualifier	Qualifier Description
<code>status ip-board</code>	<code>CCccss</code>	board location

status ip-board field descriptions

status ip-board field descriptions 1 of 2

Field Name	Output type		MIB data	Description
Incoming datagram header errors	Counter	Long	ipInHdrErrors	The number of input datagrams discarded due to errors in their IP headers, including bad checksums, version number mismatch, other format errors, time-to-live exceeded, and errors discovered in processing their IP options.
Outgoing datagrams with no route available	Counter	Long	ipOutNoRoutes	The number of IP datagrams discarded because no route could be found to transmit them to their destination. Note that this counter includes any packets counted in ipForwDatagrams which meet this 'no-route' criterion. Note that this includes any datagrams which a host cannot route because all of its default gateways are down.
Incoming datagrams received	Counter	Long	ipInReceives	The total number of input datagrams received from interfaces, including those received in error.
Incoming datagrams discarded	Counter	Long	ipInDiscards	The number of input IP datagrams for which no problems were encountered to prevent their continued processing, but which were discarded (e.g., for lack of buffer space). Note that this counter does not include any datagrams discarded while awaiting re-assembly.
Outgoing datagrams submitted for transmission	Counter	Long	ipOutRequests	The total number of IP datagrams which local IP user-protocols (including ICMP) supplied to IP in requests for transmission. Note that this counter does not include any datagrams counted in ipForwDatagrams.
Outgoing datagrams discarded	Counter	Long	ipOutDiscards	The number of output IP datagrams for which no problem was encountered to prevent their transmission to their destination, but which were discarded (e.g., for lack of buffer space). Note that this counter would include datagrams counted in ipForwDatagrams if any such packets met this (discretionary) discard criterion.
1 of 2				

status ip-board field descriptions 2 of 2

Field Name	Output type		MIB data	Description
ICMP Destination unreachable messages	Counter	Long	icmplnDestUnreachs	The number of ICMP Destination Unreachable messages received.
ICMP Redirect message	Counter	Long	icmplnRedirects	The number of ICMP Redirect messages received
				2 of 2

ip-codec-set

change ip-codec set

change ip-codec-set [*n*]

Use **change ip-codec-set** to independently administer codec sets to use media encryption or not.

Action/Object	Qualifier	Qualifier Description
change ip-codec-set	<i>n</i>	codec set number

This is an example screen for **change ip-codec-set**.

change ip-codec-set 7				Page 1 of 1
				IP Codec Set
Codec Set: 7				
Audio	Silence	Frames	Packet	
Codec	Suppression	Per Pkt	Size(ms)	
1: G.711MU	n	2	20	
2:				
3:				
4:				
5:				
6:				
7:				
Media Encryption				
1: aes				
2: aea				
3: none				

change ip-codec-set field descriptions

change ip-codec-set field descriptions 1 of 2

Field	Description
Codec Set	1-7 specifies the codec set used between the network regions. If blank, there is no connectivity between the network regions.
Audio Codec	Name of the audio codec in this codec-set G.711A (a-law) G.711MU (mu-law) G.722-64k G.722.1-24k G.722.1-32k G.723.5.3 G.723.6.3 G.726A-32k G.729 G.729A G.729B G.729AB SIREN14-24k SIREN14-32k SIREN14-48k SIREN14-S48k SIREN14-S56k SIREN14-S64k SIREN14-S96kk
Silence Suppression	y/n Enter y to enable RTP-level silence suppression on the audio stream
Frames Per Pkt	Number of frames per packet up to a packet size of 60 milliseconds (ms) 1-6 or blank G.711 default frame size is 2 (20 ms). G.723 default frame size is 3 (30 ms). G.729 default frame size is 2 (20 ms).
1 of 2	

change ip-codec-set field descriptions 2 of 2

Field	Description
Packet Size (ms)	Size of the packet in milliseconds (ms).
Media Encryption	The options for each codec set apply to all codecs defined in that set. Appears when Media Encryption Over IP is y on the system-parameters customer-options screen. Enter the options in the order of preference. Enter aes in one of the fields to add AES Media Encryption. - Enter aes for Advanced Encryption Standard encryption, standard used by U.S. government to protect sensitive (unclassified) information. Reduces circuit-switched to IP call capacity by 25%. - Enter aea for Avaya Encryption Algorithm. Not as secure as AES. Use to encrypt: - all endpoints (except Avaya 46x4 IP Telephones) within a network region using this codec set - all endpoints communicating between two network regions and using this codec set - Enter none for an unencrypted media stream. Prevents encryption when using this codec set. Default value when Media Encryption Over IP is y for the first time on the Special Applications screen. 1-srtp-aescm128-hmac80 2-srtp-aescm128-hmac32 3-srtp-aescm128-hmac80-unauth 4-srtp-aescm128-hmac32-unauth 5-srtp-aescm128-hmac80-unenc 6-srtp-aescm128-hmac32-unenc 7-srtp-aescm128-hmac80-unenc-unauth 8-srtp-aescm128-hmac32-unenc-unauth Or leave blank
2 of 2	

ip-interface

list ip-interface

```
list ip-interface [ clan | medpro | all ]
```

Use `list ip-interface` to see information on Media Processor and IP Media Resource circuit packs in your system.

Action/Object	Qualifier	Qualifier Description	Default
list ip-interface	clan	show information for all C-LAN circuit packs	
	medpro	show information for all media processor circuit packs	
	all	show information for all media processor and IP Media Resource circuit packs	

This example shows a typical output for `list ip-interface medpro`.

list ip-interface medpro

```
list ip-interface medpro
```

IP INTERFACES									
					Net				
ON	Slot	Code	Sfx	IP Address/Mask	Gateway Address	Rgn	VLAN	Virtual	Address
y	01A02	TN2302		172.16.241.24 /24	172.16.241.254	1	n		
y	01B10	TN2302		172.16.241.27 /24	172.16.241.254	3	n		
y	01B02	TN2302		172.16.241.26 /24	172.16.241.254	1	n		
y	01A05	TN2302		172.16.241.25 /24	172.16.241.254	1	n		
y	03B02	TN2302		172.16.241.29 /24	172.16.241.254	3	n		
y	03A02	TN2302		172.16.241.28 /24	172.16.241.254	3	n		
y	05B02	TN2302		172.16.242.26 /24	172.16.242.254	7	n		
y	05A02	TN2302		172.16.242.25 /24	172.16.242.254	3	n		
y	07B02	TN2302		172.16.242.30 /24	172.16.242.254	7	n		

Maintenance SAT Commands

This example shows a typical output for **list ip-interface all**.

list ip-interface all

list ip-interface all									
Page 1									
IP INTERFACES									
ON	Type	Slot	Code	Sfx	Node Name/ IP-Address	Subnet Mask	Gateway Address	Net Rgn	VLAN
---	----	-----	----	----	-----	-----	-----	---	----
y	C-LAN	01C15	TN799	D	st13clan	255.255.255.0	192.168.22.254	77	0
					192.168.22.33				
y	MEDPRO	02B05	TN2302		st13_prowler1	255.255.0.0	172.22.22.254	4	n
					172.22.22.227				
y	MEDPRO	01B06	TN2602		st13_prowler10	255.255.254.0	172.21.21.254	4	n
					172.21.20.31				
y	MEDPRO	03B14	TN2602		st13_prowler2	255.255.0.0	172.22.22.254	1	n
					172.22.22.228				
y	MEDPRO	03B15	TN2602		st13_prowler3	255.255.0.0	172.22.22.254	1	n
					172.22.22.229				
y	MEDPRO	02C06	TN2302		st13_prowler4	255.255.0.0	172.22.22.254	1	0
					172.22.22.230				
y	MEDPRO	02C07	TN2302		st13_prowler5	255.255.0.0	172.22.22.254	250	0
					172.22.22.231				

list ip-interface field descriptions

list ip-interface field descriptions 1 of 2

Field	Description
ON	y - allows use of the ethernet port
Type	Type of IP interface. This field appears for list ip-interface all .
Slot	Physical port location of the IP interface.
Code	TN identification of the circuit pack for the IP interface.
Sfx	Suffix identification of the circuit pack for the IP interface.
Node Name	Node name for the IP interface administered on the Node Names screen.
IP Address	The IP address of the IP Interface. For list ip-interface medpro , the IP Address and Subnet Mask fields are combined.
1 of 2	

list ip-interface field descriptions 2 of 2

Field	Description
Subnet Mask	Subnet mask associated with the IP address for the IP interface. The subnet mask is a 32-bit binary number that divides the network ID and the host ID in an IP address.
Gateway Address	Address of a network node that serves as the default gateway for the IP interface.
Num Skts Warn	Threshold number of sockets in use for IP endpoint registration on the C-LAN before a warning message is logged. This field appears for list ip-interface clan .
Net Rgn	Network region number for the IP interface.
VLAN	This field sends VLAN instructions to C-LAN and Media Processor boards. It does not send VLAN instructions to IP endpoints such as IP telephones and softphones. This field cannot be administered for VAL boards.
Dup	n - the IP interface circuit is not duplicated y - the IP Media Resource 320 circuit pack is duplicated. The next board in this list is the associated duplicated IP Media Resource 320 circuit pack. If media processor boards are not duplicated, n is displayed in this column.
Virtual Address	The virtual address of the duplicated TN2602 (Crossfire) circuit pack pair. This field appears on list ip-interface medpro for duplicated TN2602 circuit packs .
2 of 2	

ip-network-region

See:

[change ip-network-region](#) on page 326[status ip-network-region](#) on page 328

change ip-network-region

change ip-network-region *x*

Use **change ip-network-region** to change the audio and Quality of Service (QoS) attributes of IP network region *x*, where *x* is a network region number, or to change the codec set used for connections from network region *x* to other network regions.

To troubleshoot broken inter-network region connectivity, see **status ip-network-region**, **display failed-ip-network-region** and **test failed-ip-network-region**.

Action/Object	Qualifier	Qualifier Description
change ip-network-region	<i>x</i>	Region number

See *Administration for Network Connectivity for Avaya Communication Manager, (555-233-504)* for administration guidelines.

change ip-network-region 3	Page 1
IP Network Region	
Region: 3	
Location:	Home Domain:
Name:	
	Intra-region IP-IP Direct Audio?
AUDIO PARAMETERS	Inter-region IP-IP Direct Audio?
Codec Set: 2	IP Audio Hairpinning? y
UDP Port Min: 2048	
UDP Port Max: 65535	RTCP Reporting Enabled? y
	RTCP MONITOR SERVER PARAMETERS
	Use Default Server Parameters? n
DIFFSERV/TOS PARAMETERS	Server IP address: 172.16.24.28
Call Control PHB Value: 43	Server Port: 5005
Audio PHB Value: 46	RTCP Report Period(secs): 5
BBE PHB Value: 43	
	AUDIO RESOURCE RESERVATION PARAMETERS
	RSVP Enabled? y
802.1P/Q PARAMETERS	RSVP Refresh Rate(secs): 15
Call Control 802.1p Priority:6	Retry upon RSVP Failure Enabled? y
Audio 802.1p Priority:	RSVP Profile: guaranteed-service
H.323 IP ENDPOINTS	RSVP unreserved (BBE) PHB Value:
H.323 Link Bounce Recovery?	
Idle Traffic Inerval (sec):	
Keep-Alive Interval (sec):	
Keep-Alive Count:	

```

change ip-network-region 1                                     Page 2 of 19
                                IP NETWORK REGION

INTER-GATEWAY ALTERNATE ROUTING / DIAL PLAN TRANSPARENCY
Incoming LDN Extension:
Conversion To Full Public Number - Delete:      Insert:
Maximum Number of Trunks to Use for IGAR:
Dial Plan Transparency in Survivable Mode? n

BACKUP SERVERS IN PRIORITY ORDER      H.323 SECURITY PROFILES
1   sv-st12-elspy                     1   pin-eke
2                                     2
3                                     3
4                                     4
5
6                                     Allow SIP URI Conversion? y

TCP SIGNALING LINK ESTABLISHMENT FOR AVAYA H.323 ENDPOINTS
Near End Establishes TCP Signaling Socket? n
Near End TCP Port Min: 61440
Near End TCP Port Max: 61444

```

```

change ip-network-region 3                                     Page 2 of x
                                IP Network Region

BACKUP SERVERS IN PRIORITY ORDER
1
2
3
4
5
6

```

```

change ip-network-region 3                                     Page 3 of x
                                Inter Network Region Connection Management

src dst   codec  direct  Audio          Video          Dyn
rgn rgn   set    WAN    WAN-BW-limits  WAN-BW-limits  intervening-regions  CAC  IGAR
1   1     1      y      :NoLimit
1   2     1      y      :NoLimit
1   3     1      n      :
1   4     1      n      :
1   5     1      n      :
1   6     1      n      :

```

See *Administrator Guide for Avaya Communication Manager (03-300509)* for field descriptions for `change ip-network-region`.

status ip-network-region

status ip-network-region *x*

Use **status ip-network-region *x*** to see the status of the administered network connections between network region *x* and other network regions.

Action/Object	Qualifier	Qualifier Description
status ip network-region	<i>x</i>	ip-network region number

This is an example of the output for **status ip-network-region 2**.

status ip-network-region 2											
Inter Network Region Bandwidth Status											
Src	Dst	Conn	Conn	BW-Limits	BW-Used		#Connections		# Times		
Rgn	Rgn	Type	Stat		Tx	Rx	Tx	Rx	Hit	Today	IGAR
											Now/Today
2	1	direct	pass	128 Kbits	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxx		xxx/xxx
2	3	indirect	pass								
2	4	indirect	pass								
2	5	indirect	pass								

status ip-network-region field descriptions

status ip-network-region field descriptions 1 of 2

Field	Description
Src Rgn	Source Region number
Dst Rgn	Destination region
Conn Type	Type of connection direct indirect
Conn Stat	status of the connection pass fail
BW-Limits	Bandwidth and limits as administered with add ip-network-region
1 of 2	

status ip-network-region field descriptions 2 of 2

Field	Description
BW-Used (kbits) Tx	Bandwidth used for transmission, direct connections only
BW-Used (kbits) Rx	Bandwidth used receiving, direct connections only
#Connections Tx	Number of transmission connections, direct connections only
#Connections Rx	Number of receiving connections, direct connections only
#Times BW-Limit hit Today	Number of times the CAC threshold limits reached since the previous midnight, direct connections only
IGAR Now/Today	The number of active IGAR connections for the pair of Network Regions/ The number of times IGAR has been invoked for the pair of Network Regions since the previous midnight.
2 of 2	

ip-route

See:

[list ip-route](#) on page 329

[netstat ip-route](#) on page 331

[refresh ip-route](#) on page 333

list ip-route

list ip-route [board location]

Use **list ip-route** to list the IP routes from DEFINITY ECS out to the LAN. Enter the board parameter to list the IP routes for a specific C-LAN circuit pack, for example, **list ip-route board location**.

Action/Object	Qualifier	Qualifier Description	Login	Default
list ip-route	board location	Physical location of the circuit pack. Example: list ip-route board 01A03	init inads craft	

The following example shows the output from **list ip-route**.

list ip-route						
IP ROUTING						
Route Number	Destination Node	Gateway/Subnet Mask	C-LAN Port Network	Metric/ Bits	Accepted by C-LAN	
xxx	xxxxxxxxxxxxxxxx	xxxxxxx	xxxxxxx	0	accepted	
		xxx.xxx.xxx.xxx		24		
xxx	xxxxxxxxxxxxxxxx	xxxxxxx	xxxxxxx	0	pending	
		xxx.xxx.xxx.xxx		24		
xxx	xxxxxxxxxxxxxxxx	xxxxxxx	xxxxxxx	1	rejected	
		xxx.xxx.xxx.xxx		24		

list ip-route field descriptions

list ip-route field descriptions 1 of 2

Field	Description
Route Number	IP-route number
Destination Node	Destination of the route. The name is administered on the Node Name screen and can include the keyword Default indicating the default route.
Gateway	The node name of the Gateway through which the destination is to be reached. The Gateway is a name administered on the Node Name screen.
Subnet Mask	The destination IP subnet address. Identifies which portion of an IP address is a network address and which is a host identifier.
C-LAN Port	Indicates the C-LAN port location that provides the interface for the route.
Metric	Specifies the desirability of the IP route in terms of the efficiency of data transmission over the route. Valid entries are 0 (a simple route) and 1 (a complex route). A metric value of 1 is used only when the switch has more than one C-LAN board installed. A metric-1 route diverts usage of the route to a metric-0 route, if available.
1 of 2	

list ip-route field descriptions 2 of 2

Field	Description
Network Bits	
Accepted by C-LAN	Indicates whether a C-LAN circuit pack has accepted the administered IP-route. Routes for a link are downloaded to the C-LAN circuit pack when the link comes into service. Possibilities include: accepted – the route has been accepted by the C-LAN circuit pack rejected – the route has been rejected by the C-LAN circuit pack. The Gateway may not be on the attached ethernet subnet or may not be the IP address of the far end of the PPP link. pending – the route has not been sent to the C-LAN circuit pack, or it has been sent but no reply has been received. Typically, this status changes to <i>accepted</i> or <i>rejected</i> when some condition changes, such as a link coming up. obsolete – the route is no longer needed (some host routes were needed in R7 but are no longer needed in subsequent releases, or are duplicates of existing routes).
2 of 2	

netstat ip-route

netstat ip-route [*board location*]

Use **netstat ip-route** to see the routing tables that are resident in the C-LAN and/or VAL circuit packs. Without the **board** option, all C-LAN and VAL circuit packs are displayed. With the **board** option, only the specified C-LAN or VAL circuit pack appears.

Action/Object	Qualifier	Qualifier Description	Login
netstat ip-route	<i>board location</i>	(none) Display routing tables for all C-LAN and VAL circuit packs specific C-LAN or VAL circuit pack	init inads craft

The following example shows the output from **netstat ip-route**.

netstat ip-route				
IP ROUTING				
Bd/Pt	Destination	Gateway	Subnet Mask	Intfc/Err
01A0633	0.0.0.0	192.168.22.264	0.0.0.0	motfec0
01S0618	127.0.0.1	127.0.0.1	255.255.255.255	lo0
01A0618	127.0.0.8	127.0.0.8	255.255.255.0	lo0
01A0633	192.168.22.0	192.168.22.113	255.255.255.0	motfec0
07A04	****	****	****	LPBK_IP

netstat ip-route field descriptions

netstat ip-route field descriptions

Field	Description
Bd/Pt	The circuit pack location for the pack that provides the interface for the route.
Destination	Fixed field giving the destination of the route. The destination is a name administered on the Node Name screen which can include the keyword "Default," indicating the default route.
Gateway	The node name of the Gateway by which the Destination can be reached. The Gateway must be a name administered on the Node Name screen.
Subnet Mask	Subnet mask information entered on the IP Interfaces screen.
Intfc/Err	pppn represents one of the PPP interfaces on the C-LAN, which is administered as port n+1. cpm0 represents the ethernet interface on the C-LAN which is administered as port 17. motfec0 represents the internet interface on the VAL circuit pack, which is administered as port 33. lo0 represents the loopback interface on the C-LAN or VAL. LPBK_IP - Loopback request failed, typically because the RSCL is down. - Timeout - Query timed out. - SNMP - SNMP call failed. - BD BUSY - Board was busied out.

refresh ip-route

refresh ip-route [**all** | **board location**]

Occasionally, tables that are used to route IP messages become corrupted and/or contain stale routes which will delay packet delivery. Use **refresh ip-route** to remove dynamic (learned) routes from C-LAN circuit pack route tables and replace any administered routes that have been corrupted.

Action/Object	Qualifier	Qualifier Description	Login	Default
refresh ip-route	all board location	Refreshes route tables in all C-LAN circuit packs. Refreshes ip-route tables in a specific C-LAN circuit pack.	init inads craft station trunk MSP permissions	all

The following example shows the output from **refresh ip-route all**.

refresh ip-route all					
REFRESH IP ROUTE					
Board Location	Maintenance Name	Refresh Result	Routes Deleted	Routes Added	Failure Reason
05B11	CLAN-BD	Fail	0	0	Brd Busy
01A11	CLAN-BD	Success	0	0	

refresh ip-route all field descriptions

refresh ip-route all field descriptions 1 of 2

Field	Description
Board Location	The physical location of the C-CLAN circuit pack.
Routes Deleted	Number of routes that were deleted from the C-LAN route tables.
1 of 2	

refresh ip-route all field descriptions 2 of 2

Field	Description
Routes Added	Number of routes that were added from the C-LAN route tables.
Failure Reason	The refresh failed for the following reasons: Add - Adding a route failed. Delete - Deleting a route failed. Loopback - Failed to acquire loopback address. RSCL is probably down. Brd Busy- the CLAN-BD has been busied out. SNMP - SNMP query to the board failed. Timeout - SNMP query timeout.
2 of 2	

ip-stations

reset ip-stations

```
reset ip-stations [ip-phones | all | tti] [ ip-network-region n |
all-regions | ipaddr n n]
```

Use **reset ip-stations** to simultaneously unregister and reset all IP endpoints on a system, or a certain group of IP stations. You can limit the reset to only IP phones, to IP phones in a specific network region, to all IP endpoints in a specific network region, or within a range of ip addresses. Each defined ip station receives a reset message and is unregistered.

Use **reset ip-stations** to initiate simultaneous firmware upgrades to many IP stations, or a certain group of IP stations. You can reset IP stations on one ip-network region to prevent overloading a system with large numbers of IP station resets.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
reset ip-stations	all ip-phones tti	reset all IP endpoints reset IP phones only reset phones in TTI state only	(all)	all-ip	See Feature Interactions for reset ip-stations on page 336
	ip-network-region n all-regions ipaddr n n	reset IP endpoints in specified IP network region reset IP endpoints in all network regions reset IP endpoints within an ip address range		all regions	
Examples: reset ip-stations ip-phones reset ip-stations ip-network-region 2 reset ip-stations ip-phones ip-network-region 2 reset ip-stations ip-phones ipaddr 135.9.76.70 135.9.77.70					

Use **reset ip-stations** to reset H.323 stations including:

- ┆ IP phones
- ┆ IP Softphones
- ┆ IP Agents
- ┆ IP E-consoles
- ┆ All endpoints that appear as IP stations to Communication Manager

When **reset ip-stations** is issued:

- ┆ The system unregisters each station
- ┆ Each station individually resets
- ┆ “Command completed successfully” appears immediately at the SAT. However, not all IP stations have already been reset.
- ┆ An event is logged in the Events Report (**display events**)

If **reset ip-station** is executed a second time before all stations have reset, “Command already running; Please try again later” appears.

When **reset ip-stations** is submitted, the “Command completed successfully” message appears, but all the resets are not complete. If the system resets while **reset ip-stations** is running, resubmit the command to restart the process.

Feature Interactions for reset ip-stations

Network Regions

When setting up IP-network regions, consider the number of IP endpoints assigned to each region. Network regions are associated with specific media processing resources. Administer IP-network regions to a size that DHCP and TFTP servers can handle, and limit the performance impacts of simultaneously resetting large numbers of IP stations.

Duplicated systems

In duplicated systems, submit **reset ip-stations** on the processor where the IP endpoints are registered. For example, if there are IP endpoints registered to both a main processor and a Local Survivable Processor (LSP), and **reset ip-stations** is run on the main processor, the IP endpoints registered to the LSP are not reset. This also applies on G3R only to IP stations registered to C-LANs controlled by an ATM WAN Spare Processor, and C-LANS controlled by the processor on a Survivable Remote EPN.

ipserver-interface

See:

- [add ipserver-interface](#) on page 336
- [busyout ipserver-interface](#) on page 338
- [change ipserver-interface](#) on page 339
- [display ipserver-interface](#) on page 339
- [get forced-takeover ipserver-interface](#) on page 340
- [list ipserver-interface](#) on page 342
- [release ipserver-interface](#) on page 344
- [remove ipserver-interface](#) on page 344
- [reset ipserver-interface](#) on page 346
- [set ipserver-interface](#) on page 346
- [test ipserver-interface](#) on page 347

add ipserver-interface

add ipserver-interface *n*

Use **add ipserver-interface *n*** to administer a port-network *n* to be IPSI controlled.

Action/Object	Qualifier	Qualifier Description
add ipserver-interface	<i>n</i>	Port network
		Example: add ipserver-interface 10

The following screen shows an example of **add ip-server interface 7**. Certain fields may not appear, depending on the system configuration.

```

add ipserver-interface 7                                     Page 1 of 1
      IP SERVER INTERFACE (IPSI) ADMINISTRATION - PORT NETWORK 12

      IP Control? y      Socket Encryption? y
      Ignore Connectivity in Server Arbitration? n      Enable QoS? y
      Administer secondary ip server interface board? y

Primary IPSI
-----
Location: 7A01
Host: 170.20.20.170
DHCP ID: ipsi-A07a

QoS Parameters
-----
Call Control 802.1p: 6
Call Control DiffServ: 46

Secondary IPSI
-----
Location: 7B01
Host: 170.20.97.165
DHCP ID: ipsi-A07b

```

add ipserver-interface field descriptions

add ipserver-interface field descriptions 1 of 2

Field	Description
IP Control	y = All port networks have an IPSI that provides control. - Display-only, if IP-PNC is y on the display system-parameters customer-options screen n = This IPSI is used only for Tone Clock / Tone Detector functions - Remaining fields on this screen do not appear when IP Control is n and IP-PNC is n on the display system-parameters customer-options screen n when the port network contains a DS1 Converter (DS1C) circuit pack
Socket Encryption	Enter y to turn on socket encryption for the server and IPSI link.
Enable QoS	Enter y to turn on quality of service (QoS) from the server to the IPSI link. If enabling QoS for the control network, also enable it on the Communication Manager web interface Server Configuration and Upgrades > Configure Server page and on each IPSI interface.
Primary IPSI	
1 of 2	

add ipserver-interface field descriptions 2 of 2

Field	Description
Location	Location of the IPSI board
Host	Name of the host machine
DHCP ID	DHCP client identifier
Secondary IPSI	Secondary IPSI fields (S8700 MC only)
Location	Location of the IPSI board
Host	Name of the host machine
DHCP ID	DHCP client identifier
QoS Parameters	
Call Control 802.1p	Call priority setting (1-7)
Call Control DiffServ	DiffServ code point (DSCP)
2 of 2	

busyout ipserver-interface**busyout ipserver-interface** *Uc*Use **busyout ipserver-interface** to force an IPSI circuit pack to be out of service.

S8700 MC

If the IPSI is not duplicated:

- ┆ **busyout** causes a fallback to traditional control where the Expansion Interface is the ArchAngel
- ┆ PKT-INT functionality is moved to an IPSI in another port network

If the IPSIs are duplicated in the port network (the required argument is a cabinet/carrier):

- ┆ the active IPSI cannot be busied out
 - ┆ the standby Tone-Clock is busied out
-

**CAUTION:**

Busying out an IPSI board takes down the port network.

Action/Object	Qualifier	Qualifier Description
busyout ipserver-interface	Uc	Cabinet and carrier you want to test.
		Example: busyout ipserver-interface 6b

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

change ipserver-interface

change ipserver-interface *n*

Use **change ipserver-interface *n*** to change the QoS parameters, the IPSI circuit pack, and socket encryption.

Action/Object	Qualifier	Qualifier Description
change ipserver-interface	<i>n</i>	port network
		Example: change ipserver-interface 2

For an example of the ipserver-interface screen and the field descriptions, see [add ipserver-interface](#)

display ipserver-interface

display ipserver-interface *n* [schedule]

Use **display ipserver-interface** to see administration data for a port-network to be IPSI controlled.

Action/Object	Qualifier	Qualifier Description	Login	Default
display ipserver-interface	<i>n</i>	Port network 1 - 64 Example: display ipserver-interface 2		

For an example of the ipserver-interface screen and the field descriptions, see [add ipserver-interface](#)

get forced-takeover ipserver-interface

```
get forced-takeover ipserver-interface [ all | port-network n <1 - 64>]
```



CAUTION:

Moving a port network from one server to another causes a level 2 reset of the Port Network. This resets every board in the port network and drops any established calls carried by the port network. Shuffled IP calls are not dropped, but during the reset they will not have access to any features such as Hold, Transfer, Conference, etc.

The `get forced-takeover ipserver-interface` command provides for manually taking control of IPSI port networks. The command is issued from the server intended to control the port network.

- 1 If the Port Network targeted by `get forced-takeover ipserver-interface` is already controlled by the Main server or ESS where the command is issued, Test #1605 will immediately **PASS**.
- 1 If the Port Network is not controlled by the Main server or ESS where `get forced-takeover ipserver-interface` is issued, the server shows the test result as **IN PROGRESS**.



Important:

On an ESS administered as Local Only, the `get forced-takeover ipserver-interface` command will only attempt to gain control of port networks with the same community number as the Local Only server. See `display system-parameters ess` for Local Only and community assignments.

A test result of **IN PROGRESS** will be shown for Port Networks in other communities, but the `get forced-takeover ip-server` command will not attempt to gain control of these Port Networks.

Use `status ess port-networks` or `list ipserver-interface` to verify that the `get forced-takeover ipserver-interface` command was successful.

Action/Object	Qualifier	Qualifier Description	Login
<code>get forced-takeover ipserver-interface</code>	<code>all</code>	Force a manual takeover of all IPSI PNs	init inads craft cust su
	<code>port-network n</code>	Force a manual takeover of the Port Network number Examples: <code>get forced-takeover ipserver-interface all</code> <code>get forced-takeover ipserver-interface port-network 9</code>	

The following example shows a typical result for `get forced-takeover ipserver-interface all`.

get forced-takeover ipserver-interface all						
TEST RESULTS						
Port	Maintenance Name	Alt. Name	Test No.	Result	Error Code	
PN 01	IPSV-CTL		1605	PASS		
PN 02	IPSV-CTL		1605	IN PROGRESS		
PN 03	IPSV-CTL		1605	IN PROGRESS		
PN 04	IPSV-CTL		1605	IN PROGRESS		
Command successfully completed						

Error Codes

The following table contains a description for the Error Codes which may be returned from Test 1605:

`get forced-takeover ipserver-interface` command Error Codes

Error Code	Description
1995	ESS cluster is disabled
1996	Port network does not exist
1997	Not an IPSI port network

list ipserver-interface

list ipserver-interface [schedule]

Use **list ipserver-interface** to list all administered IPSIs in the system.

Action/Object	Qualifier	Qualifier Description	Login
list ipserver-interface	schedule	See Common Input Parameters on page 25.	init super-user inads craft dadmin switch circuit pack maintenance permissions

This is an example of **list ipserver-interface** on [S8700 IP-PNC](#).

list ipserver-interface								
IP SERVER INTERFACE INFORMATION								
Port Ntwk Num	Pri/ Bd Loc	Primary/ Secondary IP Address	Primary/ Secondary Host Name	Primary/ Secondary DHCP ID	Serv State	Control State	State Of Health C P E G	
1	1A01	198.152.254.1	ipsi-A01a	ipsi-A01a	IN	actv-aa	0.0.0.0	
	1B01	198.152.255.1	ipsi-A01b	ipsi-A01b	IN	standby	0.0.0.0	
2	2A01	198.152.254.2	ipsi-A02a	ipsi-A02a	IN	actv-aa	0.0.0.0	
	2B01	198.152.255.2	ipsi-A02b	ipsi-A02b	IN	standby	0.0.0.0	

This is an example of `list ipserver-interface` on **S8700 MC**.

list ipserver-interface								Page	1
IP SERVER INTERFACE INFORMATION									
Port Ntwk Num	Pri/ Sec Bd Loc	Primary/ Secondary IP Address	Primary/ Secondary Host Name	Primary/ Secondary DHCP ID	Serv State	Control State	State Of Health		
1	1AXX	198.152.254.	1 ipsi-A01a	ipsi-A01a	BSY	active	0.1.1		
	1B01	198.152.255.	1 ipsi-A01b	ipsi-A01b	BSY	standby	0.1.1		
2	2AXX	198.152.254.	2 ipsi-A02a	ipsi-A02a	IN	actv-aa	0.0.0		
	2B01	198.152.255.	2 ipsi-A02b	ipsi-A02b	IN	standby	0.0.0		
3	3AXX	198.152.254.	3 ipsi-A03a	ipsi-A03a	IN	actv-aa	0.0.0		
	3B01	198.152.255.	3 ipsi-A03b	ipsi-A03b	IN	standby	0.0.0		
5	5AXX	198.152.254.	5 ipsi-A05a	ipsi-A05a	IN	actv-aa	0.0.0		
	5B01	198.152.255.	5 ipsi-A05b	ipsi-A05b	IN	standby	0.0.0		
6	6AXX	198.152.254.	6 ipsi-A06a	ipsi-A06a	IN	actv-aa	0.0.0		
	6B01	198.152.255.	6 ipsi-A06b	ipsi-A06b	IN	standby	0.0.0		
7	7AXX	198.152.254.	7 ipsi-A07a	ipsi-A07a	IN	actv-aa	0.0.0		
	7B01	198.152.255.	7 ipsi-A07b	ipsi-A07b	IN	standby	0.0.0		

list ipserver-interface field descriptions

list ipserver-interface field descriptions

Field	Description
Serv State	Shows the current service state: busy out, in service, out of service
Control State	active or standby
Primary/ Secondary IP Address	n/a if the IPSI is not in control. All other fields are blank.
State of Health C P E G	Shows the state of health of the clock (C), packet interface (P), the expansion archangel link (E), and the Tone Generator (G) 0 =healthy, 1 =unhealthy

release ipserver-interface

release ipserver-interface *Uc*

Use **release ipserver-interface** to return an IPSI circuit pack to service after it has been busied out. See [busyout ipserver-interface](#) on page 338.

For more information see [Busyout and Release Commands](#) on page 33.



CAUTION:

Busying out an IPSI circuit pack takes down the port network.

Action/Object	Qualifier	Qualifier Description
release ipserver-interface	<i>U</i> <i>c</i>	Specify the cabinet number (1-44) with the IPSI board you want to test. Specify the carrier you want to test

remove ipserver-interface

remove ipserver-interface *n*

Use **remove ipserver-interface** to remove a port network from IPSI control.

Note:

You may need to busy out the IPSI before you can remove it.

Action/Object	Qualifier	Qualifier Description	Login	Default
remove ipserver-interface	<i>n</i>	Port network 1 - 64		

This is an example of **list ipserver-interface** on **S8700 MC**.

```

remove ipserver-interface 5                                     Page 1 of 1
      IP SERVER INTERFACE (IPSI) ADMINISTRATION - PORT NETWORK 5
                                                    Enable QoS? y

Primary IPSI                                                    QoS Parameters
-----
Location: 5AXX                                                    Call Control 802.1p: 6
Host: ipsi-A05a                                                    Call Control DiffServ: 46
DHCP ID: ipsi-A05a

Secondary IPSI
-----
Location: 5B01
Host: ipsi-A05b
DHCP ID: ipsi-A05b

```

This is an example of **list ipserver-interface** on an **S8700 IP-PNC**.

```

remove ipserver-interface 3                                     Page 1 of 1
      IP SERVER INTERFACE (IPSI) ADMINISTRATION - PORT NETWORK 3
                                                    Socket Encryption? y
                                                    Enable QoS? y

Primary IPSI                                                    QoS Parameters
-----
Location: 3A02                                                    Call Control 802.1p: 6
Host: 130.120.50.140                                                Call Control DiffServ: 46
DHCP ID: ipsi-A03a

```

remove ipserver-interface field descriptions

remove ipserver-interface field descriptions 1 of 2

Field	Description
Socket Encryption	y/n Indicates whether socket encryption is turned on or off for the S87xx server and IPSI link.
Enable QoS	y/n Indicates whether quality of service (QoS) is turned on or off.
Primary IPSI	
Location	Location of the IPSI board
1 of 2	

remove ipserver-interface field descriptions 2 of 2

Field	Description
Host	Name of the host machine
DHCP ID	DHCP client identifier
Secondary IPSI: These fields appear on S8700 MC	
Location	Location of the IPSI board
Host	Name of the host machine
DHCP ID	DHCP client identifier
QoS Parameters	
Call Control 802.1p	Call priority setting (1-7)
Call Control DiffServ	DiffServ code point (DSCP)
2 of 2	

reset ipserver-interface

reset ipserver-interface *UUc*

Use **reset ipserver-interface** to reset an IPSI in the named cabinet/carrier. This is equivalent to **reset board location**.

Note:

Use **busy ipserver-interface** to take the IPSI out of service before a reset is allowed.

Action/Object	Qualifier	Qualifier Description
reset ipserver-interface	<i>UUc</i>	Specify the cabinet with the board you want to test. Specify the carrier you want to test. Example: reset ipserver-interface 2a

set ipserver-interface

set ipserver-interface *Uc* | a-all | b-all

Use **set ipserver-interface *Uc*** to set a specified IPSI to be active for a given cabinet carrier.

Use `set ipserver-interface a-all` or `b-all` to set all the a- or b-side IPSIs in the control network to be active. This is useful in preparation of hub/subnet maintenance.

Use `list ipserver-interface` to see the IPSI Control State and verify that the interchange occurred. See [IPSV-CTL \(IP Server Interface Control\)](#) on page 897 in *Maintenance Alarms for Avaya Communication Manager 4.0, Media Gateways and Servers (03-300430)* for additional information on any error codes that occur.

Action/Object	Qualifier	Qualifier Description
<code>set ipserver-interface</code>	<code>Uc</code>	Specify the cabinet and carrier with the IPSI board you want to make active.
	<code>a-all</code> <code>b-all</code>	Sets all "a" side IPSIs active. Sets all "b" side IPSIs active.
		Examples: <code>set ipserver-interface 1b</code> <code>set ipserver-interface a-all</code> <code>set ipserver-interface b-all</code>

test ipserver-interface

`test ipserver-interface Uc`

Use `test ipserver-interface` to perform a board test for an IPSI in the named cabinet/carrier. It tests all clock and PKT-INT components.

Action/Object	Qualifier	Qualifier Description
<code>test ipserver-interface</code>	<code>Uc</code>	Cabinet and carrier you want to test. Examples: <code>test ipserver-interface 3A</code> <code>test ipserver-interface 12A repeat 2</code>

The following screen shows a typical result for test ipserver-interface.

test ipserver-interface 3a					
TEST RESULTS					
Port	Maintenance Name	Alt. Name	Test No.	Result	Error Code
03A	TONE-BD		46	PASS	
03A	TONE-BD		52	PASS	
03A0201	ETR-PT		42	PASS	
03A0201	ETR-PT		43	PASS	
03A0202	ETR-PT		42	PASS	
03A0202	ETR-PT		43	PASS	
03A0203	ETR-PT		42	PASS	
03A0203	ETR-PT		43	PASS	
03A0204	ETR-PT		42	PASS	
03A0204	ETR-PT		43	PASS	
03A0205	ETR-PT		42	PASS	
03A0205	ETR-PT		43	PASS	
03A0206	ETR-PT		42	PASS	
03A0206	ETR-PT		43	PASS	

isdnpri-testcall

See:

[clear isdnpri-testcall](#) on page 348

[list isdnpri-testcall](#) on page 349

[status isdnpri-testcall](#) on page 349

[test isdnpri-testcall](#) on page 351

clear isdnpri-testcall

Use **clear isdnpri-testcall** to cancel in-progress ISDN-PRI test calls. Once a running test call is cleared, another can begin.

Action/Object	Qualifier	Qualifier Description	Login
clear isdnpri-testcall	group number	Trunk group number.	init inads craft
	member number	Member within the trunk group.	
		Examples: clear isdnpri-testcall 80/1 clear isdnpri-testcall 78/2	

list isdnpri-testcall

list isdnpri-testcall [schedule]

Use **list isdnpri-testcall** to display the ISDN-PRI trunks currently in use for outgoing ISDN test calls.

Action/Object	Qualifier	Qualifier Description	Login	Default
list isdnpri-testcall	schedule	See Common Input Parameters on page 25.		

The following display shows a typical result for **list isdnpri-testcall**.

list isdnpri-testcall				
ISDN-PRI TESTCALLS				
B-Channel	Start Time	Duration	M/T Port	
078/001	25/14:36	120	1B1102	

Field Descriptions for list isdnpri-testcall

list isdnpri-testcall field descriptions

Field	Description
B-Channel	The trunk-group number and member number of the trunk in use.
Start Time	Day of the month, hour and minute when the test call began.
Duration	Expected duration, in minutes, of the test call.
M/T Port	Cabinet, carrier, slot and circuit number of the port on the Maintenance/Test circuit pack in use for the outgoing test call.

status isdnpri-testcall

status isdnpri-testcall group# / member#

Use **status isdnpri-testcall** to display the progress of an outgoing ISDN-PRI test call on the specified trunk. The tested ISDN-PRI B-channel's port number, bit error rate, number of

bits transmitted, block error rate, number of blocks transmitted, start time, duration specified, duration of test call, and reason of termination are displayed on the status screen.

Action/Object	Qualifier	Qualifier Description	Login	Feature Interaction
status isdnpri-testcall	group number <i>group member number</i>	Administered trunk group number Administered group number (trunk within a trunk group)	init inads craft	see below
		Example: status isdnpri-testcall 78/1		

status isdnpri-testcall feature interactions

If the bit error rate or block error rate is greater than zero, the ISDN-PRI trunk “may” be in a troubled state. Based on the statistical information displayed on the terminal, it can be decided to take the ISDN trunk out of service. This is subjective data because the ISDN trunk may be used for data or voice. If the trunk is used for data and the rates are high, the trunk should be taken out of service. If the trunk is used for voice, the trunk may not have to be taken out of service. High rates may also be due to some type of power hit on the line.

The following example shows the output from **status isdnpri-testcall 80/1**.

status isdnpri-testcall 80/1							Page 1 of 1	
ISDN TESTCALL STATUS								
	Bit	Number	Block	Number		Duration	Reason	
	Error	Of	Error	Of	Start	Duration	Of	Of
Port	Rate	Bits	Rate	Blocks	Time	Specified	Test	Termination
1B1401	0EE0	4EE7	0EE0	6EE2	25/12:36 120	100	in progress	

status isdn testcall field descriptions

status isdn testcall field descriptions 1 of 2

Field	Description
Port	This field specifies the physical address of the ISDN-PRI B-channel.
Bit Error Rate	The measured bit error count according to the comparison of the sent and received bit pattern. The number appears in scientific notation.
Number of Bits	The number of bits generated. The number appears in scientific notation.
1 of 2	

status isdn testcall field descriptions 2 of 2

Field	Description
Block error Rate	The measured block error count according to the comparison of the sent and received bit pattern. The number appears in scientific notation.
Number of Blocks	The number of blocks generated. The number appears in scientific notation.
Start Time	The time the test call started (dd/hh:mm).
Duration Specified	The duration specified in minutes for how long the test call should run. Valid durations are 1-120 (minutes) or blank (to indicate the default amount of minutes was used to run the test).
Duration of Test	The duration specified in minutes for how long the test call has been running. A blank indicates that the default amount of time was used to run the test.
Reason of Termination	The reason of termination indicates why the test call has terminated. Valid reasons of termination are "finished," "canceled," "overflow," "no bits," "transmission," "internal fail," "data corrupt," and "in progress." A termination reason of "finished" means the test finished in the specified time. A termination reason of "canceled" means the test call has been canceled with <code>clear isdnpri-testcall</code> . A reason of "overflow" denotes that the bits transmitted have overflowed buffer allocation. A reason of "no bits" means that no bits have been received because the ISDN-PRI test call circuit connection is bad. A reason of "transmission" means there has been a data transmission interruption, probably caused from a power hit. A termination reason of "internal fail" specifies that there is an internal error on the Maintenance/Test circuit pack. A reason of "in progress" means the test is still running and a reason of "data corrupt" is used for any other error condition.
2 of 2	

test isdnpri-testcall

```
test isdnpri-testcall group#/member# [minutes num-minutes] [schedule]
```

Use `test isdnpri-testcall` to start an outgoing ISDN-PRI test call.

Only one ISDN trunk in each port network can be tested at one time. The maximum number of asynchronous outgoing test calls that can be run simultaneously depends on the number of Maintenance/Test circuit packs in the system.

Maintenance SAT Commands

For more information, see Test #258 under [ISDN-TRK \(DS1 ISDN Trunk\)](#) in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430)* (formerly 03-300190).

Action/Object	Qualifier	Qualifier Description	Login	Default
test isdnpri-testc all	group# member#	Specify the trunk over which to originate the test call.		
	minutes num-minutes schedule	Specify the duration of the test call in minutes from 1 to 120. The duration defaults to 8.4 or 9.6 seconds. See Common Input Parameters on page 25. Example: test isdnpri-testcall 78/2 minutes 10		

The output screen for **test isdnpri-testcall** shows:

Result	PASS – The test call was successfully initiated. ABORT – Resources were not available (for example, a B-channel or Maintenance/ Test circuit pack). FAIL – An outgoing test call could not be initiated.
--------	--

journal-link

status journal-link

status journal-link wakeup-log | pms-log

Use **status journal-link** to see the operational status of a wakeup-log or a pms-log printer link. If the link is down, the number of times the switch has tried to re-establish the link will be shown.

A journal printer is used to document automatic wake-up events, emergency access to attendant events and, if the Property Management System is not functional, housekeeping events. When the system includes two printers, one is for the housekeeping events and the other is used for automatic wake-up events and emergency access events.

See [status link](#) on page 358 for more details on links.

Action/ Object	Qualifier	Qualifier Description	Login
status journal -link	wakeup-log pms-log	Status the printer that handles automatic wakeup events, emergency access events and scheduled reports Status the printer that handles housekeeping events while the PMS is down Examples: status journal-link wakeup-log status journal-link pms-log	

The following display shows a typical result for **status journal-link wakeup-log**.

```
status journal-link wakeup-log

                                JOURNAL LINK STATUS

Link State:  down
Number of retries:  1
Maintenance Busy? no
```

status journal-link field descriptions

status journal-link field descriptions

Field	Description
Link State	The operational status of the link: up — normal operational state, the link is established and is capable of supporting the application. down — The link is physically down. extension not administered — An extension number for the printer has not been assigned on the hospitality system parameters.
Maintenance Busy	Whether there is any maintenance testing being performed upon the link.

journal-printer

See:

[busyout journal-printer](#) on page 354

[release journal-printer](#) on page 355

[test journal-printer](#) on page 356

busyout journal-printer

```
busyout journal-printer pms-log | wakeup-log
```

Use `busyout journal-printer` to put the link to the Property Management System log or wakeup log printers in a maintenance busy state. When busied out, the link is dropped and no data transfer can take place over it.

Use **busyout journal-printer** to prevent unwanted interference between different maintenance processes. Maintenance software may put a component that is part of a link in a busy state, causing link set-up to fail, and resulting in attempts by the system to reestablish the link. If a maintenance test requires that the component be idle, frequent attempts at re-setup may delay the recovery of a faulty component. Busyout the link to prevent re-setup attempts.

Action/Object	Qualifier	Qualifier Description
busyout journal-printer	pms-log	Busies out the link to the Property Management System printer
	wakeup-log	Busies out the link to the Wakeup Log printer
		Examples: busyout journal-printer pms-log busyout journal-printer wakeup-log

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

release journal-printer

release journal-printer wakeup-log | pms-log

Use **release journal-printer** to return to service a busied out link to the Property Management System (PMS) log or wakeup log printers. See [Busyout and Release Commands](#) on page 33.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release journal-printer	wakeup-log	The printer that handles automatic wakeup events, emergency access events and scheduled reports.	init inads craft nms		See note below.
	pms-log	The printer that handles housekeeping events while the PMS is down.			

For general information on journal printer links, see [busyout pms-link](#) on page 451. For information on journal printers, see [status journal-link](#) on page 353.

Note:

Specific component maintenance performed on a link sometimes conflicts with link maintenance, because busied-out objects create link setup failure. Frequent link re-setup attempts may delay component recovery. For best results, **busyout** the link to disable attempted link re-setup.

test journal-printer

```
test journal-printer pms-log | wakeup-log [short | long]
[repeat-number] clear [schedule]
```

Use `test journal-printer` to perform hardware diagnostics on the link between the switch and a specified journal printer link to either the pms-log printer or the wakeup-log printer.

Action/Object	Qualifier	Qualifier Description
test journal- printer	pms-log	Test the link to the Property Management System printer, whose maintenance name is PMS-PRNT
	wakeup-log	Test the wakeup-log printer, whose maintenance name is JNL-PRNT
	short	
	long	
	repeat-number	See Common Input Parameters on page 25.
	clear	
	schedule	

The output screen for `test journal-printer` includes:

Maintenance Name	PMS-PRNT designates the PMS-log printer. JNL-PRNT designates the wakeup-log printer.
------------------	---

Background maintenance activity on a link can interfere with testing and recovery of a particular component of the link. For example, as part of a test, maintenance software may busyout a component of the link, causing the link to drop. The system may then perform frequent attempts to re-establish the link. This can delay recovery of the component, since it must be idle for certain tests to take place. Busying out the link will prevent the system from these attempts to set up the link. Remember that a `busyout` will tear down a link if it is not already down.

led

test led

```
test led [ all | cabinet UU | port-network PN# | switch-node SN# |
media gateway # | a-pnc | b-pnc] [repeat repeat#]
```

Use `test led` to verify that a specified cabinet, port network, PNC or switch node is recognized by the system. Also use `test led` to identify a port network, cabinet, or PNC (A or B).

When **test led** is entered, the red, green and yellow circuit pack LEDs are turned on until all administered carriers in the specified group have been lit for 2 seconds. They are turned off in the same order in which they came on. The cycle can be repeated a number of times with the **repeat** option. Once every repeat cycle is completed, every affected LED is restored to reflect its current status.

license

test license

test license [**short** | **long**]

Use **test license** to run a license file check on the server so you do not have to wait for the next hourly update to see if certain license errors have been cleared.

Action/Object	Qualifier	Qualifier Description	Login
test license	short long	On an S87xx server, short and long run the same test function, even though the test numbers show up differently in the results. See Common Input Parameters on page 25.	init inads craft dadmin Customer superuser login if the Processor and System MSP feature is enabled (display system-parameters customer-options), and the customer superuser login is administered on the Permissions screen

For more information, see [Common Command Output Screens](#) on page 28.

If the test results are:

- ı PASS, the system is in License-Normal mode.
- ı FAIL, the system is in License-Error or No-License mode, depending on the **Error** value.

link

See:

[busyout link](#) on page 358

[clear link](#) on page 358

[status link](#) on page 358

[test link](#) on page 363

busyout link

busyout link#

Use **busyout link** to put a specified packet gateway link in a maintenance busy state. For more information, see [Busyout and Release Commands](#) on page 33.



CAUTION:

Busyout of a link drops all calls and packet traffic dependent on that link. The application, adjunct, or switch connected to the link will be inaccessible and the link will have to be re-established later when returned to service. See [status link](#) on page 358 for more details on links.

Action/ Object	Qualifier	Qualifier Description	Login	Default
busyout link	<i>link#</i>	A number assigned to the link on the Communication Interface Links screen. Processor Interface circuit pack 1a1 or 1a1 = 1 - 4 Processor Interface circuit pack 1a2 or 1b2 = 5 - 8		

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

clear link

clear link n

Use **clear link** to clear the counters associated with a numbered PPP C-LAN link. The statistical counters cannot be cleared for a C-LAN's Ethernet link.

See [status link](#) on page 358 for more details on links.

Use **clear clan-port** to clear the counters associated with a numbered PPP C-LAN link.

status link

status link n (with C-LAN circuit pack–Ethernet connection)

Use **status link** to see:

- 1 static information about the link
- 1 the data extension and port used, connect speed, and protocol information
- 1 a counter of CHAP failures for PPP links

- 1 time information for PPP and Ethernet links, including the time of the last reset
- 1 the type and number of active applications

The same information that is displayed by **status link** can also be invoked with **status clan-port** or **netstat link** for C-LAN links.

Action/Object	Qualifier	Qualifier Description	Login	Default
status link	n	The number of the administered link Example: status link 1	init inads craft	

The following example shows page 1 of the output for **status link**.

status link screen, page 1, Link/Port Status

status link 1	Page 1 of 4
LINK/PORT STATUS	
Link Number: 1	
Link Status: connected	
Link Type: ethernet	
Link Name: gert_clan1	
Service Port Location: 01A0317	
Service Port Data Extension: 70050	
Service State: in-service/active	
Node Name: gert_clan1	
Source IP Address: 172.22.22.177	
Subnet Mask: 255.255.0.0	
Broadcast Address: 172.22.255.255	
Physical Address: 00:04:0d:05:37:1d	
Enabled? yes	
Maintenance Busy? no	
Active Channels: 2	

status link field descriptions, page 1

status link field descriptions, page 1 1 of 2

Field	Description
Link Number	Administered link number (assigned by add/change data-module)
Link Status	no, yes, unavail, connected, disconnected, enabled, out-of-service, or restarting
1 of 2	

status link field descriptions, page 1 2 of 2

Field	Description
Link Type	The type of interface according to the physical/link protocol(s) immediately “below” the network layer in the protocol stack (Ethernet or PPP)
Link Name	Administered link name (assigned by add/change data-module)
Service Port Location	Administered port location (assigned by add/change data-module)
Service Port Data Extension	Administered extension number (assigned by add/change data-module)
Service State	in-service/idle, in-service/active, disconnected, out-of-service, maintenance busy, in-service, inactive, active, idle
Node Name	Administered node name for TCP/IP endpoint (assigned by add/change data-module)
Source IP Address	IP address administered for node name (assigned with change node-name or add/change data-module)
Enabled	y/n
Maintenance Busy	y/n
Active Channels	Number of active channels
2 of 2	

status link screen, Page 2

status link 1

Page 2 of 4

ERROR COUNTERS

Reset Time: 03/08 17:38

Incoming Received:	Unicast Pkts	Multicast Pkts	Octets
Since Reset	5649003	1401469	689650382
Incoming Dropped:	Error Pkts	Discard Pkts	
Since Reset	0	83	
Outgoing Transmitted:	Unicast Pkts	Multicast Pkts	Octets
Since Reset	4181883	773	492543628
Outgoing Dropped:	Error Pkts	Discard Pkts	
Since Reset	0	0	
CRC Check: 0	Collision Count: 0		

status link field descriptions, page 2**status link field descriptions, page 2 1 of 2**

Field	Description
Incoming received Unicast packets	The number of subnetwork-unicast packets delivered to a higher-layer protocol.
Incoming received multicast packets	The number of non-unicast (subnetwork-broadcast or subnetwork-multicast) packets delivered to a higher-layer protocol.
Incoming dropped octets	The total number of octets received on the interface, including framing characters.
Incoming errored packets	The number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol.
Incoming packets discarded	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space.
Outgoing Transmitted unicast packets	The total number of packets that higher-level protocols requested be transmitted to a subnetwork-unicast address, including those that were discarded or not sent.
1 of 2	

status link field descriptions, page 2 2 of 2

Field	Description
Outgoing multicast packets	The total number of packets that higher-level protocols requested be transmitted to a non- unicast (subnetwork-broadcast or subnetwork-multicast) address, including those that were discarded or not sent.
Outgoing transmitted octets	The total number of octets transmitted out of the interface, including framing characters.
Outgoing errored packets	The number of outbound packets that could not be transmitted because of errors.
Outgoing packets discarded	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space.
2 of 2	

status link screen, page 3

The example below is for processor channels (page 3 of the screen). Information about administered hop channels displays on page 4 of the screen.

The processor or hop channel status information can take either 1 or 2 pages on this screen, depending on the number of links being reported and their condition.

status link 1	Page 3 of 4
PROCESSOR CHANNEL STATUS	
UP: 001,004	

status link field descriptions, page 3

Note:

A dash (–) or a colon (:) between numbers indicates all numbers including and between the indicated numbers.

status link field descriptions, page 3

Field	Description
UP	Channels are up.
DN	Channels are down.
PND	Channels are in a pending state from the down to the up state (processor channels only)

status link, page 4

The following is an example of the output of page 4 of **status link**. The screen displays every TCP/IP socket link that is currently up and active and that is using the Ethernet link **n** via the C-LAN board or the Processor Ethernet interface. Note that the service type of DOLAN reflects the total of IP endpoints and H323 signaling groups on that C-LAN.

status link 1		Page 4 of 4
TCP/IP Applications Currently Active		
Service Type	Sessions	
ALARM1	0	
ALARM2	0	
CDR1	0	
CDR2	0	
DOLAN	66	
PMS	0	
PMS_JRNL	0	
PMS_LOG	0	
SAT	0	
SAT_LSTN	0	
SYS_PRNT	0	

test link

test link link# [short | long] [repeat repeat# | clear] [schedule]

Use `test link` to verify that the specified link is administered and performs a series of tests on the link. See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description
<code>test link</code>	<code>link#</code> <code>short</code> <code>long</code> <code>repeat</code> <code>repeat#</code> <code>clear</code> <code>schedule</code>	Each link is identified by a number (1-16) assigned on the communication-interface links screen. <code>display communication-interface links</code> shows the location and identification of each link. See Common Input Parameters on page 25.

logging-levels

See:

[change logging-levels](#) on page 364

[display logging-levels](#) on page 366

change logging-levels

`change logging-levels`

Use `change logging-levels` to control how much information is logged for SAT activity.

Action/Object	Qualifier	Qualifier Description	Login
<code>change logging-levels</code>	<code>xyz</code>		

The following is an example of the results of **change logging-levels** page 1.

```

change logging-levels                                     Page 1 of 2
                                LOGGING LEVELS
Enable Command Logging? y
    Log Data Values: both

When enabled, log commands associated with the following actions:

      add? y      export? y      refresh? y
    busyout? y      get? n      release? y
  campon-busyout? y    go? y      remove? y
      cancel? n      import? y    reset? y
      change? y      list? n      save? y
      clear? y      mark? n      set? y
      disable? y     monitor? y    status? n
      display? n     netstat? n    test? y
    duplicate? y     notify? n      traceroute? n
      enable? y      ping? n      upload? n
      erase? y      recycle? y

```

The following is an example of the results of **change logging-levels** page 2.

```

change logging-levels                                     Page 2 of 2
                                LOGGING LEVELS

    Log all Submission Failures:
      Log PMS/AD Transactions:
Log IP REgistrations and events:
    Log CTA/PSA/TTI Transactions:

```

change logging-levels screen field descriptions

change logging-levels field descriptions

Field	Description
Enable Command Logging	y/n Enter y to enable SAT activity logging. Enter n to disable SAT activity logging.
Log Data Values	This value applies to EVERY field on a form. both = causes both the value prior to a change and the value after a change to be logged. new = causes only the value following a change to be logged. The value prior to the change is not logged. none = Neither the value prior to the change nor the value after the change is logged. However the form access is logged.
When enabled, log commands associated with the following actions	y/n Enter y to log these commands and transactions to the Command History log. The Command History log is stored via syslog and is available from the server web pages only.

display logging-levels

display logging-levels

Use `display logging-levels` to see what SAT activities are being logged to the Command History log.

See [change logging-levels](#) on page 364 for screen and field descriptions.

login-id

reset login-id

`reset login-ID n`

Use **reset login-ID** to terminate a SAT session on a TCP/IP link, or other traditional connection. Use **status logins** to see the ID number of all active SAT sessions.

Action/Object	Qualifier	Qualifier Description	Login	Default
reset login-id	<i>n</i>	The number (0-999) of the SAT session Example: reset login-id 9	init	

logins

status logins

status logins

Screen name: COMMUNICATION MANAGER LOGIN INFORMATION

Use **status logins** to see information about all of the users that are currently using the Communication Manager SAT.

The screen does not automatically update, and is a reflection of the system at the time the request was made. Users may have logged off, or on, or the command may have finished executing while the information is being displayed. This screen shows only those users who have a SAT session active. It does not show users that may be accessing the server but have no SAT session active.

The following is an example of the results of **status logins**.

status logins				
COMMUNICATION MANAGER LOGIN INFORMATION				
Login	Profile	User's Address	Active Command	Session ID
init	0	135. 9. 1. 4	status logins	1

status logins screen field descriptions

display profile-base field descriptions

Field	Description
Login	Login name.
Profile	The user profile number assigned to the login.
User's Address	User's IP address (correct regardless of whether the user is connected through a CLAN or a processor interface)
Active Command	Current or last command issued by the login. This field may not be accurate, and updates are not reflected until the next execution of status logins .
Session ID	The session number assigned by the system, in chronological order of access.

maintenance

See:

[reset maintenance](#) on page 368

[test maintenance](#) on page 368

reset maintenance

reset maintenance *UUC*

Use **reset maintenance** to reset a specified maintenance circuit pack. Specify a cabinet, 1 through 44, to reset the PN's Maintenance circuit pack in the 'a' carrier of the specified cabinet, dropping any local login to that circuit pack.

test maintenance

test maintenance [C] [short | long] [*repeat#* | clear] [schedule]

Use **test maintenance** to perform hardware diagnostic tests on the PN's Maintenance circuit packs.

For a PN's Maintenance circuit pack, the MT interface, EI link, reset, and sanity functions are tested. The long test resets the PN's Maintenance circuit pack, dropping the local login via the Maintenance board.

Parameter c specifies a cabinet. The cabinet number defaults to 1.

For more information, see [Common Command Output Screens](#) on page 28.

marked-ports

list marked-ports

`list marked-ports [schedule]`

Use `list marked-ports` to list every port that has been marked unusable with `mark port`.

Action/Object	Qualifier	Qualifier Description
<code>list marked-ports</code>	<code>schedule</code>	See Common Input Parameters on page 25.

<code>list marked-ports</code>	
MARKED-PORT INFORMATION	
Port	Board-Type
1C0101	DIG-BD
1C0102	DIG-BD

list marked-ports field descriptions

list marked-ports field descriptions

Field	Description
Port	The physical location (cabinet-carrier-slot-port circuit) of the marked port.
Board-Type	The type of circuit pack with the marked port.

mct-history

list mct-history

Use `list mct-history` to display the data associated with the Malicious Call Trace (MCT) feature chronologically, with the newest data displayed first.

MCT enables customers to collect information that could be used to identify a calling party whose conversation is deemed to have a malicious intent. Several scenarios are possible:

- 1. Communication Manager software records information about the caller, including the Calling Number whenever possible for incoming trunk calls. This information can be viewed using the Malicious Call Trace History report.
- 1. If the Communication Manager server is connected directly to a public ISDN that follows the ETSI protocol standard, Communication Manager software sends a message to the network requesting that the source of the incoming call be identified and the call be registered.
 - a. If the public ISDN sends an acknowledgement, the **ISDN Notification** field on the MCT History report will show `acknowledged`.
 - b. If the public ISDN sends a rejection (perhaps because the feature was not subscribed), the **ISDN Notification** field on the MCT History report will show `rejected`.
 - c. If the public ISDN does not send any response, the **ISDN Notification** field on the MCT History report will show `no response`.
- 1. If the Communication Manager server is *not* connected directly to a public ISDN that follows the ETSI protocol standard, the **ISDN Notification** field on the MCT History report will display `not sent`. Note that this includes the following two cases:
 - 1. If the Communication Manager server is directly connected to a public ISDN that follows the Australian ISDN protocol standard (Country Protocol 2), the public ISDN is notified when MCT is activated, but the **ISDN Notification** field displays `not sent`.
 - 2. If the Communication Manager server is *indirectly* connected via a QSIG or DCS private network to a public ISDN that follows the ETSI or Australian ISDN protocol standard, a message is sent through the private network to the gateway server. The gateway server then notifies the public ISDN that MCT has been activated, but the **ISDN Notification** field displays `not sent`. Note that in the QSIG case, the private-network message is proprietary, so all servers between the user activating MCT and the gateway must be Communication Manager servers.

The following is an example of the MCT history report:

list mct-history					Page 1
MALICIOUS CALL TRACE HISTORY					
Date	Time	Contr Ext/ Active Ext	Recorder Port	Redir From/ Actual Party	Parties on Call
12/20	14:54	none 43990	07E0401	none 43990	43991 no party #3 no party #4 no party #5 no party #6
ISDN Notification: not sent					
9/20	10:58	41908 41970	none	0 41801	08A0704 07E0401 no party #4 no party #5 no party #6
ISDN Notification: not sent					

Field Descriptions for list mct-history

Table 35: Field Descriptions for list mct-history

Date	The date of the occurrence.
Time	The time of the occurrence.
Contr Ext	Controlling Extension: The extension of the user who enabled the MCT control feature. The controlling extension user then has access (via display messages) to the information regarding the malicious call.
Active Ext	The extension of the user that activated the MCT feature.
Recorder Port	The port of a voice recorder being used to record the malicious call.
Redir From	For redirected calls, the party from which the malicious call was redirected (e.g., coverage, forwarding).
Actual Party	The extension of the user who received the malicious call.
Parties on Call	The extensions of other parties connected to the malicious call when the MCT feature was activated.
ISDN Notification	Whether an ISDN notification was sent to the PSTN notifying them of the call, and whether the network responded.

measurements

```
list measurements [ aca | announcement | atm | attendant |
coverage-path | blockage | occupancy | call-rate | call-summary |
communications-links | clan | cell-traffic | cbc-trunk-group | ds1 |
ds1-facility | expansion-services-mod | hunt-group | ip |
lar-route-pattern | lightly-used-trunk | load-balance | modem-pool |
multimedia-interface | outage-trunk | principal | route-pattern |
security-violations | summary | tone-receiver | trunk-group |
voice-conditioners | wideband-trunk-group ]
```

See:

[list measurements aca](#) on page 374

[list measurements clan ethernet](#) on page 374

[list measurements clan ppp](#) on page 377

[list measurements ds1](#) on page 381

[list measurements clan sockets](#) on page 378

[list measurements ip codec](#) on page 383

[list measurements ip dsp-resource](#) on page 387

[list measurements ip signaling-groups](#) on page 390

[list measurements tone-receiver](#) on page 393

Use list measurements to get system performance measurements.

Table 36: list measurements command qualifier information 1 of 3

Action/Object	Qualifier	Qualifier Description	Login
list measurements	log detail summary schedule	Detailed report generated Summary report generated See Common Input Parameters on page 25.	init inads craft cust rcust browse nms bcms
	aca	list measurements aca on page 374	
	announcements		
	atm		
	attendant		
	blockage		
	call-rate		
	call-summary		
	cbc-trunk-group		

1 of 3

Table 36: list measurements command qualifier information 2 of 3

Action/Object	Qualifier	Qualifier Description	Login
	clan ethernet	list measurements clan ethernet on page 374	
	clan ppp	list measurements clan ppp on page 377	
	clan sockets	list measurements clan sockets on page 378	
	communications-links		
	coverage-path		
	dsl_location	list measurements dsl on page 381	
	expansion-services mod		
	hunt-group		
	ip codec	list measurements ip codec on page 383	
	ip dsp-resource	list measurements ip dsp-resource on page 387	
	ip signaling-groups	list measurements ip signaling-groups on page 390	
	lar-route-pattern		
	lightly-used-trunk		
	load-balance		
	modem-pool		
	multimedia-interface		
	occupancy		
	outage-trunk		
	principal		
	route-pattern		
	security-violations		
	summary		

2 of 3

Table 36: list measurements command qualifier information 3 of 3

Action/Object	Qualifier	Qualifier Description	Login
	tone-receiver	list measurements tone-receiver on page 201	
	trunk-group		
	voice-conditioners		
			3 of 3

list measurements aca

For more information about using ACA, refer to “Automatic Circuit Assurance” in *Administrator Guide for Avaya Communication Manager (03-300509)*.

list measurements clan ethernet

`list measurements clan ethernet location [schedule]`

Use `list measurements clan ethernet` to see a 24-hour history of important packet-level statistics.

Use the list to infer some LAN performance characteristics. For example:

- 1 high collision counts could indicate high traffic on the LAN segment, or congestion on the bus.
- 1 high Cyclic Redundancy Check (CRC — detects and corrects errors on every frame) errors could suggest that:
 - the LAN connection may be “noisy”
 - a wire connection is loose
 - a wire is frayed or broken

The 24-hour history gives the ability to look back at these measures if the trouble cleared.

The data is collected at 15-minute intervals over 24 hours for the CRC (Cyclic Redundancy Check) and collisions for ethernet connections. If the data cannot be retrieved for the 15-minute interval, **N/A** appears. The delta (the change from the last inquiry) and the total are provided for each error count. After the occurrence of “N/A” (not available), the delta equals the total.

The primary use of this command is to quickly and unambiguously determine whether the fault lies within the Avaya-provided equipment or with the LAN or LAN administration to which the system is connected.

Action/Object	Qualifier	Qualifier Description	Login	Default
list measurements clan ethernet	location schedule	Cabinet-carrier-slot address of the C-LAN circuit pack See Common Input Parameters on page 25.	init inads craft cust	
		Example: list measurements clan ethernet 1A05		

The following example shows the output from **list measurements clan ethernet**.

list measurements clan ethernet 1C10						Page 1
Switch Name: sierra			Date:4:07pm WED AUG 01,2007			
C-LAN ETHERNET PERFORMANCE MEASUREMENTS DETAILED REPORT						
Date	Time	CRC Check		Collision Count		
		Total	Delta	Total	Delta	
08/01	0308	650	50	650	250	
08/01	0253	600	600	400	400	
08/01	0238	N/A	N/A	N/A	N/A	
08/01	0223	1000000570	20	10000000570	20	
08/01	0208	1000000550	10000000550	10000000550	10000000550	

list measurements clan ethernet field descriptions

list measurements clan ethernet field descriptions 1 of 2

Field	Description
Date	The date that the data was collected.
Time	The current 15-minute interval in which the action was performed
CRC Check	The error count for CRC errors
Total	The total value of the counter on the board The counter value can be up to 11 digits long because of the 32-bit counter on the board. After an N/A occurs, the delta equals the total. Bussing out or releasing a board or a port, using reset board , and reseating the board all clear the firmware counters.
1 of 2	

list measurements clan ethernet field descriptions 2 of 2

Field	Description
Delta	The difference between the current and the previous sample
Collision Count	The error count for collisions on the ethernet
2 of 2	

list measurements clan ppp

list measurements clan ppp location [schedule]

Use **list measurements clan ppp** to list a 24-hour history of important packet-level statistics from which you can infer some LAN performance characteristics. For example:

- ┆ Invalid frames—the number of frames that are misaligned
- ┆ CHAP failures—Challenge Handshake Authentication Protocol—the number of attempts for ppp authentication that failed
- ┆ High Cyclic Redundancy Check (CRC)—detects and corrects errors on every frame; errors could suggest that the connection may be “noisy”

The 24-hour history gives the ability to look back at these measures.

Data is retrieved at 15-minute intervals for 24 hours for CRC, Invalid Frame, and Chap Failures for PPP connections. If the data cannot be retrieved for the 15-minute interval, **N/A** appears. The delta (the change from the last inquiry) and the total are provided for each error count. After the occurrence of an “N/A,” the delta equals the total.

Action/Object	Qualifier	Qualifier Description	Login	Default
list measurements clan ppp	clan ppp	Link identifier, primary or secondary	init inads craft cust	primary
	location	Cabinet-carrier-slot port address of the C-LAN circuit pack		
	schedule	See Common Input Parameters on page 25.		
Example: list measurements clan ppp 1C1001				

The following example shows the output from **list measurements clan ppp**.

list measurements clan ppp 1C1001						Page 1	
Switch Name: sierra						Date:08/01/12007	
C-LAN PPP PERFORMANCE MEASUREMENTS DETAILED REPORT							
Date	Time	CRC Check		Invalid Frame		CHAP Failures	
		Total	Delta	Total	Delta	Total	Delta
08/01	03:08	85	25	185	85	5	0
08/01	02:53	60	60	100	100	5	5
08/01	02:38	N/A	N/A	N/A	N/A	N/A	N/A
08/01	02:23	1000060	10	1000090	10	25	5
08/01	02:08	1000050	1000050	1000080	1000080	20	20

list measurements clan ppp field descriptions

list measurements clan ppp field descriptions

Field	Description
Date	The date that the data was collected
Time	The current 15-minute interval in which the action was performed
CRC Check	The error count for CRC errors
Total	Total value of the board counter. The counter value can be up to 7 digits long because the 16- bit counter on the board. After the occurrence of an "N/A" the delta equals the total. Busing out or releasing a board or a port, using reset board , and reseating the board all clear the firmware counters.
Delta	The difference between the current and the previous sample
Invalid Frame	The number of invalid frames detected. Invalid frames are the frames that are misaligned.
CHAP Failures	The number of failed attempts for ppp authentication

list measurements clan sockets

`list measurements clan sockets qualifier [schedule]`

Use `list measurements clan sockets` on IP Media Processor and Medpro.

Action/Object	Qualifier	Qualifier Description
<code>list measurements clan sockets</code>	<code>hourly location</code>	Lists the measurements for the last 24 hours, from current hour backwards, for the indicated board.
	<code>summary yesterday-peak</code> <code>summary today-peak</code> <code>summary last-hour</code>	Lists the measurements for the previous day's peak, in socket usage (Erl), for the C-LAN boards administered on the IP interfaces screen. The screen output may reflect multiple C-LAN boards.
	<code>detail yesterday-peak loc</code> <code>detail today-peak loc</code> <code>detail last-hour loc</code>	Lists the measurements for the previous day's peak for the specified board. If the switch clock is changed, the report shows asterisks.

The following example shows page 1 of a **list measurements clan sockets hourly** report.

list measurements clan sockets hourly 32A01								Page 1
Switch Name:			Date: 9:29 am MON AUG 13, 2007					
			CLAN SOCKETS HOURLY REPORT					
			(Last 24 Hours)					
Meas			Socket	Socket	Socket	%	% Time	
Hour	Board	Region	Usage (Erl)	Peg	Denial Peg	Denials	ASB	
0400	32A01	3	51.4	4	0	0.00	0.00	
0300	32A01	3	1.9	12	0	0.00	0.00	
0200	32A01	3	2.6	4	0	0.00	0.00	
0100	32A01	3	2.5	507	0	0.00	0.00	
0000	32A01	3	1.0	15	0	0.00	0.00	
2300	32A01	3	2.3	4	0	0.00	0.00	
2200	32A01	3	9.2	8	0	0.00	0.00	
2100	32A01	3	18.2	0	0	0.00	0.00	
2000	32A01	3	4.8	4	0	0.00	0.00	
1900	32A01	3	4.8	4	0	0.00	0.00	
1800	32A01	3	6.7	4	0	0.00	0.00	
1700	32A01	3	3.9	8	0	0.00	0.00	

list measurements clan sockets field descriptions

list measurements clan sockets field descriptions 1 of 2

Field	Description
Meas Hour	The hour the measurement was taken. Switches in multiple time zones are treated as in the current MMI reports. We do not assume that the customer has made any correlation between LAN regions and time zones.
Board	The cabinet, carrier, and slot for the specified board.
Region	The network region where the C-LAN for this measurement resides.
Socket Usage (Erl)	The total time, in Erlangs, that is available from sockets on this C-LAN board. Calculated by: (Total Socket Seconds of usage) / 3600.
Socket peg	Total number of times a C-LAN socket on the board was allocated to a call or link.
Socket Denial peg	Total number of times a C-LAN socket on the board was needed for a call or link, but was not available.
1 of 2	

list measurements clan sockets field descriptions 2 of 2

Field	Description
% Denials	(Socket Denial peg)/(Socket Denial peg + Socket peg).
% Time ASB	The percentage of time during the measured interval that every C-LAN socket on the board was unavailable for use.
2 of 2	

The following example shows page 1 of a **list measurements clan sockets summary yesterday-peak** report.

```
list measurements clan sockets summary yesterday-peak Page 1
```

Switch Name: _____ Date: 9:28 am MON AUG 13, 2007

CLAN SOCKETS PEAK REPORT
(Yesterday-Peak Hour for Each Board)

Meas	Hour	Board	Region	Socket Usage (Erl)	Socket Peg	Socket Denial Peg	% Denials	% Time ASB
0800	01A03	1		112.0	0	0	0.00	0.00
2300	02A10	1		109.0	0	0	0.00	0.00
1000	13A05	2		83.0	0	0	0.00	0.00
2300	26A08	2		82.0	0	0	0.00	0.00
2000	32A01	3		122.7	15	0	0.00	0.00
700	64A08	3		164.5	0	0	0.00	0.00

The reports for **summary today-peak** and **summary last-hour** are similar to the previous report.

The following example shows **list measurements clan sockets detail yesterday-peak** report – Page 1.

```
list measurements clan sockets detail yesterday-peak 32a10
```

Switch Name: _____ Date: 9:30 am MON AUG 13, 2007

CLAN SOCKETS DETAIL REPORT
(Yesterday-Peak Hour)

Meas	Hour	Board	Region	Socket Usage (Erl)	Socket Peg	Socket Denial Peg	% Denials	% Time ASB
2000	32a10	3		122.7	15	0	0.00	0.00

The reports for **detail today-peak** and **detail last-hour** are similar to the above report.

list measurements ds1

```
list measurements [ ds1] [ ds1-log ] location [schedule]
```

```
list measurements [ ds1-facility] location [log | summary] [schedule]
```

Use `list measurements ds1` to list performance measurements on a DS1 link. The performance measurements of a DS1 link indicate the quality of the DS1's physical interface between the system and a far-end system.

Use `list measurements ds1-facility` to see link performance measurements on a DS1 Converter facility. The DS1 Converter complex consists of two DS1Cs connected by one to four DS1 facilities. This complex allows the distance between two port networks to extend up to 100 miles, thereby extending the range of the optical fiber link within limited bandwidth (96 channels). A DS1C complex can be used in a direct connectivity configuration or a Center Stage Switch configuration. The DS1 converters may be connected to an Expansion Interface (EI) or a Switch Node Interface (SNI) via a metallic connection.

Action/Object	Qualifier	Qualifier Description	Login	Default
list measurements ds1 list measurements ds1-facility	log summary location	Detailed report generated Summary report generated The physical location of a DS1 circuit pack entered as cabinet-carrier-slot, or of a DS1 converter facility where location of the circuit pack is entered and <i>f</i> is a letter (a-d) designating one of the four DS1 facilities See Common Input Parameters on page 25.	init inads craft cust rcust browse nms bcms	
	schedule	Examples: <pre>list measurements ds1 log 2a18 list measurements ds1 summary list measurements ds1-log 2e01a list measurements ds1-fac summary 2e01d schedule</pre>		

This is the output screen for **list measurements ds1 summary**:

```
list measurements ds1 summary 2a19

Switch Name:                               Date: 1:25 pm  THU OCT 18, 2007

DS-1 LINK PERFORMANCE MEASUREMENTS SUMMARY REPORT

Counted Since: 1:20 pm  THU OCT 18, 2007
Valid 15-Minute Intervals in Last 24 Hours: 96
Seconds Elapsed In Current Interval: 598      ESF Error Events: N/A
Test: none                                     Pattern: none      Synchronized: N/A
Loopback/Span Test Bit-Error Count: 0         Test Duration: 00:00:00

Worst 15-Minute Interval 24-Hour Current
Category      Date    Time  Count  Count  Interval Count
Errored Seconds 10/18  13:20 26      2456    2
Bursty Errored Seconds 10/18  13:20 0         0        0
Severely Errored Seconds 10/18  13:20 0         0        0
Unavailable/Failed Seconds 10/18  13:20 0         0        0
Controlled Slip Seconds N/A     N/A   N/A      N/A      N/A
Loss of Frame Count N/A     13:20
```

list measurements ds1-summary field descriptions

The following field descriptions pertain to the summary reports accessed by **list measurements ds1 summary** and **list measurements ds1-facility summary**.

list measurements ds1-summary field descriptions 1 of 2

Field	Description
Counted Since	The start time and date when the associated measurement counters were cleared or the DS1 circuit pack or facility was administered.
Valid 15-Minute Intervals in Last 24 Hours	The total number of 15-minute intervals in the past 24-hour period that contain valid data. (0-96)
Seconds Elapsed In Current Interval	The number of seconds from the beginning of the current 15-minute interval. (0 - 900)
ESF Error Events	
Test	
Pattern	
1 of 2	

list measurements ds1-summary field descriptions 2 of 2

Field	Description
Synchronized	
Loopback/Span Test Bit-Error Count	
Test Duration	
Worst 15-Minute Interval (Date, Time, Count)	The date, end time, and error count (from 0 to 900 in increments of four) of the 15-minute interval in the previous 24-hour period that contains the maximum value for each error category.
24-Hour Count	The sum of all valid 15-minute counts for the previous 24-hour period for each error category. (0 - 65535)
Current Interval Count	The error count for the current (incomplete) 15-minute interval for each of the four error categories. (0 - 900 or N/A if data for the 15-minute interval is invalid)
Category	The categories correspond to measurement error counters: Errored Seconds: the value of the errored seconds counter for the specified 15-minute interval (0 - 900 or N/A if data for the 15-minute interval is invalid). Bursty Errored Seconds: the value of the bursty errored seconds counter for the specified 15-minute interval (0 - 900 or N/A if data for the 15-minute interval is invalid). Severely Errored Seconds: the value of the severely errored seconds counter for the specified 15-minute interval (0 - 900 or N/A if data for the 15-minute interval is invalid). Unavailable/Failed Seconds: the value of the failed seconds counter for the specified 15-minute interval (0 - 900 or N/A if data for the 15-minute interval is invalid). Controlled Slip Seconds Loss of Frame Count:
2 of 2	

list measurements ip codec**list measurements ip codec *qualifier***

Maintenance SAT Commands

Use **list measurements ip codec** to see IP media processing codec resource measurements. The **list measurements ip codec** command works on IP Media Processor and Medpro.

The IP media processing codec resource measurements are listed by software. The report output may span multiple IP Media Processor or Medpro boards. A single report output combines statistics from IP Media Processor and Medpro circuit packs. Codecs are considered to be part of a common pool.

To estimate the amount of IP traffic used on IP trunks versus IP stations, compare the **list measurements ip codec** report with the lines of the **list measurements trunk-group**, **list performance trunk-group**, **list measurements outage-trunk**, and **monitor traffic trunk-groups** reports corresponding to IP trunk groups. It is required that the switch not have mixed IP and non-IP ports in a single trunk group.

Action/Object	Qualifier	Qualifier Description	Login	Default
list measurements ip codec		Example: list measurements ip codec hourly region 4		
	hourly region#	Lists the measurements for the last 24 hours, from current hour backwards, for the indicated region. If the switch clock is changed, the report shows asterisks.		
	summary yesterday-peak summary today-peak summary last-hour	Lists the measurements for the previous day's peak, for every region with MEDPRO resources administered on the IP Interfaces screen. The peak hour in a given region is the hour at which [G.711 Usage (Erl) + G.711 Usage (Erl)] is a maximum for that region. If the switch clock is changed, the report shows asterisks.		
	detail reg# yesterday-peak detail reg# today-peak detail reg# last-hour	Lists the measurements for the previous day's peak for the indicated region. If the switch clock is changed, the report shows asterisks.		

The following example shows the IP Codec Hourly Output For Region 4, from **list measurements ip codec hourly 4**.

```
list measurements ip codec hourly 4
```

Switch Name: _____ Date: 5:32 pm WED AUG 15, 2007

IP CODEC RESOURCE HOURLY REPORT

		G711				G723/9			
		-----				-----			
Meas	DSP	Usage	In Reg	Out of	Usage	In Reg	Out of		
Hour	Region	Rscs	(Erl)	Peg	Reg Peg	(Erl)	Peg	Reg Peg	
0400	4	xxxx	xxxx.x	xxxxx	xxxxx	xxxx.x	xxxxx	xxxxx	
0300	4	xxxx	xxxx.x	xxxxx	xxxxx	xxxx.x	xxxxx	xxxxx	
0200	4	xxxx	xxxx.x	xxxxx	xxxxx	xxxx.x	xxxxx	xxxxx	
0100	4	xxxx	xxxx.x	xxxxx	xxxxx	xxxx.x	xxxxx	xxxxx	
0000	4	xxxx	xxxx.x	xxxxx	xxxxx	xxxx.x	xxxxx	xxxxx	
2300	4	xxxx	xxxx.x	xxxxx	xxxxx	xxxx.x	xxxxx	xxxxx	
2200	4	xxxx	xxxx.x	xxxxx	xxxxx	xxxx.x	xxxxx	xxxxx	

list measurements ip codec field descriptions

list measurements ip codec field descriptions 1 of 2

Field	Description
Meas Hour	The hour the measurement was taken. Switches in multiple time zones are treated as in the current MMI reports. We do not assume that the customer has made any correlation between LAN regions and time zones. Range: 0000 – 2300.
Region	The network region that the IP Media Processors and Medpros for this measurement are in.
DSP Rscs	Total IP codec resources (voice channels) in the region. (22 or 31) * # Medpro + 64 * #IP Media Processors. The 22 or 31 multiplier for Medpro depends on admin of codec preferences. For R10, a G711 call takes 1 resource, while a G723/729 call or a Fax relay call takes 2 resources.
G.711 Usage (ERL)	Usage in Erlangs of G.711 codecs during the measurement interval. Includes time that the voice channels are on a call. Usage shall be measured from the time the voice channel is allocated until it is released. Calculated by: (Total Call Seconds) / 3600 where Total Call Seconds is a sum of the following: total time (in seconds) that a G.711 resource on a Medpro is in use total time (in seconds) that a G.711 resource on an IP Media Processor is in use
1 of 2	

list measurements ip codec field descriptions 2 of 2

Field	Description
G.711 In Reg Peg	Total number of times an IP media processor port in the region was allocated to a G.711 call.
G.711 Out of Reg peg	The total number of times an IP media processor port was needed in the region for a G.711 call, but was successfully allocated to a resource in another region. Out of Region does not include denials. If "Network regions are interconnected" is n , Out of Region is always 0 .
G.723/9 Usage (ERL)	Usage in Erlangs of G.723 or G.729 codecs during the measurement interval. Includes time that the voice channels are on a call. Usage shall be measured from the time the voice channel is allocated until it is released. Calculated by: (Total Call Seconds) / 3600 where Total Call Seconds is a sum of the following: total time (in seconds) that a G.723 or G.729 resource on a Medpro is in use twice the total time (in seconds) that a G.723 or G.729 resource on an IP Media Processor is in use
G.723/9 In Reg peg	Total number of times an IP media processor port in the region was allocated to a G.723 or G.729 call.
G.723/9 Out of Reg peg	The total number of times an IP media processor port was needed in the region for a G.723 or G.729 call, but was successfully allocated to a resource in another region. Out of Region does not include denials. If Network regions are interconnected is n , Out of Region is always 0 .
2 of 2	

The following example shows the Measurements IP CODEC yesterday-peak – Page 1.

```
list measurements ip codec summary yesterday-peak
```

Switch Name:

Date: 5:27 pm WED AUG 15, 2007

IP CODEC RESOURCE SUMMARY REPORT

		G711			G723/9		
		-----			-----		
Meas	DSP	Usage	In Reg	Out of	Usage	In Reg	Out of
Hour Region	Rscs	(Erl)	Peg	Reg Peg	(Erl)	Peg	Reg Peg
0400 1	xxxx	xxxx.x	xxxxx	xxxxx	xxxx.x	xxxxx	xxxxx
0300 2	xxxx	xxxx.x	xxxxx	xxxxx	xxxx.x	xxxxx	xxxxx
0600 44	xxxx	xxxx.x	xxxxx	xxxxx	xxxx.x	xxxxx	xxxxx

The reports **list measurements ip codec summary today-peak** and **list measurements ip codec summary last-hour** are similar to the above report.

The following example shows the Sample IP Codec detail yesterday-peak Output for Region 4, from **list measurements ip codec detail 4 yesterday-peak**.

```
list measurements ip codec detail 4 yesterday-peak
```

Switch Name:					Date: 5:32 pm WED AUG 15, 2007			
IP CODEC RESOURCE DETAIL REPORT								
G711					G723/9			
-----					-----			
Meas	DSP	Usage	In Reg	Out of	Usage	In Reg	Out of	
Hour Region	Rscs	(Erl)	Peg	Reg Peg	(Erl)	Peg	Reg Peg	
0400 4	xxxx	xxxx.x	xxxxx	xxxxx	xxxx.x	xxxxx	xxxxx	

list measurements ip dsp-resource

list measurements ip dsp-resource *qualifier*

Use **list measurements ip dsp-resource** on IP Media Processor and Medpro to see IP media processing DSP resource measurements.

The **list measurements ip dsp-resource** measurements are displayed by software. The report output may span multiple IP Media Processor or Medpro boards. A single report output combines statistics from both IP Media Processor and Medpro boards. Codecs are considered to be part of a common pool.

Action/Object	Qualifier	Qualifier Description	Login	Default
list measurements ip dsp-resource				
	hourly	Lists the measurements for the last 24 hours, from current hour backwards, for the indicated region. If the switch clock is changed, the report shows stars.		
	summary yesterday-peak summary today-peak summary last-hour	Lists the measurements for the previous day's peak DSP Usage (Erl) for every regions with MEDPRO resources administered on the ip-interfaces screen. The peak hour in a given region is the hour at which DSP Usage (Erl) is a maximum for that region. If the switch clock is changed, the report shows stars.		
	detail reg# yesterday-peak detail reg# today-peak detail reg# last-hour	Lists the measurements for the previous day's peak for the indicated region. If the switch clock is changed, the report shows stars.		

The following example shows the dsp-resource Hourly Output For Region 4, from **list measurements ip dsp-resource hourly 4**.

```
list measurements ip dsp-resource hourly 4
```

Switch Name: _____ Date: 5:32 pm WED AUG 15, 2007

IP DSP RESOURCE HOURLY REPORT

Meas	DSP	DSP Usage	In Reg	Out of	Denied	%	% Out
Hour Region	Rscs	(Erl)	Peg	Reg Peg	Peg	Blk	of Srv
0400 4	xxxx	xxxx.x	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx
0300 4	xxxx	xxxx.x	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx
0200 4	xxxx	xxxx.x	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx
0100 4	xxxx	xxxx.x	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx
0000 4	xxxx	xxxx.x	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx
2300 4	xxxx	xxxx.x	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx
2200 4	xxxx	xxxx.x	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx
2100 4	xxxx	xxxx.x	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx
2000 4	xxxx	xxxx.x	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx

list measurements ip dsp-resource field descriptions

list measurements ip dsp-resource field descriptions 1 of 2

Field	Description
Meas Hour	The hour the measurement was taken. Switches in multiple time zones are treated as in the current MMI reports. We do not assume that the customer has made any correlation between LAN regions and time zones.
Region	The network region that the IP Media Processors and Medpros for this measurement are in.
DSP Rscs	Total IP codec resources (voice channels) in the region. * # Medpro + 64 * #IP Media Processors. The 22 or 31 multiplier for Medpro depends on admin of codec preferences. For R10, a G711 call takes 1 resource, while a G723/729 call or a Fax relay call takes 2 resources.
1 of 2	

list measurements ip dsp-resource field descriptions 2 of 2

Field	Description
DSP Usage (ERL)	Usage in Erlangs of every codec during the measurement interval. Includes time that the voice channels are on a call. Usage shall be measured from the time the voice channel is allocated until it is released. Calculated by: (Total Call Seconds) / 3600 where Total Call Seconds is a sum of the following: total time (in seconds) that any codec resource on a Medpro is in use total time (in seconds) that a G.711 resource on an IP Media Processor is in use twice the total time (in seconds) that a G.723 or G.729 resource on an IP Media Processor is in use.
In Reg peg	Total number of times an IP media processor port in the region was allocated to a call.
Out of Reg peg	The total number of times an IP media processor port was needed in the region for a call, but was successfully allocated to a resource in another region. Out of Region does not include denials. If "Network regions are interconnected" is n, Out of Region is always 0.
Denied Peg	The total number of times an IP media processor port was needed in the region for a call but could not be allocated in this region nor any other region because every IP media processor port was busy, resulting in the call not being able to go through.
% Blk	The percent of attempted allocations of IP media processor ports in the region that are blocked (i.e., not successful). Includes calls that are successfully allocated out of region and denied altogether.
% out of Srv	Percent of CCS time that any IP media processor ports were out of service, either manually busied out or maintenance busy, during the measured interval. Calculated by: (Total Time in CCS that any port was OOS / (Available Resources * 36)) * 100.
2 of 2	

The following example shows the Measurements ip dsp-resource Summary – Page 1.

list measurements ip dsp-resource summary yesterday-peak								Page	1
Switch Name:				Date: 5:27 pm WED AUG 15, 2007					
IP DSP RESOURCE SUMMARY REPORT									
Meas	DSP	DSP Usage	In Reg	Out of	Denied	%	% Out		
Hour Region	Rscs	(Erl)	Peg	Reg Peg	Peg	Blk	of Srv		
0400 1	xxxx	xxxx.x	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx		
0300 2	xxxx	xxxx.x	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx		
0600 44	xxxx	xxxx.x	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx		

The reports `list measurements ip dsp-resource summary today-peak` and `list measurements ip dsp-resource summary last-hour` are similar to the above report. The following example shows the IP dsp-resource detail yesterday peak Output For Region 4, from `list measurements ip dsp-resource detail 4 yesterday-peak`

list measurements ip dsp-resource detail 4 yesterday-peak								
Switch Name:				Date: 5:32 pm WED AUG 15, 2007				
IP DSP RESOURCE DETAIL REPORT								
Meas	DSP	DSP Usage	In Reg	Out of	Denied	%	% Out	
Hour Region	Rscs	(Erl)	Peg	Reg Peg	Peg	Blk	of Srv	
0600 4	xxxx	xxxx.x	xxxxxx	xxxxxx	xxxxxx	xx.xx	xx.xx	

list measurements ip signaling-groups

`list measurements ip signaling-groups qualifier`

Use `list measurements ip signaling-groups` to see the 10 worst signaling groups for each hour of today, starting with the most recent whole hour. The forms for the **today** and **yesterday** qualifiers are 24 pages, one for each hour. The groups for each hour will be rank-ordered from worst to least worst based on the Hour Average Latency.

Action/Object	Qualifier	Qualifier Description
<code>list measurements ip signaling-groups</code>	current-hour	Shows the 10 worst signaling groups for the current hour.
	last-hour	Shows the 10 worst signaling groups for the last full hour.
	today yesterday	Shows the 10 worst signaling groups for each hour of today, starting with the most recent whole hour, or yesterday.

The following example shows the output for **list measurements ip signaling-groups current-hour**

```
list measurements ip signaling-groups current-hour
```

Switch Name: Date: 6:28 pm TUE NOV 13, 2007

IP SIGNALING GROUPS LATENCY AND LOSS REPORT
10 WORST PERFORMING BYPASS-ENABLED IP SIGNALING GROUPS
RANK ORDERED STARTING WITH WORST PERFORMING GROUP

Sig Grp	Hour Average	Hour Packets Sent	Hour Packets Lost (%)	Hour/ Worst Interval	Interval Average Latency (ms)	Interval Packets Sent	Interval Packets Lost (%)
No	Region	Latency (ms)					
14	12	10	10	0%	18:03	10	0%
120	23	10	10	0%	18:03	10	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%

The following example shows the output for **list measurements ip signaling-groups last-hour**

```
list measurements ip signaling-groups last-hour
```

Switch Name: Date: 6:28 pm TUE NOV 13, 2007

IP SIGNALING GROUPS LATENCY AND LOSS REPORT
10 WORST PERFORMING BYPASS-ENABLED IP SIGNALING GROUPS
RANK ORDERED STARTING WITH WORST PERFORMING GROUP

Sig Grp	Hour Average	Hour Packets Sent	Hour Packets Lost (%)	Hour/ Worst Interval	Interval Average Latency (ms)	Interval Packets Sent	Interval Packets Lost (%)
No	Region	Latency (ms)					
14	12	10	180	0%	18:03	10	0%
120	23	10	180	0%	18:03	10	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%
0	0	0	0	0%	18:00	0	0%

Maintenance SAT Commands

The following example shows the report for **list measurements ip signaling-groups today**.

list measurements ip signaling-groups last-hour						Page 1		
Switch Name:			Date: 6:28 pm TUE NOV 13, 2007					
IP SIGNALING GROUPS LATENCY AND LOSS REPORT								
10 WORST PERFORMING BYPASS-ENABLED IP SIGNALING GROUPS								
RANK ORDERED STARTING WITH WORST PERFORMING GROUP								
Sig		Hour	Hour	Hour	Hour/	Interval	Interval	Interval
Grp		Average	Packets	Packets	Worst	Average	Packets	Packets
No	Region	Latency(ms)	Sent	Lost(%)	Interval	Latency(ms)	Sent	Lost(%)
---	---	-----	-----	-----	-----	-----	-----	-----
14	12	10	180	0%	18:03	10	10	0%
120	23	10	180	0%	18:03	10	10	0%
0	0	0	0	0%	18:00	0	0	0%
0	0	0	0	0%	18:00	0	0	0%
0	0	0	0	0%	18:00	0	0	0%
0	0	0	0	0%	18:00	0	0	0%
0	0	0	0	0%	18:00	0	0	0%
0	0	0	0	0%	18:00	0	0	0%
0	0	0	0	0%	18:00	0	0	0%
0	0	0	0	0%	18:00	0	0	0%
0	0	0	0	0%	18:00	0	0	0%

The **yesterday** screen has the same layout and content type as the **today** screen but the information applies to the previous day's 24 hours.

list measurements ip signaling-groups field descriptions

list measurements ip signaling-groups field descriptions 1 of 2

Field	Description
Sig Grp No	The group number, rank ordered.
Region	The network region of the group.
Hour Average Latency (ms)	The average latency for the whole hour.
Hour Packets Sent	The number of packets sent during the whole hour.
Hour Packets Lost (%)	The percent lost packets for the whole hour (if 100% the corresponding latency is shown as ****).
Hour/Worst Interval	The hour and worst 3 minute interval within the hour. (The interval is identified by the last minute of the interval.)
1 of 2	

list measurements ip signaling-groups field descriptions 2 of 2

Field	Description
Interval Average Latency (ms)	The average latency for the interval.
Interval Packets Sent	The number of packets sent during the interval.
Interval Packets Lost (%)	The percent lost packets during the interval (if 100% the corresponding latency is shown as ****).
2 of 2	

list measurements tone-receiver**list measurements tone-receiver qualifier**

Use **list measurements tone-receiver** to see how many tone receiver ports the server is using and has available.

Action/Object	Qualifier	Qualifier Description
list measurements tone-receiver	schedule	See Common Input Parameters on page 25.
	summary yesterday-peak summary today-peak summary last-hour	Lists a summary of the number of tone receiver ports the server used and had available for the previous day's peak, today's peak, or the last-hour.
	detail yesterday-peak detail today-peak detail last-hour	Lists a detail of the number of tone receiver ports the server used and had available for the previous day's peak, today's peak, or the last-hour.

The following example shows the output from **list measurements tone-receiver detail yesterday-peak**.

list measurements tone-receiver detail yesterday-peak							Page	1
Switch Name: Denver				Date: 5:18 pm WED OCT 17, 2007				
TONE RECEIVER DETAIL MEASUREMENTS								
Hour	PN	Type	PN Req	PN Alloc	Peak Alloc	Total Off-PN	Peak Off-PN	
2300	1	DTMF	15	15	2	0	0	
1200	1	GPTD	3	3	1	0	0	
2300	1	CC-TTR	0	0	0	0	0	
2300	1	CC-CPTR	0	0	0	0	0	
2300	1	CC-MFCR	0	0	0	0	0	

list measurements tone-receiver detail yesterday-peak field descriptions

list measurements tone-receiver detail yesterday-peak field descriptions 1 of 2

Field	Description
Switch Name	Name of switch
Date	Time and date of report
Hour	The hour of peak tone-receiver usage per port for the time period specified (in this case, yesterday's peak)
PN	Port Network
Type	Type of tone-receiver being measured
PN Req	Port Network Requests. The number of requests for DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers within the port network during the listed hour.
PN Alloc	Port Network Total Allocation. The total number of DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers located in the listed port network allocated for use during the listed hour.
Peak Alloc	Peak Allocation. The peak number of DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers located in the listed port network in use simultaneously during the listed hour.
1 of 2	

list measurements tone-receiver detail yesterday-peak field descriptions 2 of 2

Field	Description
Total Off-PN	Total Off-Port Network. For the identified hour and port network, this is the total number of DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers allocated on a different port network for requests originated on this port network. With ideal conditions, this field shows 0. With more practical conditions, the field displays a larger number. Suggested actions: Locate communities of interest within the same port network. Provide sufficient tone receivers for each port network.
Peak Off-PN	Peak Off-Port Network. For the identified hour and port network, this is the peak number of DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers simultaneously allocated on a different port network for requests originated on this port network. A desirable goal is to minimize (within reason) the number displayed with this field. Suggested actions: Locate communities of interest within the same port network. Provide sufficient tone receivers for each port network. Perhaps you should move one TN748 and TN420 circuit pack (or, if you are working with a CC-TTR, CC-CPTR, and MFCR, move a TN744 circuit pack) to the PN with the Off-PN counts to minimize Off-PN allocations.
2 of 2	

The following example shows the output from **list measurements tone-receiver summary last-hour**.

list measurements tone-receiver summary last-hour							
Switch Name: Denver				Date: 5:23 pm WED OCT 17, 2007			
TONE RECEIVER SUMMARY MEASUREMENTS							
Hour	Meas Type	Total Req	Peak Req	Total Queued	Peak Queued	Total Denied	Peak Denied
1600	DTMF	16	2	0	0	0	0
1600	GPTD	0	0			0	0
1600	CC-TTR	0	0	0	0	0	0
1600	CC-CPTR	0	0			0	0
1600	CC-MFCR	0	0			0	0
TR Type		Total Avail		Capabilities			
DTMR-PT		40		DTMF			
GPTD-PT		20		GPTD			
CLAS-PT		0		DTMF, CC-TTR, CC-CPTR, MFCR			
ETR-PT		64		DTMF, CC-TTR, CC-CPTR, MFCR, GPTD			

list measurements tone-receiver summary last-hour field descriptions**list measurements tone-receiver summary last-hour field descriptions 1 of 2**

Field	Description
Switch Name	Name of switch
Date	Time and date of report
Hour	The hour the measurement was taken
Meas Type	Type of tone-receiver being measured
Total Req	Total Requests. The system-wide total number of requests, by call processing, for DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers during the listed hour. The total number of requests is calculated by incrementing a counter for each request.
Peak Req	Peak Requests. The system-wide peak number of simultaneous requests for DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers that occurred at any one time for the listed hour. The peak (or maximum) number is calculated by incrementing a counter for each request and decreasing the counter when the request fails or a tone receiver is released. If the Peak Req field indicates a number higher than listed in the Avail field, certain requests were either queued or denied during the peak time interval. Denied requests fail and are given the reorder tone.
Total Queued	The system-wide total number of requests queued during the listed hour. A request is queued when there are no receivers immediately available. Only DTMF and CC-TTR requests are queued. If a request for a receiver is made in one port network, and no receivers are available, then the request is offered to the next port network. If no receivers are available on any port network, then the request is queued. Queued call requests do not receive dial tone until a tone receiver becomes available.
Peak Queued	The system-wide maximum number of call requests queued at any one time during the listed hour. Maximum queue size: 1 TMF requests = 4 1 CC-TTR call vectoring requests = 80.
Total Denied	The system-wide total number of requests denied because no receivers were available during the listed hour. For DTMF-receiver or CCTR requests, this happens only after the queue is full. Those requests denied are given reorder tone.
1 of 2	

list measurements tone-receiver summary last-hour field descriptions 2 of 2

Field	Description
Peak Denied	The system-wide peak number of requests denied because no receivers were available during the listed hour. Suggested action: 1 Increase the number of tone receivers by the number displayed in the Peak Denied field. 1 Administer the system as “non-blocking” for tone receivers: increase the number of tone receivers (the Avail field) so all requests receive service immediately and no requests are queued. For example, keep the value displayed in the Avail field greater than that displayed in the Peak Req field.
TR Type	Type of tone-receiver
Total Avail	Number of tone-receivers of each type available for use
Capabilities	Tone capabilities of each tone-receiver
2 of 2	

media-gateway

See:

[add media-gateway](#) on page 397

[change media-gateway](#) on page 400

[display media-gateway](#) on page 400

[list media-gateway](#) on page 401

[list configuration media-gateway](#) on page 210

[list trace media-gateway](#) on page 609

[status media-gateways](#) on page 404

[test media-gateway](#) on page 406

add media-gateway

```
add media-gateway [ x | next ]
```

Use `add media-gateway` from the primary server to add a Media Gateway to the system.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>add media-gateway</code>	<code>x</code> <code>next</code>	Number to assign to the media gateway Next available number		

Maintenance SAT Commands

This following example shows a typical input screen for **add media-gateway next**.

add media-gateway next		Page 1 of 1
MEDIA GATEWAY		
Number: 1	Registered? n	
Type: G700	FW Version/HW Vintage:	
Name:	MGP IP Address:	
Serial No:	Controller IP Address:	
Encrypt Link? y	MAC Address:	
Network Region:	Site Data:	
Location: 1		
Recovery Rule: none		
Slot	Module Type	Name
V1:		
V2:		
V3:		
V4:		
V8:		
V9:		
Max Survivable IP Ext:		

add media-gateway field descriptions

add media-gateway field descriptions 1 of 3

Field	Description
Controller IP Address	Display only. Blank until the media gateway registers for the first time. This is the IP address the that the media gateway is registered to on the server. - For S87xx and other External Call Controllers (ECC), this is a CLAN address. - For S8300, S8500-LSP and other servers providing Processor Ethernet (PE), this is the native NIC address.
Encrypt Link	y/n Enter y to encrypt the H.248 link on the gateway. y is the default when the gateway is added.
FW Version/ HW Vintage	Display only. Current firmware and hardware versions on the media gateway.
1 of 3	

add media-gateway field descriptions 2 of 3

Field	Description
IP Address	Display only. IP Address of the media gateway. Blank until the Media Gateway registers for the first time. Once the media gateway has registered, that IP address always appears, even if the media gateway becomes unregistered, until a media gateway with a different IP address is validly registered with the same administered identifier. The populated IP address is persistent over reboots.
Location	Refers to a time-zone offset, day-light savings rule, and number plan area code.  WARNING: If you change the Location field while the media gateway is registered, you must reboot the media gateway to ensure optimal audio quality.
MAC Address	Display only. MAC Address of the media gateway. Blank until the Media Gateway registers for the first time. Once the Media Gateway has registered, that MAC Address appears, even if the Media Gateway becomes unregistered, until a Media Gateway with a different MAC Address is validly registered with the same administered identifier.
Max Survivable IP Ext:	Appears when Type is G250, G350, G450, J2320, etc. Limits the number of simultaneous endpoint registrations for the media gateway in SLS mode. VoIP resources in SLS can handle a limited number of simultaneous endpoint registrations. Administering this field above the default value can result in system performance problems. For information about SLS, see <i>Administration for the Avaya 250 and Avaya 350 Media Gateways (03-300436)</i>.
MGP IP Address	This is the IP address of the H.248 media gateway platform. The platform could reside in a network component which has its own IP address.
Module Type	Type of Avaya Media Module in the slot. Refer to the administration guide of the media gateway being added for valid media modules and slot configuration. If an administered Media Module is in conflict with the inserted Media Module, a pound sign (#) appears to the left of the Module Type field on the Media Gateway screen.
Name	Name assigned to the gateway
Name (Controller)	Name assigned to the controller.
Network Region	Network Region assigned to the media gateway. Used by the primary server to allocate resources from the nearest Media Gateway. The number of characters is dependent upon the type of primary server.
Number	Display only. Number assigned to the media gateway.
2 of 3	

add media-gateway field descriptions 3 of 3

Field	Description
Recovery Rule	Number of the auto-fallback recovery rule that applies to this Media Gateway. The recovery rule is set on the system-parameters mg-recovery-rule screen. none = no automatic fallback registrations are accepted. See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> and <i>Administration for Network Connectivity for Avaya Communication Manager, (555-233-504)</i>
Registered	y/n A media gateway is currently registered with the primary server pd = media gateway registration is pending, subject to the Recovery Rule as assigned on the set on the system-parameters mg-recovery-rule screen. Display only.
Serial No	Used for the controller to identify the gateway
Site Data	General site information
Slot	Display only. Slot number for the identified Media Module. Slots V8-V9, for virtual media modules, are listed after Slots V1-V4.
Type	Type of media gateway. Use the help key to see the list of valid media gateway types.
3 of 3	

change media-gateway**change media-gateway x**Use **change media-gateway** to change the administration of a Media Gateway.

Action/Object	Qualifier	Qualifier Description
change media-gateway	x	number assigned to the media gateway

See [add media-gateway](#) on page 397 for an example screen and an explanation of field descriptions.

display media-gateway**display media-gateway x [schedule]**

Use **display media-gateway** to see information for a specific Media Gateway.

Action/Object	Qualifier	Qualifier Description
display media-gateway	x <i>schedule</i>	number to assign to the media gateway See Common Input Parameters on page 25.

See [add media-gateway](#) on page 397 for a screen example and an explanation of field descriptions.

list media-gateway

list media-gateway [**type x**] [**region #**] [**schedule**]

Use **list media-gateway** from the primary server to see all administered media gateways.

Action/Object	Qualifier	Qualifier Description
list media-gateway	type x region # schedule	type of media-gateway (g250, etc.) region number See Common Input Parameters on page 25.

This is an example of **list media-gateway**.

list media-gateway							page 1 of x
MEDIA-GATEWAY REPORT							
Num	Name	Serial No/ FW Ver/HW Vint	IP Address Cntrl IP Addr	Type	NetRgn RecRule	Reg?	
1	mediagw1	01DR07125102 unavailable		G700	1	n	
2	mediagw2	01DR07128724 xxx.x .x /0	xxx.x .xx. .xx xxx.x .xx. .xx	G700	1	y	

list media-gateway field descriptions

list media-gateway field descriptions

Field	Description
Number	The number assigned to the media gateway by the primary server administration
Name	The name given to the media gateway by the user
Serial No	The serial number of the media gateway. Use the show system media gateway CLI command or see the sticker on the back of the unit to locate the media gateway serial number.
IP Address	The IP address of the media gateway. The IP address field is blank until the media gateway registers for the first time. Once the media gateway registers, the IP address appears, even if the media gateway becomes unregistered. That IP address changes when a media gateway with a different IP address is validly registered with the same administered identifier. The populated IP address is persistent over reboots.
Type	Type of media gateway. Use the help key to list the valid types of media gateways
NetRgn	Network region number assigned to the media gateway
Reg	y/n A media gateway is currently registered with the primary server pd = media gateway registration is pending, subject to the Recovery Rule as assigned on the set on the system-parameters mg-recovery-rule screen. rd = The media gateway was denied registration to a server because the disable nr-registration [network region] command was entered.
FW Ver/ HW Vint	Firmware version and hardware vintage
Cntrl IP Addr	IP address of the C-LAN or NIC
RecRule	Recovery Rule that applies to the media gateway, as set on the system-parameters mg-recovery-rule screen. See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i> and <i>Administration for Network Connectivity for Avaya Communication Manager, (555-233-504)</i> .

reset media-gateway

`reset media-gateway [ x | all ] level [ 1 | 2 | 3 ]`

Use `reset media-gateway` from the primary server to add a media gateway to the system.

Action/Object	Qualifier	Qualifier Description
<code>reset media-gateway</code>	<code>x</code>	number of the media gateway to reset
	<code>all</code>	all registered media gateways
	<code>level 1</code>	<code>reset media-gateway level 1</code> forces a reset of the entire platform and is destructive to user connections. The media gateway attempts to register with the media gateway controllers on its MGC list.
	<code>level 2</code>	<code>reset media-gateway level 2</code> resets the H.248 link and does not tear-down calls. The media gateway attempts to register with the media gateway controllers on its MGC list. Use <code>reset media-gateway level 2</code> to force a media gateway off of an LSP.
	<code>level 3</code>	<code>reset media-gateway level 3</code> resets all media modules and tears down all calls.

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Use `status media-gateways` to see the alarm status of the administered Media Gateways.

The following is an example of `status media-gateways`.

status media-gateways															page 1									
ALARM SUMMARY					BUSY-OUT SUMMARY					H.248 LINK SUMMARY														
Major: 0					Trunks: 0					Links Down: 0					# Logins: 1									
Minor: 0					Stations: 0					Links Up: 0														
Warning: 0																								
GATEWAY STATUS																								
Alarms					Alarms					Alarms					Alarms					Alarms				
MG	Mj	Mn	Wn	Lk	MG	Mj	Mn	Wn	Lk	MG	Mj	Mn	Wn	Lk	MG	Mj	Mn	Wn	Lk	MG	Mj	Mn	Wn	Lk
1	0	0	0	0 up	9	0	0	0	0 up	17	0	0	0	0 up	25	0	0	0	0 up	33	0	0	0	0 up
2	0	0	0	0 up	10	0	0	0	0 up	18	0	0	0	0 up	26	0	0	0	0 up	34	0	0	0	0 up
3	0	0	0	0 up	11	0	0	0	0 up	19	0	0	0	0 up	27	0	0	0	0 up	35	0	0	0	0 up
4	0	0	0	0 up	12	0	0	0	0 up	20	0	0	0	0 up	28	0	0	0	0 up	36	0	0	0	0 up
5	0	0	0	0 up	13	0	0	0	0 up	21	0	0	0	0 up	29	0	0	0	0 up	37	0	0	0	0 up
6	0	0	0	0 up	14	0	0	0	0 up	22	0	0	0	0 up	30	0	0	0	0 up	38	0	0	0	0 up
7	0	0	0	0 up	15	0	0	0	0 up	23	0	0	0	0 up	31	0	0	0	0 up	39	0	0	0	0 up
8	0	0	0	0 rd	16	0	0	0	0 up	24	0	0	0	0 up	32	0	0	0	0 up	40	0	0	0	0 up

status media-gateways field descriptions

Field	Description
ALARM SUMMARY	Current number of alarms (Major/Minor/Warning) for all administered media gateways
BUSY-OUT SUMMARY	Current number of trunks/stations in a busy-out state for all administered media gateways
H.248 LINK SUMMARY	Current number of H.248 links that are down and up for all administered media gateways
1 of 2	

status media-gateways field descriptions 2 of 2

Field	Description
GATEWAY STATUS Alarms (Mj Mn Wn)	Number of major alarms, minor alarms, and warnings that exist on each administered media gateways.
GATEWAY STATUS Lk	Status of the H.248 link on each administered media gateways up = the link is up dn = the link is down pd = the media gateway has not yet returned to the primary call controller after having at least one registration request denied. rd = the media gateway was denied registration to a server because the disable nr-registration [network region] command was entered
2 of 2	

test media-gateway

test media-gateway x

Action/Object	Qualifier	Qualifier Description
test media-gateway	x	number assigned to the media gateway

Use **test media-gateway** from the primary server to run a board audit, an H.248 link audit, and an H.248 context audit.

- 1 The link (test 1527) and context audits run successfully and no error codes are associated with the tests. Use **test media-gateway** to run an H.248 link audit when there is an alarm against a Media Gateway for being unregistered when it actually is registered. If there is an interchange while a media gateway is registering or unregistering, the alarm may appear and **status media-gateway** and **list media-gateway** may incorrectly show the media gateway to be unregistered.
- 1 Results of **test media-gateway** vary depending on configuration of the media gateway.

test media-gateway results

The media gateway is operating as	and is	test result
main server	registered	pass
local survivable processor	registered	fail with error code 257
main server	unregistered, and the Link Loss Delay Timer period has not expired (link bounce is occurring)	fail with error code 769
main server	unregistered, and the Link Loss Delay Timer period has expired	fail with error code 1

media-processor

See:

[set media-processor](#) on page 407

[status media-processor board](#) on page 411

set media-processor

```
set media-processor location [ lock | unlock ] [ override ]
```

Use `set media-processor` to request a demand interchange of TN2602AP IP Media Resource 320 circuit packs. Use `set media-processor location lock` to prevent an undesired interchange.

Action/Object	Qualifier	Qualifier Description	Login
<code>set media-processor</code>	<code>location</code>	location of the Media Resource to be active	craft
	<code>lock</code>	boards remain in their current state (active/standby)	
	<code>unlock</code>	clear the locked state	
	<code>override</code>	force an interchange to a less-healthy board	

When `set media-processor` does not produce an interchange, an error message appears.

set media-processor error messages

SAT Error Message	Description
Command only supported by a TN2602 AP and greater board	The board location specified is not a TN2602 IP Media Resource. Use <code>list config</code> to verify the TN code and identify the board in this location.
Duplication not administered for this media-processor	This IP Media Resource is not administered as a duplicated board. Use <code>display ip-interface</code> to verify administration of the board.
Invalid duplication state for this media-processor pair	This pair of duplicated IP Media Resources has not transitioned to a state where one is active and one is standby. Use <code>status media-processor</code> to verify the duplication status of the IP Media Resources.
standby media-processor is not refreshed; use "override"	The standby IP Media Resource does not have the same set of calls up as the active board. An interchange making the standby active would cause a loss of some or all of the calls. Use <code>set media-processor location override</code> to ignore the warning and continue the interchange.

If the `set media-processor` interchange fails, the TEST RESULTS screen appears with a result of FAIL and an Error Code.

Table 37: set media-processor Test Results Error Codes 1 of 2

Error Code	Description
1	Mode not configured. The board indicates that it has not been configured to be duplex mode.
2	Requested state not recognized. The message to the board to go active or standby is corrupted (neither active nor standby).
3	Board locked active. To prevent interchanges when certain operations are being performed, it is possible to disable interchanges with <code>set media-processor lock</code> . Error Code 3 appears when a demand interchange is requested and the board is locked in the active state. Use <code>set media-processor unlock</code> to unlock the boards.
4	Board locked standby. To prevent interchanges when certain operations are being performed, interchanges are disabled with <code>set media-processor lock</code> . Error Code 4 is returned when a demand interchange is requested and the board is locked in the standby state. Use <code>set media-processor unlock</code> to unlock the boards.
5	Peer state of health better. The process to make this board standby was denied because the health of the current active board is better. Use <code>set media-processor override</code> to force the interchange if necessary. Use <code>set media-processor lock</code> within 20 seconds; otherwise the boards will automatically interchange back.
6	Peer state of health worse. A request to make this board active was denied because the health of the current standby board is worse. Use <code>set media-processor override</code> to force the interchange if necessary. Use <code>set media-processor lock</code> within 20 seconds; otherwise the boards will automatically interchange back.
7	Interchange prevented by the damping timer. To prevent interchange oscillation, and to allow for locking of less health boards in the active state, a damping timer of 20 seconds is started after each interchange. If an interchange request is received during that period, it is prevented and this error code is returned. Use <code>set media-processor override</code> to bypass this operation.
8	Internal error prevented interchange. An internal error in the board prevented the interchange.
9	Incorrect network configuration. For duplex configurations, additional network configuration data values are required, and they must be valid. Specifically, both boards must be on the same subnet and they each must have their peer addresses. If this information has not been configured or it is invalid, the interchange fails with this code
1 of 2	

Table 37: set media-processor Test Results Error Codes 2 of 2

Error Code	Description
10	Interchange in progress. If a state transition is already in progress when an interchange request is received, the state requested by the command is compared with the state currently being transitioned to. If the states are not the same, the interchange request is ignored and this error code is returned.
11	Internal error. This error is reported if an interchange request is received and the duplication subsystem on the board is stuck in the arbitration state, unable to go either active or standby as a result of a mode downlink from CM software
12	Internal error. This error is reported if an interchange request is received and the duplication subsystem on the board is stuck in the arbitration state, unable to go either active or standby as a result of a previous interchange request.
501	Internal error. This error is reported when no response is received from the active-going-standby board.
502	Internal error. This error is reported when no response is received from the standby-going-active board.
2 of 2	

status media-processor

status media-processor [*location* | **all**]

Use **status media-processor** to see the busyout status of the specified MedPro or IPMedPro media processor board.

Action/Object	Qualifier	Qualifier Description	Login
status media-processor	<i>location</i> all	location of the media processor all media processor boards in a system	

The following is an example of **status media-processor all**.

status media-processor all

Page 1 of 1

IP BEARER INTERFACE STATUS

Alarms										Links									
Slot	Code	Mj	Mn	Wn	Pr	Cl	El	Dup	St	Slot	Code	Mj	Mn	Wn	Pr	Cl	El	Dup	St
1A05	TN2602	0	0	0	up	up	up	B05	act	8A08	TN2602	0	0	0	up	up	up	B08	act
1B05	TN2602	0	0	0	up	up	up	A05	sby	8B08	TN2602	0	0	0	up	up	up	A08	sby

Pr=Peer Link, Cl=Control Link, El=Ethernet Link, Dup=Duplicate Slot, St=state

status media-processor all field descriptions**status media-processor all field descriptions**

Field	Description
If a circuit pack is duplicated, this screen indicates which is the active board. na = non-duplicated circuit packs	
Slot	Location of the media processor circuit pack
Code	TN code for the media processor circuit pack
Alarms	Mj = major alarms Mn = minor alarms Wn = warnings
Links	Status of the circuit pack links for single and duplicated circuit packs. Pr = Peer Link Cl = Control Link El = Ethernet Link up = the link is up dn = the link is down na = not applicable
Dup	na = not applicable, for single circuit packs The slot location of the duplicated media processor circuit pack, If the circuit pack is duplicated.
St	Status of the media processor circuit pack act = active sby = standby dis = disabled bsy = busied out ini = init

status media-processor board

status media-processor board location

Use **status media-processor board** to see the status of the specified MedPro or IPMedPro media processor board. List the circuit pack and digital signal processor (DSP) usage, and the active and standby circuit pack usage for duplicated circuit pack

Action/Object	Qualifier	Qualifier Description	Login
status media-processor	location	location of the media processor	

The following is an example of **status media-processor board 1c03** for a duplicated circuit pack.

status media-processor board 1c03

Page 1 of 1

MEDIA-PROCESSOR STATUS

Duplication State: active

Board Location: 1c03

Source IP Address: 192.168.22.11

Node Name: medpro1

Subnet Mask: 255.255.255.0

Gateway Address: 192.168.22.255

MAC Address: 00:00:04:0d:05:03

Ethernet Enabled? yes

Duplication State: standby

Board Locations: 1c07

Source IP Address: 192.168.22.51

Node Name: medpro2

Subnet Mask: 255.255.255.0

Gateway Address: 192.168.22.255

MAC Address: 00:00:04:0d:05:07

Ethernet Enabled? yes

COMMON DUPLICATED VALUES

Links

Alarms

mpcl: up

eth: up

peer: up

Standby Refreshed: yes

Network Region: 1

Shared IP Address: 135.9.72.52

Shared Virt-MAC: 02:00:04:0d:05:18

Locked? no

Links

Alarms

mpcl: up

eth: up

peer: up

DSP CHANNEL STATUS

DSP 1: in-service/active, 60 calls

DSP 2: in-service/active, 50 calls

DSP 3: in-service/active, 57 calls

DSP 4: in-service/active, 47 calls

DSP 1: in-service/standby

DSP 2: in-service/standby

DSP 3: in-service/standby

DSP 4: in-service/standby

status media-processor board field descriptions

status media-processor board field descriptions

Field	Description
Duplication State	active/standby/init Status of each duplicated circuit pack.
Links	up/down - status of the circuit pack link, for single or duplicated circuit packs. mpcl = Media Processor Control Link eth = Ethernet link peer = peer-to-peer link (applies only to duplicated circuit packs)
Alarms	0 through 99 - the number of major alarms, minor alarms, or warnings mj = major alarms mn = minor alarms wn = warnings
Standby Refreshed	y/n y = the standby circuit pack in a duplicated pair is in sync with Communication Manager. Appears for duplicated circuit packs.
Network Region	1 through 250 The network region number of the duplicated circuit packs.
Shared IP Address	The virtual IP address that is shared between the two duplicated circuit packs. Appears for duplicated circuit packs.
Shared Virt-MAC	The virtual MAC address that is shared between two duplicated circuit packs. Appears for duplicated circuit packs.
Locked	y/n y = set media-processor override or set media-processor lock command is in use. Appears for duplicated circuit packs.

mis

See:

[busyout mis](#) on page 413

[release mis](#) on page 413

busyout mis

busyout mis

Use **busyout mis** to busyout a management information system.

Action/Object	Qualifier	Qualifier Description	Login
busyout mis			init inads craft cust rcust

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

release mis

release mis

Use **release mis** to activate management information systems. Hardware tests are executed to verify that equipment is functioning properly.

For more information see [Busyout and Release Commands](#) on page 33.

Action/Object	Qualifier	Qualifier Description	Login
release mis			init inads craft cust rcust

modem-pool

See:

[release modem-pool](#) on page 414

[test modem-pool](#) on page 414

release modem-pool

release modem-pool

Use **release modem-pool** to deactivate specified modem pool groups or group members. Specify group numbers and member numbers to release single group members. Specify modem pool group numbers to release members in a modem pool group.

For more information see [Busyout and Release Commands](#) on page 33.

Action/Object	Qualifier	Qualifier Description	Login	Default
release modem-pool	<i>group member</i>	1-5 pair of analog and digital line ports (or two pair for the Integrated modem-pool case). 1-32.	init inads craft	

test modem-pool

Use **test modem-pool** to performs hardware diagnostic tests on the specified modem pool group or an individual member of a specified group (Combined or Integrated). A Combined modem-pool group consists of pairs of Analog and Digital Line ports. One pair of Analog and Digital Line ports used for modem-pooling is called a conversion resource. An Integrated group consists of modem-pool circuit packs, each containing two conversion resources. Therefore, when a member number is specified for a Combined modem-pool group, one conversion resource is tested, and when a member number is specified for an Integrated modem-pool group, two conversion resources are tested.

Action/Object	Qualifier	Qualifier Description	Login	Default
test modem-pool	group number	The administered group number (1-5) See Common Input Parameters on page 25.	init inads craft	short
	member number short long repeat <i>n</i> clear schedule	Examples: test modem-pool 1 test modem-pool 1 schedule test modem-pool 1/3 1 r 2 test modem-pool 1/3 1 r 2 schedule test modem-pool 2 r 2 test modem-pool 2 1		1

moh-analog-group

list moh-analog-group

```
list moh-analog-group { [1-Max] ( number n | (to-number n) | count n) }
[schedule]
```

Use **list moh-analog-group** to list Music On Hold groups and see how many members (audio sources) are in each group.

For more information on the Music On Hold Groups screen, see *Administrator Guide for Avaya Communication Manager (03-300509)*.

Action/Object	Qualifier	Qualifier Description
list moh-analog-group	1-Max	Music On Hold number
	number <i>n</i>	range of Music On Hold group numbers to list
	to-number <i>n</i>	number of Music On Hold groups to see on the page
	count <i>n</i>	See Common Input Parameters on page 25.
	schedule	

The following is an example of **list moh-analog-group**.

list moh-analog-group		Page 1
MUSIC-ON-HOLD GROUPS		
Group	Name	Number or Sources
8	Elevator Music	5
10	Latin Renditions	20
11	Polka Music	30
At End of Member List		

list moh-analog-group field descriptions

list moh-analog-group field descriptions

Field	Description
Group	Number of the Music On Hold group
Name	Name of the Music On Hold group
Number of Sources	Number of members (sources) in the Music On Hold group

monitored-station

list monitored-station

list monitored-station [*start extension*] [*count xxxx*]

Use **list monitored-station** to see information on stations controlled by domain-controlled associations. Each station can have a maximum of 4 domain-controlled associations.

Action/Object	Qualifier	Qualifier Description	Login	Default
list monitored-station	start extension count xxxx	starting extension for the list number of stations on the list	init inads craft cust	

The following screen shows the output for **list monitored-station**.

list monitored-station				
MONITORED STATION				
Station	Association 1	Association 2	Association 3	Association 4
Ext	Link Ext CRV	Link Ext CRV	Link Ext CRV	Link Ext CRV
3001	25001 1000	25002 23		

list monitored-station field descriptions

list monitored-station field descriptions

Field	Description
Ext	The extension number of the station.
Link Ext	index to a table where the information about a particular ASAI link is stored.
CRV	ISDN Call Reference Value

mst

See:

[clear mst](#) on page 417

[disable mst](#) on page 418

[list mst](#) on page 419

clear mst

Use **clear mst** before a trace. If **clear mst** is active during a trace, it clears unwanted data.

Action/Object	Qualifier	Qualifier Description	Login
clear mst			init inads

disable mst

The **disable mst** command stops the message trace facility. If the trace was not already disabled, the command inserts a GAP marker into the trace. The user should execute **disable mst** when the trace is complete. If left enabled, the trace continues to use CPU time until the time limit expires. Entering **disable mst** has no effect on the system if the trace is already disabled. To view the results of the trace, enter **list mst**.

Action/Object	Qualifier	Qualifier Description	Login
disable mst			init inads

list mst

list mst

Use `list mst` to see the messages in the trace buffer while a trace is active or disabled. If the trace is active, older messages may be sporadically omitted if wraparound is selected and the message rate is high. The integrity of the buffer remains intact even when `list mst` is used repeatedly.

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>list mst</code>	<code>from message number</code>	First message in the list. List indicates if the number is not in the buffer, and no additional messages appear. If no message number is entered, the list begins with the oldest FIFO message.	init inads	FIFO order	See Common Input Parameters on page 25
	<code>count number</code>	The number of messages in the list. Use this number to limit the trace			
	<code>continuous</code>	Display updates as new messages enter the trace buffer (FIFO). This option is most useful in conjunction with "auto-page." The command terminates when canceled by the user.			
	<code>LIFO</code>	Show newest message first			
	<code>FIFO</code>	Show messages in the order received			
	<code>auto-page</code>	The screen will automatically page when full. Use with <code>continuous</code> to see messages arrive. Examples: <code>list mst continuous</code> <code>list mst continuous</code> <code>auto-page</code> <code>list mst LIFO</code> <code>list mst from 222 count 7</code>			

The following screen shows the output for **list mst**.

list mst												
Message Sequence Trace Data												
Number	Date/Time	Type	Message									
1	12/21/90											
	14:30:21.220	62	00 00 74 17 08 02 00 11 05 04 03 80 90 a2 18									
			03 a1 83 86 70 01 80 96 28 0d 73 74 61 74 69									
			6f 6e 20 35 31 30 30 31									
2	14:30:22.420	60	00 00 74 17 08 02 80 11 02 18 03 a9 83 86									
3	14:30:23.420	60	00 00 74 17 08 02 80 11 03 1e 02 81 81									
4	14:30:25.420	60	00 00 74 17 08 02 80 11 01									
5	14:30:25.820	60	00 00 74 17 08 02 80 11 07 96 28 0d 73 74 61									
			74 69 6f 6e 20 35 31 30 30 34									
6	14:30:28.020	62	00 00 74 17 08 02 00 11 0f									
7	14:50:25.820	71	01									
8	14:52:26.020	56	00 00 70 00 08 01 04 64 96 1c 13 91 a1 10 02									
			01 03 02 01 c4 40 08 96 49 05 83 31 30 30 b4									
9	14:52:26.020	57	00 00 70 00 08 01 84 64 96 1c 0d 91 a2 0a 02									
			01 03 30 05 02 01 c4 40 00									

list mst field descriptions

list mst field descriptions

Field	Description
Number	The sequence number for the message.
Date/Time	The Date/Time.
Type	MST message type: 60 = ISDN uplink 62 = ISDN downlink, 6C = ISDN level 2 primitive
Message	Message text in hexadecimal.

MST message descriptions

The terminology Message [n] used in this section refers to the byte at offset **n** in the message being displayed.

MST message types contain a version number. When the structure of the MST message changes, the version field in the MST buffer also changes. Version 1 displays a blank in the version field immediately after the MST message type field. Subsequent versions display the version number after the MST message type field and are connected with a hyphen (-). For example: Version 2 of the X.25 Application error/notification message added the text of the pm state table stimulus, which was ignored.

Example:

Version 1 of MST message type 0xA2 appears on the **enlist mst** output:

list mst			
Message Sequence Trace Data			
Number	Date/Time	Type	Message
1	12/21/90 11:41:22:425	A2	17 10

Version 2 of MST message type 0xA2 appears on the **list mst** output:

list mst			
Message Sequence Trace Data			
Number	Date/Time	Type	Message
90	12/21/90 12:41:14:112	A2-02	17 10 21 03 32 05 01 80

multimedia

list multimedia

list multimedia [**endpoints** | **h.320-stations** | **ip-stations** | **ip-unregistered**] [**ext x**] [**to-ext x**] [**count n**] [**schedule**]

Action/Object	Qualifier	Qualifier Description
list multimedia endpoints	[ext x]	list information for a specific extension.
list multimedia h.320-stations	[to-ext x]	when used with [ext x], list information for all multimedia endpoint types beginning with one extension and ending with another.
list multimedia ip-stations	[count n]	list a certain number (<i>n</i>) of multimedia endpoints
list multimedia ip-unregistered	schedule	See Common Input Parameters on page 25.

The following screen shows the output for **list multimedia endpoints**.

```
list multimedia endpoints
```

MULTIMEDIA ENDPOINTS				
MM Data Ext	MMComplex Voice Ext	H.320 Conversion?	Multimedia Mode	Service Link Mode
75040	75045	y	enhanced	as-needed
75041				
75051	75050	y	basic	as-needed

The following screen shows the output for **list multimedia h.320-stations**.

```
list multimedia h.320-stations
```

MULTIMEDIA H.320-STATIONS	
Station Ext	Media Complex Ext
33528	
33530	
33531	
35051	35059

The following screen shows the output for **list multimedia ip-stations**.

```
list multimedia ip-stations
```

MULTIMEDIA IP STATIONS					
IP STATION			MEDIA COMPLEX		
Ext	Port	Registered?	Ext	Port	Registered?
4002	X	n			
33564	S00032	n			
35036	S00002	y	35037	S0003	n

list multimedia ip-stations field descriptions

list multimedia ip-stations field descriptions page 1 1 of 2

Field	Description
IP STATION	
Ext	Extension of the IP station.
Registered	Shows the current registration status of the endpoint.
1 of 2	

list multimedia ip-stations field descriptions page 1 2 of 2

Field	Description
Port	Port information for the IP Telephone when an IP telephone and IP Softphone are in service on the same extension simultaneously.
Registered	Shows the current registration status of the endpoint.
MEDIA COMPLEX	
Ext	Extension of the endpoint.
Port	Port information for the IP Softphone when an IP telephone and IP Softphone are in service on the same extension simultaneously.
Registered	Shows the current registration status of the endpoint.
2 of 2	

node-names

display node-names

`display node-names [schedule]`

Use `display node-names` to see a list of the administered node names.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>display node-names</code>	<code>schedule</code>	See Common Input Parameters on page 25	init inads craft	

The following example shows the output from page 1 `display node-names`

page 1 of 6

NODE NAMES

Audix Name		IP address	MSA Names		IP Address
1.	_____	____.____.____.____	1.	_____	____.____.____.____
2.	_____	____.____.____.____	2.	_____	____.____.____.____
3.	_____	____.____.____.____	3.	_____	____.____.____.____
4.	_____	____.____.____.____	4.	_____	____.____.____.____
5.	_____	____.____.____.____	5.	_____	____.____.____.____
6.	_____	____.____.____.____	6.	_____	____.____.____.____
7.	_____	____.____.____.____	7.	_____	____.____.____.____
8.	_____	____.____.____.____			

display node-names field descriptions, page 1

display node-names field descriptions page 1

Field	Description
Audix Name	Identifies the name of the adjunct or switch node. Enter 1-7 characters for audix or msa; 1-20 characters for others. Default is blank.
IP Address	IP address for the adjunct or switch. Enter 0 – 255 or leave blank.
MSA Names	MSA node name (up to 7 characters)
IP Address	IP address for the adjunct or switch. Enter 0 – 255 or leave blank.

The following example shows the output from page 2 **display node-names**.

NODE NAMES				Page 2 of 6	
Name	IP Address		Name	IP Address	
1. Default	0.	0.	0.	0.	17. _____
2. _____	_____	_____	_____	_____	18. _____
3. _____	_____	_____	_____	_____	19. _____
4. _____	_____	_____	_____	_____	20. _____
5. _____	_____	_____	_____	_____	21. _____
6. _____	_____	_____	_____	_____	22. _____
7. _____	_____	_____	_____	_____	23. _____
8. _____	_____	_____	_____	_____	24. _____
9. _____	_____	_____	_____	_____	25. _____
10. _____	_____	_____	_____	_____	26. _____
11. _____	_____	_____	_____	_____	27. _____
12. _____	_____	_____	_____	_____	28. _____
13. _____	_____	_____	_____	_____	29. _____
14. _____	_____	_____	_____	_____	30. _____
15. _____	_____	_____	_____	_____	31. _____
16. _____	_____	_____	_____	_____	32. _____

display node-names field descriptions, page 2

display node-names field descriptions page 2

Field	Description
Name	Node name for CMS nodes, DCS nodes, and so forth.
IP Address	IP address for the adjunct or switch. Enter 0 – 255 or leave blank.

nr-registration

See:

[disable nr-registration](#) on page 426

[enable nr-registration](#) on page 426

disable nr-registration

```
disable nr-registration
```

**CAUTION:**

disable nr-registration can cause momentary service disruption. It causes all gateways and IP phones in a network region to unregister from the server where the command is executed. **disable nr-registration** is automatically saved across system restarts even without **save translation**.

Use **disable nr-registration** to deny media gateways and IP-phones within a specified IP Network Region from registering on the primary server or survivable processor. This causes the media gateways and IP phones to register instead with an alternate server or Local Survivable Processor. This is useful when network outages cause media gateways and IP phones to disconnect and reregister with the primary server in an interval that is too short for the endpoints to fail over to an LSP.

Use **disable nr-registration** on a primary server, an ESS, and an LSP. The disabled network region registration state on the primary server is not file-synced to the LSP or associated ESS.

A gateway must be assigned to the specified network region.

disable nr-registration causes a disable network region warning alarm to appear in the alarm log.

Note:

When the **Enable Detection and Alarms** field is **y** on the IP-Options System Parameters screen (**change system-parameters ip-options**) the detection of the hyperactive link bounce is enabled which will cause associated gateway and network region alarms.

Action/Object	Qualifier	Qualifier Description	Login
disable nr-registration	x	IP network region number. A gateway must be assigned to the network region.	init inads craft superuser customer login with server maintenance permissions

enable nr-registration

```
enable nr-registration [IP network region number]
```

Use **enable nr-registration** to enable media gateway registration and IP-phone registration to the main server from a specified IP Network Region.

Use **enable nr-registration** on a primary server, an ESS, and an LSP. The enabled network region registration state on the primary server is not file-synced to the LSP or associated ESS.

When an unused IP network region number is entered for **enable nr-registration**, no error message appears.

Action/Object	Qualifier	Qualifier Description	Login
enable nr-registration	x	IP network region number. A gateway must be assigned to the network region.	init inads craft superuser customer login with server maintenance permissions

off-pbx-telephone

See:

[status off-pbx-telephone station](#) on page 428

[list off-pbx-telephone station-mapping](#) on page 429

status off-pbx-telephone station

status off-pbx-telephone station x

Use **status off-pbx-telephone station x** to see the service state and connected ports of an Extended Access (off-PBX) station. Extended Access applications include:

- ┆ Extension to Cellular
- ┆ Cellular Service Provider (CSP)
- ┆ Session Initiation Protocol (SIP)
- ┆ Seamless Converged Communications Across Network (SCCAN)

Action/Object	Qualifier	Qualifier Description	Login
status off-pbx-telephone station	x	extension	inads init

The following example shows the output from **status off-pbx-telephone station**

status off-pbx-telephone station 12345					page 1 of 1
OFF-PBX TELEPHONE STATUS FOR STATION 12345					
No.	Type	Trunk/Member Group	Port	Connected Ports	
1	OPS	0001/001	T00026	001V204	T00026
2	EC500	0017/004	001V204	T00026	T00026

status off-pbx telephone station field descriptions

status off-pbx-telephone station field descriptions

Field	Description
No.	The order in which the Extension to Cellular, EC500 application was administered on the Stations with Off-PBX Telephone Integration (add off-pbx-telephone station-mapping) screen.
Type	The type of Extended Access application.
Trunk/ Member Group	The number of the Trunk Group and Trunk Group member associated with the station. If there is no active outside call, the message appears: No trunks associated with this off-pbx telephone station
Port	The port connected to the physical station. This physical station is mapped to an Extended Access telephone such as a cellular phone.
Connected Ports	The connected ports of Extended Access calls.

off-pbx-telephone station-mapping

list off-pbx-telephone station-mapping

`list off-pbx-telephone station-mapping x`

Use `list off-pbx-telephone station-mapping x` to see the association between an office phone and an off-PBX phone.

Action/Object	Qualifier	Qualifier Description
<code>list off-pbx-telephone station-mapping</code>	x	complete office phone extension, or partial phone number plus * (wildcard)

Station To Off-PBX Telephone Mapping screen

list off-pbx-telephone station-mapping							Page 1 of 1
STATION TO OFF-PBX TELEPHONE MAPPING							
Station Extension	Appl	CC	Phone Num	Config Set	Trunk Selection	Mapping Mode	Calls Allowed
43001	EC500		9736831204	1 /	ars	both	all
43001	OPS		12345	1 /	ars	orig	all
1234567891111	CSP	423	6095343211	3	ars	both	all

list off-pbx-telephone station-mapping field descriptions

See `add off-pbx-telephone station-mapping` in the *Administrator Guide for Avaya Communication Manager (03-300509)* for additional information on these fields.

list off-pbx-telephone station-mapping field descriptions

Field	Description
Station Extension	The extension assigned to the user
Appl	Type of application used for mapping the OPTIM station to off-pbx-telephone CSP = cell phone with Extension to Cellular provided by the cellular service provider EC500 = cell phone with Extension to Cellular HEMU = Home Enterprise Mobility User OPS = SIP Enablement Services (SES) enabled phone PBFMC = Public Fixed Mobile Convergence PVFCM = Private Fixed Mobile Convergence SCCAN = wireless SIP Enablement Services (SES) phone and cell phone VEMU = Visited Enterprise Mobility User VIEMU = Visited Initial Enterprise Mobility User
CC	Country Code associated with the off-pbx-telephone.
Phone Num	Phone number of the off-pbx-telephone.
Config Set	Configuration set to be used for mapping.
Trunk Selection	Trunk group that connects to the off-pbx-telephone.
Mapping Mode	Specifies the direction for calls allowed at the off-pbx-telephone.
Calls Allowed	Number of simultaneous active calls at the off-pbx-telephone.

options

set options

set options

Use **set options** to administer whether certain alarms are reported to INADS or whether they are downgraded to a minor alarm, warning alarm, or no alarm.

Action/Object	Login	Default
set options	inads init	Alarm reporting options for major and minor On-board Trunk Alarms (Alarm Group 1) are y . All others are w . Every trunk group is associated with alarm severity group 1.

A remote user with INADS permission uses **set options** to select:

- ┆ types of maintenance categories that report alarms automatically
- ┆ types of maintenance categories that require the customer to call in

If the default setting are used, normal alarm levels are observed. Changing the default settings on the **set options** form may increase the number of alarms reported to the Global Services Delivery (GSD).

Upgrades to the **set options** form are tied to Avaya Service Offers. Customers who wish to have Avaya monitor off-board network facilities must subscribe to an Offer to have these alarms accepted by Avaya.

Note:

Alarms cannot be upgraded.

set options SAT screen

The following is an example of the **set options** screen.

set options	Page 1 of 22
ALARM REPORTING OPTIONS	
	Major Minor
On-board Station Alarms: w	w
Off-board Station Alarms: w	w
On-board Trunk Alarms (Alarm Group 1): y	y
Off-board Trunk Alarms (Alarm Group 1): w	w
On-board Trunk Alarms (Alarm Group 2): w	w
Off-board Trunk Alarms (Alarm Group 2): w	w
On-board Trunk Alarms (Alarm Group 3): w	w
Off-board Trunk Alarms (Alarm Group 3): w	w
On-board Trunk Alarms (Alarm Group 4): w	w
Off-board Trunk Alarms (Alarm Group 4): w	w
On-board Adjunct Link Alarms: w	w
Off-board Adjunct Link Alarms: w	w
Off-board MASI Link Alarms:	w
Off-board DS1 Alarms: w	w
Off-board TCP/IP Link Alarms: w	w
Off-board Alarms (Other): w	w
Off-board ATM Network Alarms:	w

set options	Page 2 of 22
ALARM REPORTING OPTIONS	
	Major Minor
Off-board Firmware Download Alarms:	w
Off-board Signaling Group Alarms:	w
Remote Max Alarms:	w
CLAN Ping Alarms:	w

set options									
TRUNK GROUP ALARM OPTIONS									
(Alarm Group)									
01: 1	11: 1	21: 1	31: 2	41: 2	51: 3	61: 3	71: 3	81: 4	91: 4
02: 1	12: 1	22: 1	32: 2	42: 2	52: 3	62: 3	72: 3	82: 4	92: 4
03: 1	13: 1	23: 1	33: 2	43: 2	53: 3	63: 3	73: 3	83: 4	93: 4
04: 1	14: 1	24: 1	34: 2	44: 2	54: 3	64: 3	74: 3	84: 4	94: 4
05: 1	15: 1	25: 1	35: 2	45: 2	55: 3	65: 3	75: 3	85: 4	95: 4
06: 1	16: 1	26: 2	36: 2	46: 2	56: 3	66: 3	76: 4	86: 4	96: 4
07: 1	17: 1	27: 2	37: 2	47: 2	57: 3	67: 3	77: 4	87: 4	97: 4
08: 1	18: 1	28: 2	38: 2	48: 2	58: 3	68: 3	78: 4	88: 4	98: 4
09: 1	19: 1	29: 2	39: 2	49: 2	59: 3	69: 3	79: 4	89: 4	99: 4
10: 1	20: 1	30: 2	40: 2	50: 2	60: 3	70: 3	80: 4	90: 4	100: 4

On the Alarm Reporting Options screen, select the alarm severity options for:

- | four trunk alarm severity groups
- | adjunct alarms
- | off-board DS1 alarms
- | other off-board alarms
- | each trunk group (This allows management of alarming for different trunk groups. Some can be upgraded while others are left as warnings.)
- | remote max alarms
- | off-board C-LAN TCP/IP Ping Test alarms: downgrade alarm levels of the Off-board C-LAN TCP/IP Ping Test Alarm and all other Off-board TCP/IP Link Alarms.

Alarm options available are:

| Minor

Alarms are raised as maintenance testing discovers them and the severity of the alarm is upgraded or downgraded to a minor. Alarmed resources that are normally taken out of service are still taken out of service. LEDs on the port board and maintenance board follow the normal minor alarm LED strategy and there is a call to the receiving OSS.

| Warning

Alarms are raised as maintenance testing discovers them, and the severity of the alarm is downgraded to a warning. The advantage is that the Alarm Log can still be used to pinpoint trunk or station problems. Alarmed resources that are normally taken out-of-service are still taken out-of-service. Alarm LEDs light on the port circuit pack and Maintenance circuit pack as before, but no attendant LEDs or stations reporting alarms are affected. There is no call to INADS.

Maintenance SAT Commands

1 Report

Downgrade the alarm to a warning and report the warning to INADS. This is not supported by Avaya.

1 Yes

Alarms are raised in the normal manner. There is no filtering of alarm data.

1 No

Alarms raised on a trunk, station, or adjunct in this category are dropped. Error information is provided, but there is no trace of an alarm. There is no LED activity and no call to INADS. Because resources are taken out-of-service without any record, this option is recommended only when other options do not provide the desired result.

The alarm options can be administered only on a system-wide basis for the following alarm categories:

1 Major on-board station alarms

1 Minor on-board station alarms

Four alarm severity groups are provided for trunk alarms. The alarm options can be administered for the categories listed below in each alarm severity group:

1 Major on-board trunk alarms

1 Minor on-board trunk alarms

1 Major off-board trunk alarms

1 Minor off-board trunk alarms

For Adjuncts, an alarm severity option is assigned to each of the following categories:

1 Major on-board adjunct alarms

1 Major off-board adjunct alarms

1 Minor on-board adjunct alarms

1 Minor off-board adjunct alarms

You can also administer the options on a system-wide basis for minor off-board DS1 Interface circuit pack alarms.

Alarm reporting options information in the Alarm Reporting Options screen is considered translation data and is preserved through every level of restart.

Neither the trunk nor the station category applies to alarms raised on the common portion of the circuit pack.

If the option associated with the alarm type is **n**, the alarm report is dropped. All error information about the alarm is intact, but there is no record of an alarm and no LEDs light on the port circuit pack, the Maintenance circuit pack, the attendant console, or alarm reporting station to indicate a problem.

If the option is set to **warning** or **report**, port circuit pack LEDs and LEDs on the Maintenance circuit pack are affected the same as normal warning alarms.

The default parameters are as follows:

- ┆ Downgrade every station, off-board trunk, and minor DS1-BD alarm to a warning alarm.
- ┆ Major and minor on-board trunk alarms should continue to raise alarms and report to INADS.

MOs affected by set options *1 of 3*

MO type	MO
Investigate even warning alarms on these MOs when there are user-reported problems.	
Adjunct-Related MOs	┆ ASAI adjunct (ASAI-ADJ) ┆ ASAI adjunct IP (ADJ-IP/ASAI-IP) ┆ Avaya adjunct port (ATT-PORT) ┆ Ethernet ASAI port (LGATE-PT) ┆ Ethernet ASAI adjunct (LGATE-AJ) ┆ Ethernet Avaya port (ATTE-PT) ┆ Ethernet Avaya adjunct (ATTE-AJ) ┆ ISDN-BRI ports connected to adjuncts (ABRI-PORT) ┆ Control LAN Packet/Port (PPT-PT) Although adjuncts are administered as stations, the administration of alarm severity for the station alarm group does not affect the alarm severity levels of the adjuncts. Similarly, the administration of alarm severity for the adjunct alarm group does not affect the alarm severity levels for other types of stations.
1 of 3	

MOs affected by set options 2 of 3

MO type	MO
Investigate even warning alarms on these MOs when there are user-reported problems.	
Associated Link MOs	┆ CDR Link (CDR) ┆ PN or EPN Maintenance circuit pack (MAINT) ┆ Expansion Interface (EXP-INTF) ┆ ISDN-PRI signaling group (ISDN-SGR) ┆ Journal printer (JNL-PRNT) ┆ PMS link (PMS-LINK) ┆ Control LAN Packet/Port (PPT-PT) ┆ Primary CDR link (PRI-CDR) ┆ Synchronization (SYNC) ┆ System Communication Interface (PI-SCI) ┆ System printer (SYS-PRNT) ┆ TDM clock (TDM-CLK) ┆ Tone Generator board (TONE-BD)
Circuit Pack MOs	┆ DS1 Interface Circuit Pack (DS1-BD) ┆ Control LAN Ethernet (ETH-PT)
Station MOs	┆ Analog Lines (ANL-LINE, ANL-NE-L, ANL-16-L) ┆ Digital Lines (DIG-LINE) ┆ Hybrid Lines (HYB-LINE) ┆ MET Lines (MET-LINE) ┆ ISDN-BRI Lines (BRI-PORT, BRI-SET) Minor alarms escalate to major alarms if more than 75 percent of the members of the trunk group are alarmed. If the trunk option is set to "warning," "minor," "report," or "no," this no longer happens. Maintenance reactivates individual trunk members according to major and minor alarm criteria.
2 of 3	

MOs affected by set options 3 of 3

MO type	MO
Investigate even warning alarms on these MOs when there are user-reported problems.	
Trunk MOs	┆ Auxiliary Trunks (AUX-TRK) ┆ Central Office Trunks (CO-TRK) ┆ Direct Inward Dialing Trunks (DID-TRK) ┆ Direct Inward and Outward Dial Trunks (DIOD-TRK)[G1.2SE only] ┆ DS1 Central Office Trunks (CO-DS1) ┆ DS1 Direct Inward Dialing Trunks (DID-DS1) ┆ DS1 Tie Trunks (TIE-DS1) ┆ ISDN Trunks (ISDN-TRK) ┆ Tie Trunks (TIE-TRK) Trunks that are not members of Trunk Groups, (for example, PCOLs) are downgraded according to the alarm severity of group one.
3 of 3	

set options field help descriptions

m(inor)	Downgrade the major alarm to a minor alarm and report the alarm to INADS.
n(o)	Do not log the alarm or report it to INADS.
r(eport)	Downgrade the alarm to a warning and report the warning to INADS. This is not supported by Avaya.
w(arning)	Downgrade the alarm to a warning, log it but do not report the alarm to INADS.
y(es)	Log and report the alarm to INADS.

Press HELP in any field of page 2 to see the help message:

Enter alarm group number: 1 to 4

The alarm group number is a way of distinguishing four different groups of alarms. These alarm groups allow the user to specify that alarms in different groups are handled differently from those in other groups.

packet-interface

See:

[reset packet-interface](#) on page 438

[status packet-interface](#) on page 439

[test packet-interface](#) on page 441

reset packet-interface

reset packet-interface *Uc*

Use **reset packet-interface** to reset and initialize the Packet Interface (PKT-INT) module on the IPSI (TN2312AP) circuit packs.

A standby PKT-INT can always be reset. An active PKT-INT can be reset if it has been taken out of service by the software. There is no **busy-out** command for the PKT-INT. When the PKT-INT goes out of service due to errors, the IPSI has a bad PKT-INT state of health, and the IPSI goes out of service.

Taking an IPSI out of service also takes the PKT-INT out of service. Attempts to reset the PKT-INT on a busied-out IPSI are ignored because **release ipserver-interface** resets the PKT-INT.

Action/Object	Qualifier	Qualifier Description	Login
reset packet-interface	<i>U c</i>	Specify the cabinet number that has the board to test. Specify the carrier you want to test.	

status packet-interface

status packet-interface [*cabinet #*]

Use **status packet-interface** to see the status of the IPSIs in the servers.

Use **status packet-interface** to see the status of all packet-interface circuit packs in the system along with link information. The service state appears for both active and standby packet-interface circuit packs. Link status information including total, active and failed links are displayed for active packet-interface circuit packs only.

If there are no standby Packet Interface circuit packs, or if the standby is inaccessible (due to handshake failure or incomplete memory refresh) the standby packet-interface circuit packs will be in the uninstalled state.

When a packet-interface circuit pack is out-of-service or uninstalled, it is not used to establish and maintain links. When the circuit pack returns to in-service status, new links are again assigned to it.

Status packet-interface currently provides status for up to five packet interfaces. The command line takes a cabinet number as an argument and displays information about all packet interfaces for the cabinet. If there are no IPSIs in the requested cabinet, an error displays.

Action/Object	Qualifier	Qualifier Description	Login	Default
status packet- interface			init inads craft	

On the **status packet-interface** screen, separate columns identify each Packet Interface circuit pack slot. Service state appears for both active and standby packet-interface circuit packs. A cabinet number must be specified. If there are no IPSIs in the cabinet, the **No IPSI in cabinet specified** message appears. Locate the IPSI using **list ipserver-interface**.

The following display shows a typical result for **status packet-interface**.

status packet-interface		
	PACKET	INTERFACE STATUS
Location:	01A1	01A2
Service State:	in-service	in-service
Total Links:	1	264
Active Links:	1	264
Failed Links:	0	0
Location:	01B1	01B2
Service State:	uninstalled	uninstalled
Total Links:	-	-
Active Links:	-	-
Failed Links:	-	-

status packet-interface field descriptions

status packet-interface field descriptions

Field	Description
Location	The packet-interface cabinet, carrier and circuit pack position number.
Service State	One of the following states appears: "in-service", "out-of-service" or "uninstalled". The "standby" state is used in place of "in-service" for standby packet-interface circuit packs.
Total Links	The total number of links.
Active Links	The number of links that are in use.
Failed Links	The number of links that failed to be established. These links are in a recovery state and not active. The failures can arise from problems in the packet-interface, EI or center stage hardware. The number of failed links is the number of total links minus the number of active links.

test packet-interface

test packet-interface [*Uc*] [*short* | *long*] [*repeat#* | *clear*] [*schedule*]

Use **test packet-interface** to perform hardware diagnostic tests on any or all of the Packet Interface circuit packs in a specified carrier. Tests performed include local memory checksum tests, loop-around tests, and checks of failure counters. On Linux platforms, **test packet-interface** tests the IPSI circuit packs.

The Maintenance Loop-Around test (#886) is included in the test sequences of *active* packet-interface circuit packs only. The Active-Standby Peer Link test (#888) is included in the test sequences of the *standby* packet-interface circuit packs only.

If the packet-interface circuit pack is in the “out-of-service” or “uninstalled” states, no demand tests as well as scheduled, periodic and error tests will run. See also [reset packet-interface](#) on page 438 and [status packet-interface](#) on page 439.

Action/Object	Qualifier	Qualifier Description
test packet-interface	<i>Uc</i> <i>short</i> <i>long</i> <i>repeat#</i> <i>clear</i> <i>schedule</i>	Specify the cabinet number with the IPSI board you want to test, and the carrier. See Common Input Parameters on page 25.

See [Common Command Output Screens](#) on page 28.

periodic-scheduled

status periodic-scheduled

status periodic-scheduled

Use **status periodic-scheduled** to see summary information about currently active and recently completed background testing. Periodic tests run every hour, and scheduled tests run daily. Starting and stopping times, and other parameters for daily scheduled testing, are administered with [change system-parameters maintenance](#) on page 583.

The following example shows results from **status periodic-scheduled**.

status periodic-scheduled					
	MO Type	Current Cycle % Complete	Current Cycle Active?	Previous Cycle Duration (hr:min:sec)	Rate of Completed Cycles
PERIODIC	System Critical	100%	n	00:00:08	4.0/hr
MAINTENANCE	Shared Resource	100%	n	00:00:16	4.0/hr
	Single User	100%	n	00:00:05	4.0/hr
	Total			00:00:29	
Start Time of Current or Previous Cycle: 07/02/04:17:16					
Pre - SCHEDULED MAINTENANCE			n	00:00:09	
SCHEDULED	System Critical	100%	n	00:00:26	1.0/day
MAINTENANCE	Shared Resource	100%	n	00:01:35	1.0/day
	Single User	100%	n	00:00:06	1.0/day
	Total			00:02:07	
Start Time of Current or Previous Cycle: 07/01/22:00:15					

status periodic-scheduled field descriptions

status periodic-scheduled field descriptions 1 of 2

Field	Description
PERIODIC MAINTENANCE section	This data reflects the status of periodic maintenance which is performed hourly, according to the selections made on the change system-parameters maintenance screen. See <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)</i> for more information.
1 of 2	

status periodic-scheduled field descriptions 2 of 2

Field	Description
Pre-SCHEDULED MAINTENANCE section	The data in this section reflects the status of pre-scheduled maintenance. Pre-scheduled maintenance can include interchanges of duplicated components and backup of translation data. It is performed according to selections made on the change system-parameters maintenance screen.
SCHEDULED MAINTENANCE section	The data in this section reflects the status of scheduled maintenance which is performed daily. Scheduled maintenance is performed according to the selections made on the change system-parameters maintenance screen.
System Critical	System-critical resources are those whose health affects the entire system such as the processor. These are always tested first.
Shared Resource	Shared resources are those that are used by many users, such as trunks. These are tested after system critical resources.
Single User	Single-user resources are those whose health affects only one user, such as voice stations.
Total	Total duration of previous periodic or scheduled maintenance cycle. Note: Scheduled maintenance total does not include pre-scheduled maintenance duration.
Current Cycle % Complete	The ratio of the number of maintenance objects tested to the total number of maintenance objects tested during a cycle. For periodic tests, the ratio is for the current cycle, if active; or for the last completed cycle if not. For scheduled tests, the ratio is for the last completed cycle.
Current Cycle Active	Reflects whether the current cycle of periodic, pre-scheduled or scheduled maintenance is currently running. Value is y if currently running or n if it is not.
Previous Cycle Duration	Reflects how long the system critical, shared resource, or single user maintenance activities took for the previous cycle of maintenance.
Rate of Completed Cycles	Reflects how often maintenance cycle is performed.
Start Time of Current or Previous Cycle	Time at which maintenance cycle began in <i>month/day/hour:minute:second</i> format. For scheduled maintenance, this time reflects when the pre-scheduled maintenance began.
2 of 2	

pin

See:

[change pin](#) on page 444

[reset pin](#) on page 445

change pin

change pin [*dadmin* | *second craft login name*]

Use the **change pin** command to change the PIN for the dadmin login or for the second craft login. The PIN should be a minimum of 7 characters and a maximum of 32 characters. Upper and lower case, plus numbers 0 - 9, and the special characters shown on the screen are allowed. Other characters are prohibited. PINs do not expire. PINs must conform to the minimum and maximum lengths, and must contain at least one letter and one number. PINs are not displayed when entered or changed.

The dadmin and init logins may change the PIN for dadmin or the second craft login.

The second craft login may change the PIN only for the second craft login.

Action/Object	Qualifier	Qualifier Description	Login
change pin	<i>dadmin</i> <i>second craft login name</i>	dadmin login craft2 login	dadmin init

```

change pin

                                CHANGE PIN

                                New Pin: _____

                                Re-enter Pin: _____

PINS may be between 7 and 32 characters, and may contain
--upper and lower case letters,
--the numbers 0-9
--the special character period (.)
--the special character percent (%)
--the special character star (*)
--the special character question (?)
--the special character minus (-)
--the special character comma (,)
--the special character colo (:)
PINs must contain at least one numeral and one alphabetic character.

```

reset pin

```
reset pin [ dadmin | second craft login name ]
```

The **reset pin** command resets the PIN for the *dadmin* login or the second craft login. The old PIN is not required. When a PIN is reset, it returns to the state where the PIN must be re-created on the next SAT access. Note that the PIN of the second craft login may be changed, but it cannot be "reset" to an uninitialized value.

The command is accessible only to the init and *dadmin* logins, and either login may reset either pin. When the command is entered, no screen appears. The message "Command completes successfully" is displayed.

Action/Object	Qualifier	Qualifier Description	Login
reset pin	<i>dadmin</i> <i>second craft login name</i>	dadmin login craft2 login	dadmin init

ping

```
ping ip-address addr [board location | source port-id] [packet-length  
len] [repeat #]
```

```
ping node-name name [board location | source port-id] [packet-length  
len] [repeat #]
```

When debugging connectivity problems, a ping helps to indicate low-level connectivity. If an external ping works but higher-level applications such as DCS, CMS, or INTUITY do not, there probably is connectivity to the board. Interrogate the switch for other clues as to why the higher-level application is not working.

The **ping** command checks low-level connectivity between two IP-connected peers: a destination and a source.

1 The destination can be:

- an IP address (*ip-address addr*)
- a node (*node-name name*)

1 The source can be:

- a C-LAN or IP Medpro board (*board location*)
- a Softphone, IP phone or Remote Office (R300) phone (*source port-id*).

If no source is specified, the first C-LAN in the same region as the IP address that is being pinged is used as the source.

Use this test to check the circuitry in the data path for a peer-to-peer IP layer connection. This test is nondestructive.

Note:

Pings from an IP Medpro board reflect audio transport performance. Pings from a C-LAN board reflect control information transport performance. The recipient of a ping will reply with the same Quality of Service (QoS) value found in the received packet, so the time measurements reported should reflect the behavior of the type of packets sent. When an IP Medpro board is used as the source, the default DiffServ and 802.1p/Q parameters downloaded to that board are used in the execution of the **ping**.

**CAUTION:**

Repeated ping tests can consume a lot of bandwidth and can bog down a network as a result. If the network is already heavily loaded, a ping test can fail even if there is connectivity between the source and destination.

Action/Object	Qualifier	Qualifier Description	Login
ping ip-address ping node-name	addr board loc source port-id packet-length len repeat #	See descriptions below. Examples: ping ip-address 192.68.3.26 ping ip-address 192.68.3.26 board 1C05 ping ip-address 168.24.3.66 packet-length 1500 ping node-name gert_clan1 source S00015	init inads craft cust dadmin

ping parameters

ping parameters 1 of 2

ip-address <i>addr</i>	The IP address of the device to ping, www.xxx.yyy.zzz.
node-name <i>name</i>	The name of the node to ping. Use display node-names ip to see what IP nodes are administered.
board <i>location</i>	The location of the C-LAN or IP Medpro board (<i>location</i>) used as the source of the ping. Specify the board if there are multiple C-LAN or IP Medpro boards. If neither board nor source is given, the first C-LAN in the same region as the IP address that is being pinged will be the source of the ping.
source <i>port-id</i>	The virtual endpoint port ID to use as the source of the ping. This can be the virtual endpoint port ID of a softphone, IP phone, or Remote Max (R300) phone. Use status station ext to determine the virtual endpoint port ID of a phone. If neither board nor source is given, the first C-LAN in the same region as the IP address that is being pinged will be the source of the ping.

ping parameters 2 of 2

packet-length <i>len</i>	The packet length of the ping packet, from 64 to 1500. If packet-length is not given, the default packet length is 64 bytes. Specifying a longer packet length in the command line can show: - if a router or host has a problem fragmenting or reassembling transferred packets - a more complete indication of the link status
repeat <i>rpt</i>	The number of times to repeat the ping test. See Caution above before using.

ping output

The following screens show examples of **ping ip-address packet-length** and **ping node-name**.

ping ip-address 192.68.3.26 packet-length 1500						
PING RESULTS						
End-pt IP	Port	Port Type	Result	Time(ms)	Error Code	
192.68.3.26	01C0202	PPP-PT	PASS	221		

ping node-name prowler10						
PING RESULTS						
End-pt Node-name	Port	Port Type	Result	Time(ms)	Error Code	
prowler10	64A0817	ETH-PT	PASS	16		

ping field descriptions**ping field descriptions 1 of 2**

Field	Description
End-pt IP or End-pt Node-name	The destination of the ping command.
Port	The source's slot or port
1 of 2	

ping field descriptions 2 of 2

Field	Description
Port Type	The source port's maintenance object name
Result	PASS, FAIL or ABORT
Time (ms)	The round-trip time (in milliseconds) of the ping .
Error Code	Identifies problems associated with the circuitry in the data path for a peer-to-peer IP layer connection. For the meaning of the error code and troubleshooting procedures, see the Port Type's maintenance object description in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)</i> . The MO description indicates the type of ping test used and the meaning of that ping test's error codes.
2 of 2	

Error messages

Error messages for **ping** are listed in [Ping command error messages](#).

Ping command error messages 1 of 2

Message	Interpretation
www.xxx.yyy.zzz IP address not assigned	The system cannot find the IP address.
IP address not reachable from this board	The IP address is not in the route table of the specified board.
Local IP address not supported	The C-LAN board does not support ping of a local PPP IP address.
More than one route exists, specify board	The IP address is not in the route table, and more than one C-LAN circuit pack has a default route.
"xxxx" Invalid IP address	Invalid IP address parameter. Must be in www.xxx.yyy.zzz format.
"CCcss" is an invalid identifier; please press HELP	Invalid board location (when using board).
Board not inserted	Valid board location, but there is no board in that slot.
Error encountered, could not complete request	An internal error, the port through which the IP address is reached could not be found.
1 of 2	

Ping command error messages 2 of 2

Message	Interpretation
Invalid range	The packet size is greater than 1500 or less than 64 bytes in length, or there are invalid or unrecognized parameters.
WARNING Default packet length of 64 bytes used for TN799DP	The default packet length of 64 bytes is used for a TN799DP board.
2 of 2	

pkt

See:

[clear pkt](#) on page 449

[test pkt](#) on page 449

clear pkt

Use `clear pkt` to resolve packet bus problems and send a forced packet bus `clear stimuli` over the packet bus.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>clear pkt</code>	<code>port network location</code>	Physical position of the packet bus (1 - 3) Example: <code>clear pkt port-network 1</code>	init inads craft	

test pkt

```
test pkt port-network n [short | long] [repeat repeat# | clear]
[schedule]
```

Use `test pkt` to run a series of tests on the packet bus of the specified PN or PPN.

**WARNING:**

Since `clear long` clears every counter if the test passes, it is possible for firmware counters to be cleared even though a problem exists. In some cases customer service might degrade since calls may be routed over defective equipment.

Action/Object	Qualifier	Qualifier Description	Login	Default
test pkt port-network	pn short long repeat <i>n</i> clear	The Packet bus to be tested: <i>nn</i> (1)	init inads craft	short 1
		Examples: test pkt port-network 1 1 test pkt port-network 1 sh r 2 test pkt port-network 1 1 r 25 test pkt port-network 1 test pkt port-network 1 c		

pms-down

list pms-down

`list pms-down [start-time] [stop-time]`

Use `list pms-down` to see every event that has meaning to the Property Management System (PMS) that has occurred while the link between the switch and the PMS was down. For example, room status codes entered by hotel housekeeping staff during a PMS outage appear in this report.

Action/Object	Qualifier	Qualifier Description
list pms-down	start-time	The starting time in 24-hour notation from which events are to be listed.
	stop-time	The time in 24-hour notation up to which events are to be listed.

The following example shows a typical result of `list pms-down`.

list pms-down			
PROPERTY MANAGEMENT SYSTEM ACTIVITY			
Extension	Event	Reason	Time
402	from room, code 1	PMS link out of service	7:00am
405	from stn, code 1	PMS link out of service	9:00am
411	check in, complete	PMS link out of service	9:30am
411	PBX enabled MWL	PMS link out of service	12:00am
450	from room, code 1	PMS reject	12:05am

list pms-down field descriptions

list pms-down field descriptions

Field	Description
Extension	The extension associated with the reported event.
Event	The PMS event that was reported to the switch, but which could not be sent to the PMS.
Reason	The reason that the event could not be reported by the switch to the PMS.
Time	The time at which the event was reported.

pms-link

See:

[busyout pms-link](#) on page 451

[release pms-link](#) on page 452

[status pms-link](#) on page 453

[test pms-link](#) on page 454

busyout pms-link

busyout pms-link

Use `busyout pms-link` to place every maintenance object associated with a property management system link in the maintenance busy state. No periodic or scheduled maintenance is performed on the busied out maintenance objects until they are released. When the object is

maintenance busy the object is deactivated (no call processing activity may include the busied object) and the link is dropped. Warning alarms (error type 18) are generated on each busied out maintenance object, so that the Initialization and Administration System (INADS) can determine the state of the objects. Use **release pms link** to reactivate the busied out objects on the link.

These links provide asynchronous data connections from switches to peripherals, and they are composed of the following:

- 1 Far-end data module
- 1 Simulated data channel
- 1 Manager that initiates and maintains the link
- 1 Controller/protocol that services the link

For information about what a property management system (PMS) is and what it does, see [status pms-link](#) on page 453. See [status link](#) on page 358 for more details on links.

Note:

Specific component maintenance performed on a link sometimes conflicts with link maintenance, because busied-out objects create link setup failure. Frequent link re-setup attempts may delay component recovery. For best results, **busyout** the link to disable attempted link re-setup.

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

release pms-link

release pms-link

Use **release pms-link** to reactivate the busied out maintenance objects on the property management system (PMS) link. The **busyout pms-link** command places all maintenance objects associated with a PMS link in the maintenance busy state. Once released, periodic and scheduled maintenance can be performed on the maintenance objects. See [Busyout and Release Commands](#) on page 33. See [status link](#) on page 358 for more details on links.

Use **release pms-link** to deactivate MOs that are associated with a property management system link. These links provide asynchronous data connections from switches to peripherals; they are composed of a:

- 1 Far end data module
- 1 Simulated data channel on a NETCON board
- 1 Manager that initiates and maintains the link

1 Controller/protocol that services the link

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release pms-link			init inads craft		See note below.

Note:

Specific component maintenance performed on a link sometimes conflicts with link maintenance, because busied-out objects create link setup failure. Frequent link re-setup attempts may delay component recovery. For best results, **busyout** the link to disable attempted link re-setup.

status pms-link

status pms-link

Use **status pms-link** to see the status of the property management system interface link.

Action/Object	Qualifier	Qualifier Description	Login
status pms-link			init inads craft cust browse

Status of the property management link will be up, whether or not a data base swap is taking place between the switch and PMS. If the link is down, the number of attempts made to set up the link appears.

A property management system (PMS) is a stand alone computer system that can be integrated with the switch to enhance the service capability for a hotel/motel.

For general information on PMS links, see [busyout pms-link](#) on page 451. See [status link](#) on page 358 for more details on links.

The following display shows a typical result for **status pms-link**.

<pre> status pms-link PMS LINK STATUS Physical Link State: down Protocol State: down Number of Retries: 3 Maintenance Busy? no </pre>
--

status pms-link field description

status pms-link field description

Field	Description
Physical Link State	up, down, extension not administered. The PMS link is considered administered only if an extension is given in the System Hospitality form.
Protocol State	up/down The state of the C-LAN protocol. Blank if not administered.
Number of Retries	Number of times the switch has tried to set up the link. Appears when the link is down.
Maintenance Busy	y/n If y , maintenance testing is being performed on the link.

test pms-link

test pms-link [**long** | **short**] [**repeat n** | **clear**] [**schedule**]

Use **test pms-link** to verify that the link to the Property Management System (PMS) is administered and performs a series of tests on the link.

See [status pms-link](#) on page 453 for information about the PMS and interpreting its status. See [busyout pms-link](#) on page 451 for information on PMS links. See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test pms-link	short long repeat n clear schedule	See Common Input Parameters on page 25. Examples: test pms-link sh r 5 test pms-link l test pms-link test pms-link c test pms-link c sch	init inads craft	short 1	See note below

Note:

Specific component maintenance performed on a link sometimes conflicts with link maintenance, because busied-out objects create link setup failure. Frequent link re-setup attempts may delay component recovery. For best results, **busyout** the link to disable attempted link re-setup.

pnc

See:

[set pnc](#) on page 455

[status pnc](#) on page 455

set pnc

set pnc lock | unlock

On critical-reliability systems (duplicated PNC), **set pnc lock** locks the active port network connectivity in the active state. PNC interchanges are prevented, and the active PNC remains active regardless of its state of health. Duplicate call setup takes place, though the standby is not available for service. This condition can also be initiated with **reset pnc interchange override-and-lock**. Use the **Software Locked** field on the **status pnc** screen to see if the PNC is locked. The **Interchange Disabled** field refers to the antithrashing mechanism.

Set pnc unlock releases the lock and enables subsequent interchanges to take place.

If the health of the active PNC has degraded to worse than that of the standby pnc, unlocking the active port network connectivity can cause an immediate PNC interchange. This condition can be foreseen by use of **status pnc**.

System restarts remove a PNC lock.



CAUTION:

If the active PNC experiences problems while in the locked state, service disruptions may occur that would ordinarily be avoided by PNC interchange.

Action/ Object	Qualifier	Qualifier Description
set pnc	lock	PNC interchanges are prevented, and the active port network connectivity is locked on-line.
	unlock	Releases the PNC lock.

status pnc

status pnc

Use **status pnc** to see a summary of conditions on the active and standby Port Network Connectivities (PNC). If the PNC is not duplicated, the B-PNC column and other duplication-related fields are blank.

Maintenance SAT Commands

The following screen shows an example of **status pnc** on a system with a single switch node CSS and duplicated PNC.

```
status pnc

                                PORT NETWORK CONNECTIVITY

                                Duplicated? yes
                                Software Locked? no
                                Standby Busied? no
                                Direct Connect? no
                                Standby Refreshed? yes
                                Interchange Disabled? no

                                A-PNC                                B-PNC

                                Mode: active                        Mode: standby
                                State of Health: functional        State of Health: functional
                                Inter PN Index: 00.00.00.00.00.00    Inter PN Index: 00.00.00.00.00.00
                                Inter SN Index: 00.00              Inter SN Index: 00.00
                                Major Alarms: 0                    Major Alarms: 0
                                Minor Alarms: 0                    Minor Alarms: 0
                                Warning Alarms: 0                  Warning Alarms: 0
                                SN Locations:                      SN Locations: 03E
```

status pnc field descriptions

Many fields on this screen are blank when the PNC is not duplicated

status pnc field descriptions 1 of 3

Field	Description
Duplicated	Whether or not the system has a duplicated PNC (critical-reliability option).
Software Locked	On a system with duplicated PNC, whether the PNCs are locked by means of the set pnc lock or reset pnc override-and-lock . When this field is y , spontaneous or demand PNC interchanges are not possible. To enable interchanges, use set pnc unlock .
Standby Busied	On a system with duplicated PNC, whether or not the standby PNC is busied out with busy pnc . Interchanges are prevented when the standby is busied out.
Direct Connect	Whether the system uses direct-connect connectivity or a center stage switch.
1 of 3	

status pnc field descriptions 2 of 3

Field	Description
Standby Refreshed	On a duplicated system, this field indicates whether the standby PNC has completed a global refresh of duplicated call setup after being released from a busyout, or after a system reset. This field does not indicate if a partial unrefresh has taken place in response to a problem on the standby. Only a “functional” state of health on the standby (all zeros in the State of Health vector) guarantees that the standby’s call setup matches completely that of the active.
Interchange Disabled	This field is y when the anti-thrashing mechanism is in effect, preventing PNC interchanges. This is the case for 5 minutes after a spontaneous PNC interchange, and for 30 seconds after a demand interchange. The reset pnc interchange override-and-lock command overrides antithrashing. This field does not indicate whether a PNC interchange is currently prevented by a software lock, by insufficient state of health of the standby, or by busyout of the standby.
Mode	This field displays “active” or “standby”, depending on whether or not that PNC controls active call processing.
State of Health	On a system with duplicated PNC, the state of health of each PNC. For the standby PNC, service effects mentioned below are those that would occur if that PNC were to become active via an interchange. Functional: the indicated PNC has no service disrupting alarms against it. The state-of-health vector is all zeros, and call setup on the standby PNC matches that of the active. Partially functional: the health of the PNC is less than perfect. The source and severity of the problem is indicated by the state-of-health vector (Inter-PN and Inter-SN Indexes). Whenever the standby’s state of health is partially functional, duplicated call setup on the standby probably does not match that on the active. Not functional: Expansion Archangel Links to all PNs are down on this PNC. No service is possible to any PNs via this PNC.
2 of 3	

status pnc field descriptions 3 of 3

Field	Description
Inter PN Index, Inter SN Index	The Inter-PN and Inter-SN Indexes screen the state-of-health vector, which is used to track and compare the states of health of both PNCs. The fields making up the indexes are 2-digit numbers separated by periods (.), with each field representing a different class of faults. The fault class fields are arranged in order of decreasing importance from left to right. In other words, each field in the index supersedes the following fields in determining which PNC is healthiest. The Inter-PN Index contains six fields (aa.bb.cc.dd.ee.ff), and the Inter-SN Index has two (gg.hh). The Inter-PN Index reports faults in connectivity between port networks and supersedes the Inter-SN Index, which reports faults in connectivity between switch nodes. (The Inter-SN Index is only meaningful for systems with a center stage switch having 2 switch nodes, each of which is duplicated). The meaning of each fault class field is given in Table 38: Fault Class Field Descriptions on page 458. A zero entry indicates that there are no such faults reported. Higher numbers indicate increasing number of faults. All zeros indicates a perfect state of health. Unless the PNCs are locked, the active PNC's state of health should always be equal to or better than the standby's. (Otherwise, the system would perform a spontaneous interchange.) After a PNC-related alarm is cleared, the system performs a partial refresh of the standby PNC. The corresponding fault class field is not updated to reflect the improved state of health until the refresh is done. The state-of-health indexes will not agree with the current alarm status during this period.
Major Alarms, Minor Alarms, Warning Alarms	The number of major, minor, or warning alarms logged against DS1C-BD, SNI-BD, SNC-BD, EXP-INTF, FIBER-LK, DS1C-FAC, SNC-LINK, SN-CONF, SNC-REF, SYNCH, and SNI-PEER on the indicated PNC.
SN Locations	The locations of all switch nodes comprising the indicated PNC.
3 of 3	

Table 38: Fault Class Field Descriptions 1 of 2

Inter PN Index Fields (aa.bb.cc.dd.ee.ff)				
Position	Fault Class	Priority	Description	MOs
aa	FC_EAL	1	Number of PNs with EALs down	EXP-PN
bb	FC_INL	2	Number of PNs with LINL, RINL, or EI-SNI neighbor link faults	EXP-PN SN-CONF
1 of 2				

Table 38: Fault Class Field Descriptions 2 of 2

Inter PN Index Fields (<i>aa.bb.cc.dd.ee.ff</i>)				
Position	Fault Class	Priority	Description	MOs
cc	FC_BFDL	3	Number of PNs with Bearer Fault Detection Link (BFDL) faults.	EXP-INTF SYS-LINK
dd	FC_HW	4	Number of PNs affected by hardware faults in a link having an EI as an endpoint (Endpoints can be determined with <code>list fiber-link</code> .)	EXP-INTF SN-CONF FIBER-LK SNI-BD DS1C-BD
ee	FC_PER	5	Number of PNs affected by SNI peer link faults for SNIs connected to EIs	SNI-PEER
ff	FC_DS1	6	Number of PNs affected by DS1C facility faults	DS1FAC
Inter SN Index Fields (<i>gg.hh</i>)				
gg	FC_SNIL	7	Number of inter-switch-node fibers affected by peer or neighbor link faults	SNI-PEER
hh	FC_SNIHW	8	Number of inter-switch-node fibers affected by hardware faults	SN-CONF SNI-BD FIBER-LK
				2 of 2

pnc interchange

reset pnc interchange

`reset pnc interchange [override-and-lock]`

Note:

`Reset pnc interchange` does not work like other `reset` commands. Instead of resetting or initializing hardware, a PNC interchange is executed. Before entering `reset pnc interchange`, use `status pnc` to check the states of health of the two PNCs.

Use `reset pnc interchange` to execute a PNC interchange on a critical-reliability system (duplicated PNC). The standby PNC becomes active and assumes control of active call processing, and the active goes to standby. If the standby PNC's health is equal to or better than the active PNC's, no service disruption takes place; all stable calls and links are preserved. Some unstable calls may drop.

Both demand and spontaneous PNC interchanges cannot take place when:

- 1 The standby PNC is busied out.
- 1 The PNCs are locked by means of the **set pnc lock** or **reset pnc interchange override-and-lock** commands.
- 1 For 5 minutes after a spontaneous PNC interchange, or for 30 seconds after a demand interchange, an anti-thrashing mechanism prevents subsequent interchanges unless the **override-and-lock** option is used.
- 1 When the standby PNC's state of health is lower than the active PNC's, the command aborts unless the **override-and-lock** option is used.
- 1 If the standby PNC has not completed a global refresh since it was last initialized or released, the reset aborts unless the **override-and-lock** option is used.

Note the following caution regarding the use of the **override-and-lock** option.

See `status pnc` for details of how to obtain and interpret the states of health and other current information about the PNCs. For a more complete explanation of PNC duplication and interchanges, see [PNC-DUP \(PNC Duplication\)](#) of the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)*.

Action/Object	Qualifier	Qualifier Description	Login
reset pnc interchange	override-and-lock	Override the anti-thrashing mechanism. Subsequent PNC interchanges are prevented, regardless of changes in the states health of the PNCs. Double call setup still takes place; each call is set up on both PNCs. To unlock the PNCs, use set pnc unlock.  CAUTION: This option forces execution of the interchange regardless of the standby's state of health, possibly disrupting service.	

If **reset pnc interchange** is unsuccessful due to the standby PNC's state of health (operation of anti-thrashing), the following message appears:

**Interchange of pnc failed;
try again using the "override-and-lock" identifier**

If **reset pnc interchange** is unsuccessful due to a busyout of the standby PNC, the **Must release port network connectivity first** message appears.

port

See:

[busyout port](#) on page 461
[clear port](#) on page 461
[display port](#) on page 461
[mark port](#) on page 463

[release port](#) on page 464

[test port](#) on page 464

busyout port

busyout port location

Use **busyout port** to busyout a specified port on a circuit pack.

Action/Object	Qualifier	Qualifier Description	Login
busyout port	<i>location</i>	port address (PCSS) marked port: PPSSpp Examples: busyout port 01c1101 busyout port 02c1501	init inads craft

Busyout port location on a specific SIP B-channel:

- ┆ drops any active call that exists on the B -channel
- ┆ reduces the trunk group's capacity by one
- ┆ the physical piece of hardware is removed from service

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

clear port

Use **clear port** to remove marks from ports and free the ports for service. **Clear port** works with **mark port**.

Action/Object	Qualifier	Qualifier Description	Login
clear port	<i>location</i>	Port location: <i>PCSSpp</i> Example: clear port 01c1102	init inads cust nms

display port

display port location [schedule]

Use **display port** to see a port's equipment type and identification number.

Action/ Object	Qualifier	Qualifier Description	Login
display port	<i>location</i>	address of the port Example: display port 1a0502 display port 01a05002 (both specify cabinet 1, carrier A, slot 5 and port 2).	init inads craft cust browse

The following example shows the output from **display port**.

```
display port 1c0801
                                PORT INFORMATION
                                Port: 01C08001
                                Equipment Type: Station
                                Identification: 71026
```

display port field descriptions

display port field descriptions

Field	Description
Port	Port address location
Equipment type	Type of hardware that is physically connected to the specified port, or TTI port for a phone in a TTI state Softphone Restore Port = softphone registration originated from this port. No new extensions can be assigned to this port location. Use list registered-ip-stations for more information on the IP Softphone extension assigned to this port.
Identification	Depending on the equipment type, identifies: ┆ extension ┆ trunk group number and member number ┆ modem pool group number ┆ IP address of an IP telephone that is in TTI state

mark port

mark port *port-location*

Use **mark port** to make a port unusable by normal call processing. The port can be tested, etc., but calls are not attempted through the port. A marked port is saved as part of translation. Use **clear port** to restore the port to service.

For more information, see [Common Input Parameters](#) on page 25 and [Common Command Output Screens](#) on page 28.

Action/Object	Qualifier	Qualifier Description	Login
mark port	<i>port-location</i>	Location of the port to be marked Examples: mark port 1c0208 mark port 2a1001	init inads craft

release port

Use `release port` to activate specified ports on circuit packs.

For more information see [Busyout and Release Commands](#) on page 33.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>release port</code>	<code>location</code>	Physical location of the port, <i>PCSS</i>	init inads craft	

Release port `location` on a specific SIP B-channel:

- ┆ increases the trunk group's capacity by one
- ┆ the physical piece of hardware is added to service

test port

`test port location [long | short] [repeat n | clear]`

Use `test port location` to perform hardware diagnostic tests on an individual port circuit. In most cases, tests are performed on hardware connected to the port.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>test port</code>	<code>location</code> <code>short</code> <code>long</code> <code>repeat <i>n</i></code> <code>clear</code>	<i>PCSSpp</i> See Common Input Parameters on page 25. Examples: <code>test port 01c1101 1</code> <code>test port 02e1502 sh r 2</code> <code>test port 02d1201 r 4</code> <code>test port 01c1101 c</code>	init inads craft	short 1



WARNING:

Because `test port location clear long` clears all counters if tests pass, firmware counters may be cleared even when a problem exists. In some cases customer service might degrade because calls may be routed over defective equipment.

port-network

See:

[reset port-network](#) on page 465

[status port-network](#) on page 465

reset port-network

```
reset port-network PN# level [1 | 2]
```



CAUTION:

A reset of level 2 is destructive, causing all calls and application links on the specified PN to drop. PN resets are described in [EXP-PN \(Expansion Port Network\)](#) on page 823 in *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)*.

Use `reset port-network` to reset a specified port network to a specified level. This does not cause an interchange on a system with duplicated PNC. A reset will not work on a port network whose fiber link to the PN or CSS is down.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>reset port-network</code>		Example: <code>reset port-network 10 level 2</code>		
	<i>PN#</i>	Port network number. Use <code>list cabinet</code> to find the PN number(s) associated with a given cabinet.		
	<code>level 1</code> <code>level 2</code>	Use reset level 1 (WARM restart) to restart a PN that is still fully or partially in service. All stable calls are preserved, and full service is restored within 35 seconds. Use reset level 2 (COLD restart) to reset, remove, and reinsert all PN circuit packs, to recover a PN that has been taken out of service. Level 2 restarts should take less than 2 minutes. All calls and application links with an endpoint in the PN are dropped. If two level 2 resets within an hour fail to return the PN to service, PN Emergency Transfer is invoked. PN Emergency Transfer is already in effect if the link to the PN has been down for more than 1 minute.		

For more information, see [Common Command Output Screens](#) on page 28 and [Common Error Codes for maintenance commands](#) on page 34.

status port-network

```
status port-network
```

Maintenance SAT Commands

Use **status port-network** to see information about the status of a specified port network. The fields on the screen vary depending on the PNC configuration on the system.

In port networks where PKT-INTs are moved to the IPSIs, **status port-network** shows the location and state of the links, whether active or failed, and the total alarms, faults, and open bus links.

The following example shows the output for the **status port-network** for an **S8700 IP-PNC** port network.

```
status port-network 2
```

PORT NETWORK STATUS									
PN	Major Alarms	Minor Alarms	Warning Alarms	Carrier Locs	PN Control Active	PN Control Standby	Internet Protocol (IP) Connected Port Network		
2	0	4	6	02A 02B 02C 02D	up	up			
TDM Bus	Service State	Control Channel	Dedicated Tones	TONE/CLOCK			Service State	System Clock	System Tones
A	in	y	n	02B			in	standby	standby
B	in	n	y	02A			in	active	active
		Service PKT State	Major Alarms	Minor Alarms	Bus Faults	Open Bus Leads			
		2	in	n	y				

The following example shows the output for the **status port-network** for an ATM port network.

```
status port-network 2
```

PORT NETWORK STATUS									
PN	Major Alarms	Minor Alarms	Warning Alarms	Carrier Locs	PN Control Active	PN Control Standby	ATM PNC Conn	Endpoints	Mode
2	0	4	6	02A 02B	up	up	2 A-PNC 1 B-PNC	02A01-AT02A 02B02-AT02B	active standby

TDM Bus	Service State	Control Channel	Dedicated Tones		TONE/CLOCK	Service State	System Clock	System Tones
A	in	y	n		02B	in	standby	standby
B	in	n	y		02A	in	active	active

	PKT	Service State	Major Alarms	Minor Alarms	Bus Faults	Open Bus Leads
	1	in	n	n		

The following example shows the output for the **status port-network** for a CSS port network.

```
status port-network 1
```

PORT NETWORK STATUS									
PN	Major Alarms	Minor Alarms	Warning Alarms	Carrier Locs	PN Control Active	PN Control Standby	Fiber Link	Endpoints	Mode
1	0	28	732	01A 01B	up	up	1 A-PNC 1 B-PNC	01A01-01E02 01B02-01D02	active standby

TDM Bus	Service State	Control Channel	Dedicated Tones		TONE/CLOCK	Service State	System Clock	System Tones
A	in	y	n		01B	in	standby	standby
B	in	n	y		01A	in	active	active

	PKT	Service State	Major Alarms	Minor Alarms	Bus Faults	Open Bus Leads
	1	in	n	n		

status port-network field descriptions

status port-network field descriptions 1 of 3

Field	Description
PN	The Port Network number associated with the Port Network for which status is being displayed.
Major Alarms	The number of major alarms logged against the Port Network that is being displayed.
Minor Alarms	The number of minor alarms logged against the Port Network that is being displayed.
Warning Alarms	The number of warning alarms logged against the Port Network that is being displayed.
Carrier Locs	The cabinet and carrier locations of each carrier in the Port Network.
PN Control Active/Standby	Active and standby (if control network is duplicated) control network status for the specified port network. up = the link between the TN2312 IPSI circuit pack and the server is up down = the link between the TN2312 IPSI circuit pack and the server is down For direct connect, CSS, or ATM fiber connected port networks, the PNC status of a port network is determined by the availability of the EAL (Expansion Archangel Link) and the INL (Indirect Neighbor Link) to the port network. up = the EAL and INL are both available down = the EAL and INL are both unavailable near-end = the EAL is available but the INL is unavailable far-end = the INL is available but the EAL is unavailable. When the far-end EAL is unavailable, Tone-Clock, TDM-bus, and packet-bus information are blank. aa = there is a problem with the archangel. The control is up, but the archangel is not functioning and is not available.
FIBER-LINK	This field displays the fiber-link number associated with all fiber links having an Expansion Interface circuit pack endpoint residing in the specified Port Network. The fiber connectivity side will also be displayed (i.e., "A-PNC" or "B-PNC").
Endpoints	The physical position of each Expansion Interface board that is an endpoint for a fiber link in the specified Port Network. A high-reliability system will display only one Expansion Interface pair, while a critical-reliability system will display two Expansion Interface pairs separated by a hyphen (-). If blanks are displayed, it means the endpoints could not be retrieved by software.
1 of 3	

status port-network field descriptions 2 of 3

Field	Description
Mode	The mode is the current role of the link. A mode of "active" means the link is providing normal circuit and control functions for the Port Network. A mode of "standby" means the link is part of a duplicated system and is ready to perform its functions but is not active. If blanks are displayed it means that PNC is not duplicated, or the mode could not be retrieved from software.
TDM Bus	The TDM bus identifier associated with the Port Network appears. The TDM bus ("a" or "b") specifies which half of the TDM bus is being displayed. When Control Links are down, this field is blank.
Service State	The operational state of the TDM bus. A TDM bus service state of "in" means the bus is in normal operation. A TDM bus service state of "out" means the bus has failed certain maintenance tests and has been taken out of service, or the maintenance object has been demand busied out. When Control Links are down, this field is blank.
Control Channel	y/n Shows whether the TDM bus has the control channel on it. Only one TDM bus of a TDM bus pair on each Port Network can have the control channel on it at a given time. Blank if the system does not contain a PN, and when Control Links are down.
Dedicated Tones	y/n Shows whether the TDM bus has the system tones on it. Only one TDM bus of a TDM bus pair can have system tones on it at a given time. Blank if the system does not contain a PN, and when Control Links are down.
TONE/CLOCK	The location of the IPSI or Tone-Clock circuit pack, containing the Tone-Clock circuit in the specified Port Network. The location is represented using the cabinet and carrier where the Tone-Clock resides (e.g., 1a, 1b, 2a, 2b, etc.). Blank = Control Links are down.
Service State	The operational state of the Tone-Clock circuit. in means the Tone-Clock has been installed and is in normal operation. out means that the Tone-Clock is out of service and has failed certain maintenance tests. Blank = Control Links are down.
System Clock	Shows which IPSI or Tone-Clock circuit pack supplies the system clock for that port network by displaying the mode of the Tone-Clock. active = the Tone-Clock supplies the system clock. Only one Tone-Clock in each Port Network can be active at any given time. standby = the Tone-Clock is part of a duplicated clock system and is ready to supply the system clock, but is not currently active down = the Tone-Clock is not operational Blank = Control Links are down.
2 of 3	

status port-network field descriptions 3 of 3

Field	Description
System Tones	Shows which IPSI or Tone-Clock circuit pack supplies the system tones for that port network by displaying the mode of the Tone-Clock. active means that the Tone-Clock supplies the system tones. Only one Tone-Clock in each Port Network can be active at any given time. standby means the Tone-Clock is part of a duplicated clock system and is ready to supply system tones, but is not currently active down means the Tone-Clock is not operational. Blank when Control Links are down.
PKT	Packet Bus identifier, the same as the Port Network number.
Service State	This field represents the operational state of the packet bus. A service state of "in" means the packet bus has been installed and is in normal operation. A service state of "out" means either that the: 1 Packet bus is out of service and has failed certain maintenance tests 1 Maintenance object has been demand busied out. A service state of "reconfig" means that the Maintenance/Test circuit pack has swapped one or more signal leads because of lead faults detected during testing (high- and critical-reliability systems). A service state of "open lds" means the Maintenance/Test circuit pack query was run, and open bus leads were found. A service state of blanks in this field means the system does not have the Packet Bus feature optioned. When Control Links are down, service state information is unavailable.
Major Alarms	Whether major alarms are logged against the packet bus that is being displayed y/n . When Control Links are down, this field is blank.
Minor Alarms	Whether minor alarms are logged against the packet bus that is being displayed y/n . When Control Links are down, this field is blank.
Bus Faults	This field indicates the number of faulty bus leads, where a fault is defined as either shorted to another lead or stuck at some value. This field may take on any integer value between 0 and 24. The field contains a blank if the Maintenance/Test circuit pack is not present or has been taken out of service. When Control Links are down, this field is blank.
Open Bus Leads	This field indicates the number of bus leads that have an open circuit between the Maintenance/Test circuit pack and bus terminator. This information is determined by testing performed on the bus leads; bus leads test open as a result of physical damage to the backplane or the backplane's connectors, or because a bus terminator is missing. This field may contain integer values between 0 and 24. This field contains a blank if the Maintenance/Test circuit pack is not present or has been taken out of service. When Control Links are down, this field is blank.
3 of 3	

power-shutdown

get power-shutdown

`get power-shutdown [cabinet | carrier]`

Use `get power-shutdown` to see the cause of the last shutdown of a power supply in an individual media gateway or a stack. Use `get power-shutdown` on carriers or a stack (cabinet) equipped with a TN2312BP IPSI or later IPSI circuit pack.

Use `display error` to see the time of the last shutdown.

Note:

When you reset a 655A power supply by unplugging it, keep it unplugged for 30 seconds to allow it to discharge. Otherwise, it retains the information it stored before it was unplugged.

Action/Object	Qualifier	Qualifier Description	Login
<code>get power-shutdown</code>	<i>cabinet</i> <i>carrier</i>	cabinet location location of a G650 carrier within a G650 stack	init super-user inads craft dadmin Switch Circuit Pack Maintenance permissions

The following display shows a typical result of `get power-shutdown`.

<code>get power-shutdown 01</code>	
655A POWER SUPPLY SHUTDOWN CAUSE	
SLOT	CAUSE
01A00	PS removed and reinserted
01A15	PS removed and reinserted
01B00	PS removed and reinserted
01B15	PS removed and reinserted
01C00	Commanded shutdown
01C15	Commanded shutdown
01D00	PS removed and reinserted
01E00	AC input removed

get power-shutdown field descriptions

Field	Description
Slot	Power supply cabinet/carrier/slot
Cause	Cause of last shutdown.

pri-endpoint

See:

[busyout pri-endpoint](#) on page 472

[release pri-endpoint](#) on page 473

[status pri-endpoint](#) on page 473

[test pri-endpoint](#) on page 475

busyout pri-endpoint

busyout pri-endpoint extension

Use **busyout pri-endpoint** to busyout all PRI endpoint ports (B-channels) associated with the specified PRI endpoint.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
busyout pri-endpoint	<i>location</i>	PRI endpoint extension number Example: busyout pri-endpoint 25012	init inads craft mms		Active calls on busied out PRI endpoints are dropped. Call attempts from far-end PRI terminal adapters are denied with a cause value of 17.

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

release pri-endpoint

Use **release pri-endpoint** to remove PRI endpoint ports (B-channels) associated with specified PRI endpoint from maintenance busy states. Periodic and scheduled tests resume on released ports. The switch attempts to negotiate with the far-end PRI terminal adapter activating PRI endpoint port (B-channel). Maintenance does background initialization testing on released ports. For details of the test sequence, refer to [3].

Action/Object	Qualifier	Qualifier Description	Login
release pri-endpoint	extension	extension number associated with desired PRI endpoint.	init inads craft nms

status pri-endpoint

This command displays internal software state information for diagnosis and can help locate facilities with which a PRI endpoint is communicating. Status information for each of the B-channels making up the PRI endpoint display in addition to some overall PRI endpoint information.

Action/Object	Qualifier	Qualifier Description	Login
status pri-endpoint	extension	PRI endpoint extension to be displayed (see dial-plan). Examples: status pri-endpoint 25012 status pri-endpoint 77868	init inads craft nms browse

The following example shows the output for **status pri-endpoint 22501** and assumes the following:

- 1 PRI endpoint ports for extension 22501 are in cabinet 1, carrier B, slot 20, circuit 1 to 6.
- 1 The ports 1 to 3 of the specified PRI endpoint are connected on an active call to ports 13 to 15 of board in location 1B19 (cabinet 1, carrier B, slot 19).
- 1 Ports 4 and 5 of the specified PRI endpoint are idle.
- 1 Port 6 of the specified PRI endpoint is out of service, and background maintenance testing is being performed on the port.

Note:

A PRI endpoint can initiate and receive a call on any one or more of the B-channels making up the PRI endpoint.

```

status pri-endpoint 22501
                                                                    page 1 of 1

PRI-ENDPOINT STATUS

Extension: 22501
Signaling Group ID: 3
Originating Auto Restoration? n

Width: 6
B-Channels Active: 3
B-Channels Idle: 2

Port      Service State      Test In Progress  Connected Port
01B2001   in-service/active    n                 01B1913
01B2002   in-service/active    n                 01B1914
01B2003   in-service/active    n                 01B1915
01B2004   in-service/idle      n
01B2005   in-service/idle      n
01B2006   out-of-service-NE    y

```

Note that the line listing of each B-channel's status may continue onto the next page. The user is prompted to press the NxtPg key to continue the display.

status pri-endpoint field descriptions

status pri-endpoint field descriptions 1 of 2

Field	Description
Extension	PRI endpoint extension
Width	Administered number of B-channels associated with the specified PRI endpoint
Signaling Group ID	ID number of the signaling group that handles the signaling for the ports in the specified PRI endpoint
Originating Auto Restoration	Administered option for the auto restore feature (restores calls originated from this PRI endpoint in the case of network failure): y restoration option enabled n restoration option disabled
B-Channels Active	The number of B-channels active on a call
B-Channels Idle	The number of B-channels in the in-service/idle state
Port	Port locations (cabinet-carrier-slot-circuit) for each of the B-channels making up the PRI endpoint.
1 of 2	

status pri-endpoint field descriptions 2 of 2

Field	Description
Service State	Service state of the B-channels: in-service/active, in-service/idle, out-of-service-NE, out-of-service-FE, maint-NE/active, maint-FE/active, maint-NE/idle, and maint-FE/idle. NE (Near End) and FE (Far End) refer to which "end" of the B-channel has placed the facility in the current state. NE refers to the switch and FE refers to the PRI terminal adapter (or any device that terminates the D-channel signaling on the facility).
Test In Progress	Whether or not there is any current maintenance testing on the port.
Connected Port	Connected port location (cabinet-carrier-slot-circuit) for each of the B-channels active on a call.
2 of 2	

test pri-endpoint

Use `test pri-endpoint` to perform hardware diagnostic tests on all port circuits (B-channels) that are associated with the specified PRI endpoint.

Action/ Object	Qualifier	Qualifier Description	Login	Default
<code>test pri-end point</code>	<code>extension</code>	PRI endpoint extension to be tested (must conform to dial-plan) See Common Input Parameters on page 25.	init inads craft nms	short 1
	<code>short</code> <code>long</code> <code>repeat n</code> <code>clear</code>	Examples: <code>test pri-endpoint 25012</code> <code>test pri-endpoint 45002 sh</code> <code>test pri-endpoint 45892 l</code> <code>test pri-endpoint 24389 sh r 4</code> <code>test pri-endpoint 34899 l r 6</code> <code>test pri-endpoint 34912 l r 5 schedule</code> <code>test pri-endpoint 93483 r 2</code> <code>test pri-endpoint 10022 c</code>		

processor-ip-interface

See:

[busyout processor-ip-interface](#) on page 476

[status processor-ip-interface](#) on page 476

[release processor-ip-interface](#) on page 476

busyout processor-ip-interface

busyout processor-ip-interface

Use **busyout processor-ip-interface** to busyout the processor ethernet interface link. **Busyout processor-ip-interface** brings down the processor channel applications, ip-services, and IP calls that were active on the link.

Action/Object	Qualifier	Qualifier Description	Login
busyout processor-ip-interface		Example: busyout board 01c11	init inads craft

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

status processor-ip-interface

Use **status processor-ip-interface** to see the status of the processor-ip-interface.

Action/Object	Qualifier	Qualifier Description
status processor-ip-interface		

The following example shows the output from **status processor-ip-interface**.

<pre>status processor-ip-interface</pre>	Page 1 of 2
<pre>PROCESSOR IP INTERFACE STATUS</pre>	
<pre> Status: connected</pre>	
<pre> Enabled: n</pre>	
<pre>Source IP Address: 192.11.128.148</pre>	
<pre>Subnet Mask: 255.255.255.0</pre>	
<pre>Broadcast Address: 0.0.0.0</pre>	
<pre>Maintenance Busy?: no</pre>	
<pre>Active Channels: 0</pre>	

release processor-ip-interface

release processor-ip-interface

Use **release processor-ip-interface** to release the processor ethernet interface link and to bring up the processor channel applications, ip-services, and IP calls that were administered active prior to busying out the link.

For more information see [Busyyout and Release Commands](#) on page 33.

profile-base

display profile-base

display profile-base

Use **display profile-base** to see the Linux Group number that corresponds to Communication Manager user profile 0.

The screen name is **User Profile Base**.

Action/Object	Qualifier	Qualifier Description
display profile-base		

display profile-base screen display

display profile-base	User Profile Base
	Profile Base: 10000
This screen is used to display the Linux Group number that corresponds to CommunicationManager user profile 0.	

display profile-base screen field descriptions

display profile-base field descriptions

Field	Description
Profile Base	Linux Group number that corresponds to Communication Manager user profile 0. Profile Base default number is 10000.

psa

status psa

`status psa`

See [status tti](#) on page 638.

public-unknown-numbering

See:

[change public-unknown-numbering](#) on page 478

[display public-unknown-numbering](#) on page 479

[list public-unknown-numbering](#) on page 479

change public-unknown-numbering

`change public-unknown-numbering n [ ext-digits x ][ trunk-group trunk-group-number ]`

Use `change public-unknown-numbering n [trunk-group trunk-group# ]` to administer the desired digits for name and number display on display-equipped stations in an ISDN network.

Action/Object	Qualifier	Qualifier Description
<code>change public-unknown-numbering</code>	<i>n</i>	Number of digits (extension length, Ex -Len) in the extension being administered. Enter 0 for attendant.
	<i>ext-digits</i>	the first extension on the screen Example: <code>change public-unknown-numbering 5</code> <code>change public-unknown-numbering 5 ext-digits 10010</code>
	<i>trunk-group #</i>	The <i>trunk-group</i> option displays valid results only when used in conjunction with the <i>ext-digits</i> option. Otherwise, an error message is returned.

See *Administrator Guide for Avaya Communication Manager (03-300509)* for a screen example and field descriptions, and for more information on ISDN Call Identification Display and Numbering-Public/Unknown.

display public-unknown-numbering

`display public-unknown-numbering n [ext-digits]`

Use `display public-unknown-numbering` to see the administration for name and number display on display-equipped stations in an ISDN network.

Action/Object	Qualifier	Qualifier Description
<code>display public-unknown-numbering</code>	<i>n</i>	Number of digits (extension length, Ex -Len) in the extension being administered. Enter 0 for attendant.
	<code>ext-digits</code>	the first extension on the screen Example: <code>display public-unknown-numbering 5</code> <code>display public-unknown-numbering 5 ext-digits 10010</code>

See *Administrator Guide for Avaya Communication Manager (03-300509)* for a screen example and field descriptions, and for more information on ISDN Call Identification Display and Numbering-Public/Unknown.

list public-unknown-numbering

`list public-unknown-numbering start n [ext digits | count]`

Maintenance SAT Commands

Use **list public-unknown-numbering** to list all entries in the public-unknown-numbering table, used to specify desired digits for name and number display on display-equipped stations in an ISDN network.

Action/Object	Qualifier	Qualifier Description
list public-unknown-numbering	start <i>n</i> count	starting point for the extension digits you want to see number of output lines Example: list public-unknown-numbering list public-unknown-numbering 5 list public-unknown-numbering start 4 list public-unknown-numbering start 4 count 50

The following example shows the output for **list public-unknown-numbering**.

list public-unknown-numbering				
NUMBERING - PUBLIC/UNKNOWN FORMAT				
Ext	Ext	Trk	CPN	Total
Len	Code	Grp(s)	Prefix	CPN
5	4			Len
				4

list public-unknown-numbering field descriptions

Field	Description
CPN Prefix	The number that is added to the beginning of the extension to form a Calling or Connected Number. ▮ blank = the extension is sent unchanged. Use in countries where the public network is able to insert the appropriate CPN Prefix to form an external DID number ▮ If the CPN Prefix length matches the Total CPN Len, the extension number is not used to formulate the PN number. ▮ If the CPN Prefix length plus the extension length exceeds the Total CPN Len, excess leading digits of the extension are deleted when formulating the CPN. ▮ If the CPN Prefix length plus the extension length is less than the Total CPN Len, the entry is not allowed ▮ If the Total CPN Len is 0, no calling party number information is provided to the called party and no connected party number information is provided to the calling party.
Ext Code	Can be up to 7 digits, but cannot be greater than the Ext Len field. attd = attendant 0 = the Ext Len field must be 1 and the DDD number must be 10 digits. 0 to 9 or blank Example: When Ext Len is 4, Ext Code of 12 represents all extensions of the screen 12xx, excluding any explicitly listed longer codes. If code 123 is also listed, the Ext Code 12 represents all extensions of the screen 12xx except extensions of the screen 123x.
Ext Len	Number of digits for the extension, as entered on the command line (list public-unknown-numbering n).
Total CPN Len	Total number of digits to send. If 0, no calling party number information is provided to the called party and no connected party number information is provided to the calling party.
Trk Grp(s)	Number of the ISDN trunk group carrying the call, or the range of trunk groups that use the same CPN Prefix. blank = IEs are not dependent on which trunk group carries the call.

registered-ip-stations

list registered-ip-stations

```
list registered-ip-stations
```

Maintenance SAT Commands

[ext *X*] [type *X*] [id *X*] [release *X*] [region *X*] [port *X*] [gatekeeper *X*]
[tcp *y* | *n*] [authenticated *X*] [count *n*]

Use **list registered-ip-stations** to see specific information about registered ip stations. Sort registered ip-station information by:

- ┆ gatekeeper address
- ┆ network region
- ┆ product ID
- ┆ station type
- ┆ TCP socket registration

Action/Object	Qualifier	Qualifier Description
list registered- ip-stations	authenticated	
	count <i>n</i>	number of stations to list
	ext <i>x</i>	extension number of the registered stations
	gatekeeper <i>x</i>	the C-LAN's or processor's IP address (xxx.xxx.xxx.xxx)
	id <i>x</i>	the product type (x.yyy) of the registered extension
	port <i>x</i>	the port number of the registered stations
	release <i>x</i>	release number of the registered stations
	region <i>x</i>	the network region of the registered stations
	tcp <i>y</i> <i>n</i>	TCP signaling socket registration established
	type <i>x</i>	administered set type (xxxxxx) .

The following example shows a typical result of **list registered-ip-stations**.

list registered-ip-stations							Page 1 of 1
REGISTERED IP STATIONS							
Station Ext/ Orig Port	Set Type	Product ID	Prod Rel	Station IP Address	Net Rgn	Gatekeeper IP Address	TCP Skt
1234567890123 1234567	1234567	1234567890	12345	123456789012345	123	123456789012345	1
20000	4620	IP_Phone	2.200	172.20.80.1	12	172.23.23.134	y
20001	4620	IP_Phone	2.200	172.20.80.2	12	172.23.23.134	y

list registered-ip-stations field descriptions

list registered-ip-stations 1 of 2

Field	Description
For shared-control endpoints (an IP telephone and IP Softphone are in service on the same extension simultaneously), both endpoints register. The records for each endpoint appear vertically adjacent to each other.	
Station Ext/ Orig Port	First line: Station extension number Second line: Port number assigned to the extension that is now under the control of the specified endpoint, for example, a softphone. For an IP endpoint, this is the circuit-switched port that was assigned to this extension number before the IP endpoint registered to the extension. For a shared-control extension where the Telephone is a DCP set, this is the port of the shared-control's DCP set. If a softphone is not taking over a DCP set, no second line appears.
Set Type	Administered set type for the extension.
Product ID	Product ID of the registered endpoint. For example, this can be the product ID of a softphone that is registered to a hardphone extension, and the release information, provided from the endpoint during registration.
Prod Rel	Release number of the endpoint, provided from the endpoint to the gatekeeper during registration.
Station IP address	Location of the registered station, as the C-LAN or processor IP address or port location.
Net Rgn	Network region number assigned to the endpoint.
1 of 2	

list registered-ip-stations 2 of 2

Field	Description
Orig Port	Port number assigned to the extension that is now under the control of the specified endpoint, for example, a softphone. For an IP endpoint, this is the circuit-switched port that was assigned to this extension number before the IP endpoint registered to the extension. For a shared-control extension where the Telephone is a DCP set, this is the port of the shared-control's DCP set.
Gatekeeper IP Address	The IP address of the C-LAN, server, or other device that is performing the role of the H.323 gatekeeper for this endpoint.
TCP Skt	y/n Indicates whether or not the TCP signaling socket is established for the IP station.
2 of 2	

release

Release commands release specified maintenance objects from the maintenance busyout state and puts them back into service, assuming the health of the component(s) permits. Hardware tests specific to the maintenance object are performed to verify that it is functioning.

For each maintenance object, **release** is entered in the same fashion as the associated **busyout** command, except that the word **release** is entered instead of **busyout**. See the description of the related **busyout** command for details of command syntax.

If a **release** command is entered for an object that is not busied out, the command aborts. Some **release** commands trigger recovery actions by the system, such as the refresh of a standby PNC. See the description of the related **busyout** command for details of command execution and interactions.

For more information see [Busyout and Release Commands](#) on page 33.

Action/Object	Qualifier	Qualifier Description	Login	Default
release xxxx	<i>location maintenance- name [address]</i>	Location of the given maintenance object. Use the same format as that used for the related busyout command.		
		Examples: release board 01c11 release data-module 310 release Tone-Clock 2a release ds1-fac 02e01a release fiber-link 13 release port 03a1012 release station extension		

The identity of the maintenance object and the result of executing **release** appears on an output screen similar to the related **busyout** screen. When a **release** aborts or fails, an error code indicating the reason appears. See [Common Error Codes for maintenance commands](#) on page 34.

remote-access

status remote-access

```
status remote-access
```

Use **status remote-access** to see information about remote access calls.

```

status remote-access

                                REMOTE ACCESS STATUS

Remote Access Status: not-administered
                        Date/Time Modified:   /   /   :

Barrier   Date       Expiration No. of Calls Status   Date/Time Expired Cause
Code      Modified   Date       Calls   Used

1:        /   /      /   /      /   /      :
2:        /   /      /   /      /   /      :
3:        /   /      /   /      /   /      :
4:        /   /      /   /      /   /      :
5:        /   /      /   /      /   /      :
6:        /   /      /   /      /   /      :
7:        /   /      /   /      /   /      :
8:        /   /      /   /      /   /      :
9:        /   /      /   /      /   /      :
10:       /   /      /   /      /   /      :

```

status remote-access field descriptions

status remote-access field descriptions

Field	Description
Remote Access Status	Indicates if the feature is enabled or not.
Barrier Code	
Date Modified	
Expiration Date	
No. of Calls	
Calls Used	
Status	
Date/Time Expired	
Cause	Reason for the expiration

remote-office

See:

[add remote-office](#) on page 487

[change remote-office](#) on page 488

[list remote-office](#) on page 488

[display remote-office](#) on page 488

[remove remote-office](#) on page 489

[status remote-office](#) on page 489

add remote-office

add remote-office nn

Use **add remote-office n** to administer a new remote office on your system.

Action/Object	Qualifier	Qualifier Description	Login	Default
add remote-office	nn	The number assigned to the remote office.		

The following example shows the screen for **add remote-office**.

add remote-office n	Page 1 of 1
REMOTE OFFICE	
Node Name:	
Network Region:	
Location:	
Site Data:	

add remote-office field descriptions

add remote-office field descriptions

Field	Description
Node Name	Node Name or IP address assigned to the remote office
Network Region	Network Region number assigned to all stations supported on this remote office. This network region may be used to override the default region obtained from the C-LAN used for signaling to and from the stations.
Location	Location number of the remote office
Site Data	Text information specific to your company.

change remote-office

change remote-office nn

Use **change remote-office nn** to change the administration of a specific remote office on your system. See [add remote-office](#) on page 487 for screen and field information.

display remote-office

display remote-office nn

Use **display remote-office nn** to see the information for a specific remote office administered on your system.

Action/Object	Qualifier	Qualifier Description
display remote-office	schedule	See Common Input Parameters on page 25.

See [add remote-office](#) on page 487 for screen and field information.

list remote-office

list remote-office [schedule]

Use **list remote-office** to list all of the currently administered remote offices on the system. Information includes the remote-office number, node name, network region, location number, and ip address of the remote office.

Action/Object	Qualifier	Qualifier Description	Login	Default
list remote-office	schedule	See Common Input Parameters on page 25.		

The following example shows the screen from **list remote-office**.

list remote-office					Page 1 of 1
Num	Node Name	Net Region	Location	IP Address	
10	romaxn01	1	1	135.9 .72 .52	

list remote-office field descriptions

list remote-office field descriptions

Field	Description
Node Name	Node Name assigned to the remote office
Net Region	Network Region number
Location	Location of the remote office
IP Address	IP Address of the remote office

remove remote-office

remove remote-office nn

Use **remove remote-office nn** to remove a specific remote office from your system. See [add remote-office](#) on page 487 for screen and field information.

status remote-office

Use **status remote-office nn** to see information about a specified remote-office.

The following example shows the screen from **status remote-office**.

```
status remote-office 10
                                REMOTE OFFICE 10
                                Node Name: romaxn01      IP Address: 135.9  .72 .52
                                Network Region: 1
                                Location: 1
Trunk Signaling Groups: *14
Stations Registered: 81234  82232  81234  88888  83210  83333
* Signaling group is currently registered
```

status remote-office field descriptions

status remote-office field descriptions

Field	Description
Node Name	Node Name assigned to the Remote Office
IP Address	IP Address of the node name assigned to the Remote Office
Network Region	Network Region number assigned to the Remote Office
Location	Location number for the Remote Office
Trunk Signaling Groups	Trunk Signaling Group assigned to the Remote Office
Stations Registered	Extensions of the stations on the Remote Office that are currently registered.

route-table

refresh route-table [*all* | *location*]

Occasionally, tables that are used to route IP messages become corrupted and/or contain stale routes, delaying packet delivery. Use **refresh route-table** to remove learned routes from C-LAN circuit pack route tables, and replace administered routes that have been corrupted.

Action/ Object	Qualifier	Qualifier Description	Login	Default
refresh route- table	<i>all</i> <i>location</i>	Refreshes route tables in all C-LAN circuit packs. Refreshes ip-route tables in a specific C-LAN circuit pack (CCss).	init inads craft station trunk MSP permissions	all

The following example shows the output from **refresh route-table all**.

refresh route-table all			Page	1 of	1
C-LAN Board Location	Number of Routes Removed	Number of Routes Added			
01B11	7	0			
01B12	0	0			
01B13	0	1			
01C05	2	0			
01C06	3	0			
01C07	0	0			
01C08	15	2			
01C09	2	0			
01C10	5	0			
01C11	9	0			
Refresh Route Table Is Completed					

The following example shows the output from **refresh route-table 01B11**.

refresh route-table 01B11			Page	1 of	1
C-LAN Board Location	Number of Routes Removed	Number of Routes Added			
01B11	7	0			
Refresh Route Table Is Completed					

refresh route-table field descriptions

refresh route-table field descriptions

Field	Description
C-LAN Board Location	The physical location of the circuit pack in CCcss format (cabinet, carrier, slot)
Number of Routes Removed	The number of routes that were deleted from the TN799DP (C-LAN) route tables
Number of Routes Added	The number of routes that were added from the TN799DP (C-LAN) route tables

security violations

monitor security-violations

`monitor security-violations`

Use `monitor security-violations` to see the following information about failed attempts to access the system:

- ┆ the time of the violation
- ┆ the login entered
- ┆ the port accessed during the failed login attempt

For remote access violations additional information appears:

- ┆ trunk-group number
- ┆ member number
- ┆ extension

A total of 16 entries are maintained for each type of access. The `monitor security-violations` report is automatically updated every 30 seconds until the command is canceled by pressing **CANCEL**. Canceling does not log off the terminal.

Note:

`monitor security-violations` is not available in ASA.

Action/Object	Qualifier	Qualifier Description	Login
<code>monitor security-violations</code>			init inads craft cust rcust bcms browse

security violations output

`monitor security-violations` output field descriptions

Date	The date of the security violation (MM/DD)
Time	The time of the logged security violation (HH:MM)
Login	The login ID that was entered as part of the violation attempt.

System Management Violations

System management violations field descriptions

Port Type	The type of port through which the login violation was attempted: SYS-PORT - a dial-in connection to a system port. MAINT - a physical connection to the G3-MT terminal connector on a PN's Maintenance circuit pack.
Ext	Extension assigned to the data module that was used to attempt the failed login. If a data module was not used (as in the case of dedicated EIA connections) the field is blank.

Remote Access Violations

Remote access violations field descriptions

TG No.	The trunk group that carried the incoming remote access attempt (remote access violations only).
Mbr	The trunk-group member number associated with the trunk from which the remote access attempt terminated (remote access violations only).
Ext	The extension used to access the RAP (remote access violations only).

session

enable session

enable session enables a telnet session on the TN2302 and TN2602 media-processor circuit packs.

Action/Object	Qualifier	Qualifier Description	Login
enable session			init craft inads

Maintenance SAT Commands

This is an example screen for **enable session**.

enable session	Page 1 of 1
ENABLE SESSION	
Login: _____	
Password: _____	
Reenter Password: _____	
Secure? y	
Time to login: 0	
Board Address: _____	

enable session field descriptions

enable session field descriptions

Field	Description
Login	3 - 6 alphabetic characters
Password	7 - 11 characters containing at least one letter and one number.
Reenter Password	Reenter the password
Secure	y = enable SFTP n = enable FTP
Time to login	Number of minutes (0 - 255) to be logged in. The login will be dropped after that time.
Board Address	Location of the circuit pack

set-data

list set-data

```
list set-data [schedule]
```

Use **list set-data** to see phone information administered from the **Site Data** and **Station** screens.

Action/Object	Qualifier	Qualifier Description	Login
list set-data	schedule	See Common Input Parameters on page 25.	

The following example shows the screen from **list set-data**.

list set-data		Page 1 of 1		
		SET DATA		
Extension	Name	Building Floor Room	Cable Color/ Jack Cord Len Set Type	Speaker Headset Mounting
-----	----	-----	-----	-----
4000	sdfsd			n
			0	n
			H.323	
4001	793 Analog 1			n
			0	n
			2500+	

list set-data field descriptions

list set-data field descriptions 1 of 2

Field	Description
Ext	station extension number, administered on the Station screen
Name	name used in the system directory
Building, Floor, Room	physical location of the station
Cable	identifies the cable that connects the phone jack to the system
Jack	identifies the jack where the phone is plugged in
Color	color of phone
Cord Len	length of the cord attached to the receiver
Speaker	y/n
Headset	y/n
1 of 2	

list set-data field descriptions 2 of 2

Field	Description
Mounting	desk or wall
Set Type	type of phone
2 of 2	

shell

go shell

go shell

Use **go shell** to get SAT access to the server's Linux bash shell.

1. Type **go shell** at the SAT command prompt and press **ENTER**.

The screen displays:

Suppress alarm origination? (y/n) [y]

2. Enter **y** to suppress alarms if you are logged into a server via an analog modem that is also the server's only alarm-reporting interface.

This prevents the other server logging an occurrence of SME Event ID #1.

3. Enter your terminal type, or press **ENTER** for the default terminal type.

The Linux prompt appears. It is the login and the server name followed by **>**.

4. At the Linux prompt, enter a Linux command.

Here is a sample screen for **go shell**.

```
Suppress alarm origination? (y/n) [y] y
Alarm is suppressed. 30 minutes left.
Alarm origination suppressed

Wed Oct 24 13:24:30 MST 2007
Enter your terminal type (i.e., xterm, vt100, etc.) [vt100]=>vt100
31516: old priority 0, new priority 0
craft@server1>
```


signaling-group

See:

[display signaling-group](#) on page 497

[list signaling-group](#) on page 501

[set signaling-group](#) on page 502

[status signaling-group](#) on page 503

[test signaling-group](#) on page 505

display signaling-group

Use **display signaling-group** to see the properties of a specific signaling group, designated by the qualifier. Signaling groups are groups of B-Channels for which a given D-Channel (or D-Channel pair) carries the signaling information.

Action/Object	Qualifier	Qualifier Description	Login	Default
display signaling-group	xx	number of signaling group to display Example: display signaling-group 4	init inads craft	none

The following is an example of the output of **display signaling-group** page 1

display signaling-group 4	Page 1 of 5
SIGNaling GROUP	
Group Number: 4	Group Type: h.323
Remote Office? n	Max number of NCA TSC: 4
	Max number of CA TSC: 4
	Trunk Group for NCA TSC: 4
Trunk Group for Channel Selection: 4	
TSC Supplementary Service Protocol: a	
T303 Timer (sec):	
Near-end Node Name: j_b_clan	Far-end Node Name: cl_dolan_c11
Near-end Listen Port: 7007	Far-end Listen Port: 7007
	Far-end Network Region:
LRQ Required? n	Calls Share IP Signaling Connection? y
RRQ Required? n	
Bypass if IP Threshold Exceeded? n	
Direct IP-IP Audio Connection? n	
IP Audio Hairpinning? n	
Interworking Message: PROgress	

display signaling-group field descriptions

display signaling-group field descriptions 1 of 3

Field	Description
Grp No	The signaling group number
Group Type	The type of signal format (ISDN-PRI, ATM, H.323, SIP)
Max NCA TSCs	Maximum number of Non-Call Associated (NCA) Temporary Signaling Connections (TSCs) - virtual connections established within a D-Channel in the facility so that users can transport non-call control user-user information.
Max CA TSCs	Maximum number of Call Associated (CA) TSCs.
Remote Office	The number of NCA TSCs that are administered.
Trunk Group for NCA TSC	The ISDN-PRI trunk group number whose incoming call-handling table handles incoming NCA-TSCs through this signaling group
Trunk Group for Channel Selection	If more than one trunk group is assigned to this signaling group, this trunk group is the one that can accept incoming calls
TSC Supplementary Service Protocol	This field appears when trunk Group Type is ISDN, and for signaling group types ATM, H.323, and ISDN-PRI. a = AT&T Customer Supplementary Services when Country Code is 1A on the DS1 screen. a = Bellcore Supplementary Services when Country Code is 1B on the DS1 screen a = Nortel Proprietary Supplementary Services when Country Code is 1C on the DS1 screen. b = ISO Q SIT c = ETSI. Use to support ETSI-ISDN Completion of Calls (Auto Callback) functionality. d = ECMA QSIG e allows DCS with rerouting, when DCS with Rerouting is y, and Used for DCS on the trunk group screen is y. f = Feature Plus g = ANSI.
T303 Timer (sec)	The number of seconds the system waits for a response from the far end before invoking Look Ahead Routing. Appears when the Group Type field is isdn-pri on the DS1 Circuit Pack screen or h.323 on the Signaling Group screen.
1 of 3	

display signaling-group field descriptions 2 of 3

Field	Description
Near-end Node Name	The node name for the C-LAN IP interface on this switch, administered on the Node Names screen and the IP Interfaces screen.
Far-end Node Name	The node name for the far-end C-LAN IP interface used for trunks assigned to this signaling group, administered on the Node Names screen.
Near-end Listen Port	A port number assigned to both near-end and far-end systems for signaling. 1719 is used when LRQ is y .
Far-end Listen Port	The same port number assigned to the near-end listen port.
Far-end Network Region	The network region number that is assigned to the far-end of the trunk group. It appears only for H.323 signaling groups. A blank indicates the region of the near-end node
LRQ Required	n when the far-end PBX uses a Communication Manager server y when the far-end PBX uses a server that is not a Communication Manager server, and requires a location request to obtain a signaling address in its signaling protocol
RRQ Required	y when the signaling group serves a remote office (gateway) n when the signaling group serves a gatekeeper
Calls Share IP Signaling Connection	y = inter-Communication Manager server connections n = the local and/or remote PBX uses a non-Avaya server.
Bypass if IP Threshold Exceeded?	y = the system automatically removes from service trunks assigned to this signaling group, when IP transport performance falls below limits administered on the Maintenance-Related System-Parameters screen.
Direct IP-IP Audio Connection	y allows direct audio connections between IP endpoints, and saves on bandwidth resources and improves sound quality of VoIP transmissions.
2 of 3	

display signaling-group field descriptions 3 of 3

Field	Description
IP Audio Hairpinning	y allows IP endpoints to be connected through the IP circuit pack on the switch in IP format, without going through the TDM bus.
Interworking Message	Determines what message the switch sends when an incoming ISDN trunk call interworks (is routed over a non-ISDN trunk group). PROGress causes the public network to cut through the B-channel and allow the caller to hear tones, such as ringback or busy tone, over the non-ISDN trunk. ALERTing causes the public network in many countries to play ringback tone to the caller. Select this value only if the DS1 is connected to the public network, and it is determined that callers hear silence (rather than ringback or busy tone) when a call incoming over the DS1 interworks to a non-ISDN trunk.
3 of 3	

The following is an example of the output of **display signaling-group** page 2

display signaling-group 4					Page 2 of 5			
ADMINISTERED NCA TSC ASSIGNMENT								
Service/Feature:			As-needed Inactivity Time-out (min):					
TSC Index	Local Ext.	Enabled	Established	Mach. Dest.	Digits	Appl.	ID	
1:	64666	Y	permanent	22666		dcs	24	
2:		n						
3:		n						
4:		n						
5:		n						
6:		n						
7:		n						
8:		n						
9:		n						
10:		n						
11:		n						
12:		n						
13:		n						
14:		n						
15:		n						
16:		n						

list signaling-group

Use **list signaling-group** to see a list of signaling groups, which are groups of B-Channels for which a given D-Channel (or D-Channel pair) will carry the signaling information.

Action/Object	Qualifier	Qualifier Description	Login
list signaling-group	count xx	number of signaling groups to be displayed Example: list signaling-group count 6	init inads craft

The following is an example of **list signaling-group**.

list signaling-group										
SIGNALING GROUPS										
Grp No.	Group Type	No. FAS?	No. Trunk Brds	Primary D-Channel	Secondary D-Channel	Max NCA	TSCs	Max No, NCA	TSCs	Adm'd NCA TSCs
2	atm	y	1	01B0815		0		0		0
4	h.323	y	1			4		4		1
5	isdn-pri	y	1	01B1024		0		0		0
6	isdn-pri	y	1	01A0724		48		23		1
9	h.323	y	1			0		0		0
15	atm	y	1	01B0809		0		0		0
25	isdn-pri	y	1	01B0924		20		20		0

list signaling-group field descriptions

list signaling-group field descriptions 1 of 2

Field	Description
Grp No	The signaling group number
Group Type	The type of signal format (ISDN-PRI, ATM, H.323)
1 of 2	

list signaling-group field descriptions 2 of 2

Field	Description
FAS	Facility Associated Signaling (FAS), in which a D-Channel carries signaling information for only those B-Channels on the same facility as the D-Channel. This is identical to a DS1 interface. If the parameter is "n", this is referred to as Non-Facility Associated Signaling (NFAS), in which a B-Channel can belong to any signaling group as long as the maximum number of DS1's for a signaling group is not exceeded.
No. Trunk Brds	The number of trunk boards having members belonging to this signaling group
Primary D-Channel	The D-Channel administered to be the primary channel. If, during the backup procedure, both channels are in the same state, switches at opposite ends of the PRI select the primary D-Channel to be put into service.
Secondary D-Channel	This channel will only appear if the signaling group is an NFAS signaling group. This D-Channel is administered to be the secondary D-Channel. If, during the backup procedure, both channels are in the same state, switches at opposite ends of the PRI select the primary D-Channel to be put into service.
Max NCA TSCs	Maximum number of Non-Call Associated (NCA) Temporary Signaling Connections (TSCs) - virtual connections established within a D-Channel in the facility so that users can transport non-call control user-user information.
Max CA TSCs	Maximum number of Call Associated (CA) TSCs.
No. Adm'd NCA TSCs	The number of NCA TSCs that are administered.
2 of 2	

set signaling-group

set signaling-group group#

Use **set signaling-group** to set the secondary D-channel in the specified signaling group to be the primary D-channel. The primary D-channel becomes the secondary D-channel. A signaling group is a collection of B-channels signaled for by a designated single D-channel or set of D-channels over an ISDN-PRI link.

Action/Object	Qualifier	Qualifier Description	Login	Default
set signaling-group	group#	The number assigned to the signaling group.		

status signaling-group

status signaling-group *group#*

Use **status signaling-group** to see the service state, type, and port location of the primary and secondary D-channels within an ISDN-PRI signaling group. A signaling group is a set of B-channels signaled for by a designated single D-channel, or combination of D-channels over an ISDN-BRI.

Action/Object	Qualifier	Qualifier Description	Login	Default
status signaling-group	<i>group#</i>	The administered number associated with each signaling group.		

The following information is given for **status signaling-group** for both primary and secondary D-channels, if any.

status signaling-group 1		Page 1 of 1	
STATUS SIGNALING-GROUP			
Group ID: 1			
Type: facility associated signaling			
Group State: in-service			
Primary D-Channel			
Link: 1	Port: 01C1924	Level 3 State: in-service	
Secondary D-Channel			
Link:	Port:	Level 3 State:	

status signaling-group field descriptions

status signaling-group field descriptions 1 of 2

Field	Description
Group ID	An administered number that identifies the signaling group.
Type	See ISDN-SGR (ISDN-PRI Signaling Group) on page 920 in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430)</i> (formerly 03-300190) for more information about group types. ▮ facility associated signaling: Every member is carried on a single DS1-associated facility. Facility-associated signaling groups support only simplex D-channel configurations. ▮ non-facility associated signaling: Members can include trunks on several different associated DS1 facilities. ▮ An explicit identifier specifies members of the DS1 trunk group across its ISDN-PRI link. A single D-channel on one facility provides signaling for every member. With D-channel backup, a second D-channel is assigned to assume control of signaling if the primary D-channel fails.
Group State	in-service: one of the D-channels signaling for the group is in service out-of-service: neither D-channel in the group is in service If there is no D-channel backup and the primary D-channel is out-of-service, the signaling group is in an out-of-service state.
Link	Link transporting the D-channel
1 of 2	

status signaling-group field descriptions 2 of 2

Field	Description
Port	Address of the port transporting either the primary or secondary D-channel
Level 3 State	State of the primary or secondary D-channels: in-service: the D-channel is in the multiple-frame-established state at layer 2 carrying normal call-control signaling at layer 3. standby: the D-channel is in the multiple-frame-established state at layer 2, and not carrying any layer 3 call-control messages on logical link 0,0. wait: an attempt has been made by one side of the interface to establish layer 3 peer communications as part of the process of going to the “in-service” state, which is transitional in nature. Only when the ISDN SERVICE message is sent over the interface, and the far end of the interface responds with a SERVICE ACKnowledge message is the D-channel placed in the “in-service” state. maintenance-busy: the D-channel is not in the multiple-frame-established state at layer 2. This state is entered automatically when an active D-channel is declared failed. A D-channel that has been placed in the “maintenance-busy” state may be placed in the “out-of-service” state without system technician intervention. manual-out-of-service: system technician intervention has caused the D-channel to be placed in the TEI-assigned state at layer 2. System Technician intervention is required to retrieve a D-channel from this state. out-of-service: the D-channel is in the TEI-assigned state at layer 2, but is periodically requested by layer 3 to attempt to establish the link. no-link: no link is administered for the D-channel
2 of 2	

test signaling-group

```
test signaling-group group# [short | long] [repeat repeat# | clear]
[schedule]
```

Use **test signaling-group** to validate the administration of a signaling group, and run a series of diagnostic tests on it.

An ISDN-PRI signaling group is a set of B-channels whose signaling messages are carried together on a designated D-channel or set of D-channels.

See [status signaling-group](#) on page 503 for information on how to access the additional data after running `test signaling-group`.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>test signaling-group</code>	<i>group identifier</i> <code>short</code> <code>long</code> <code>repeat n</code> <code>clear</code>	The station extension (must conform to dial-plan) See Common Input Parameters on page 25.	init inads craft	short 1
		Examples: <code>test signaling-group 1</code> <code>test signaling-group 1 repeat 10</code> <code>test signaling-group 2 short</code> <code>test signaling-group 4 long</code> <code>test signaling-group 4 long clear</code>		

skill-status

list skill-status

`list skill-status [starting-number xx] [count num-groups yy]`
[schedule]

Use `list skill-status` to see administration and status data for skilled hunt groups.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>list skill-status</code>	<i>starting-number xx</i> <i>count num-groups yy</i>	The starting hunt group number. The number of hunt groups to be displayed.	init inads craft	1 1 if <i>starting-number</i> is specified. Otherwise, all.
		Example: <code>list skill-status</code> <code>list skill-status 3</code> <code>list skill-status 11 count 6</code>		

list skill-status										Page 1 of 5
SKILL STATUS										
Grp No.	Grp Name	Grp Type	S L	C S	O T	D P	D Q	Extension/Service Level	Level 1 Threshold	Level 2 Threshold S EWT OCW
1	CC HG 1	ead-mia	y	n	y	n	n	20 70631 /	40 /	60 / 0 0
2	CC HG 2	ead-mia	n				n	20 70632 /	/	/ 0 0
3	CC HG 3	ead-mia	n				n	20 70633 /	/	/ 0 0
4	CC HG 4	ead-mia	n				n	20 70634 /	/	/ 0 0
5	CC HG 5	ead-mia	n				n	20 70635 /	/	/ 0 0
6	CC HG 6	ead-mia	n				n	20 70636 /	/	/ 0 0
7	CC HG 7	ead-mia	n				n	20 70637 /	/	/ 0 0

list skill-status field descriptions

list skill-status field descriptions 1 of 2

Field	Description
Group No.	The number of the hunt group/skill group being reported
Group Name	Communication Manager name associated with the hunt group/skill group as administered with change hunt-group (not the CMS name)
Group Type	Call distribution method for the hunt group/skill group
SLS	Service level supervisor
CSO	Call selection override
OCW	(Activate on) Oldest call waiting
DTA	Dynamic threshold adjustment
DPA	Dynamic percentage adjustment
DQP	Dynamic queue position
SO	Service objective
1 of 2	

list skill-status field descriptions 2 of 2

Field	Description
Extension Service Level	Extension number of the hunt group/skill group and the assigned service level targets (represents percentage of calls answered in a specific number of seconds)
Level 1 Threshold	First wait time threshold; when value is exceeded, calls queued to group of reserve agents.
Level 2 Threshold	Second wait time threshold; when exceeded, calls routed to contingency reserve agents
EWT	Estimated wait time for calls queuing to hunt group/skill group
OCW	Oldest call waiting time in queue for the hunt group/skill group
2 of 2	

This table shows data for each skilled hunt group.

Skilled hunt group details

Group Number	Group Name	Group Extension	Group Type
Service Level Supervisor	Call Selection Override	Activate on Oldest Call Waiting	Dynamic Threshold Adjustment
Dynamic Percent Adjustment	Dynamic Queue Position	Service Objective	Weighted Service Level (status)
Service Level Target (percentage and time)	Level 1 Threshold	Adjusted Level 1 Threshold (status)	Level 2 Threshold
Adjusted Level 2 Threshold (status)	SLS State (status)	Expected Wait Time (status)	Time in Queue of Call at Head of Queue (status)

socket-usage

See:

[monitor socket-usage](#) on page 508

[status socket-usage](#) on page 509

monitor socket-usage

`monitor socket-usage`

Use **monitor socket-usage** to show how many IP endpoints are registered and how many of those registered IP endpoints have their TCP signaling channels established (connected). The **monitor socket-usage** screen is periodically updated until the user cancels out of the command.

Action/Object	Qualifier	Qualifier Description
monitor socket-usage		

The following example shows the output for **monitor socket-usage**.

monitor socket-usage
SOCKET USAGE
Total Registered IP Endpoints: 20
Registered IP Endpoints with TCP Signaling Socket Established: 10

status socket-usage

status socket-usage

Use **status socket-usage** to show a snapshot of the individual socket usage for each C-LAN or Processor Ethernet information, and to list the system's:

- 1 number of registered IP endpoints
- 1 number of registered IP endpoints with TCP signaling sockets established
- 1 number of sockets used
- 1 number of sockets on the system

Status socket-usage replaces **status clan-usage**.

Action/Object	Qualifier	Qualifier Description
status socket-usage	schedule	See Common Input Parameters on page 25

The following example shows the output for **status socket-usage**.

status socket-usage							Page 1 of 4		
SOCKET USAGE									
Total Registered IP Endpoints: 6883									
Registered IP Endpoints With TCP Signaling Socket Established: 6705									
Total Socket Usage: 08262/24576									
Intf		Board	Socket	Net	Intf		Board	Socket	Net
Type	Loc	Sfx	Usage	Rgn	Type	Loc	Sfx	Usage	Rgn
procr			003/2500	6	CLAN	02A09	D	007/400	1
CLAN	03A04	D	000/400	2	CLAN	03A05	D	000/400	2

status socket-usage field descriptions

status socket-usage field descriptions

Field	Description
Total Registered IP Endpoints	The number of IP endpoints registered with the server.
Registered IP Endpoints with TCP Signaling Socket Established	The number of registered IP endpoints that have their TCP signaling channels established.
Total Socket Usage	The number of TCP signaling sockets currently in use by C-LANs and Processor Ethernet circuit packs.
Intf Type	Type of interface: C-LAN = TN799 circuit pack procr = Processor Ethernet circuit pack
Loc	The cabinet/carrier/slot location of the C-LAN or Processor Ethernet circuit pack
Board/Suffix	The circuit pack designation suffix.
Socket Usage	The first number = number of sockets in use on the circuit pack when the command was entered. The second number = value administered in the Number of C-LAN Sockets Before Warning field using the add/change ip-interfaces command. The socket number does not include sockets used by adjuncts.
Net Rgn	Network Region assigned to the circuit pack on the add ip-interfaces screen.

sp-link

See:

[busyout sp-link](#) on page 511

[release sp-link](#) on page 512

[status sp-link](#) on page 512

[test sp-link](#) on page 513

busyout sp-link

busyout sp-link

Use **busyout sp-link** to put the system printer link into a maintenance busy state and prevent access to the system printer.

The system printer link is a link from the switch to an external printer. This link is created by administering the system printer extension and setting up a call to the system printer.

See [status link](#) on page 358 for more details on links.

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

release sp-link

release sp-link

Use **release sp-link** to release the system printer link from a maintenance busy state and enable access to the system printer. See **busyout sp-link** for more information, and [Busyout and Release Commands](#) on page 33. See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login
release sp-link			init inads craft

status sp-link

status sp-link

Use **status sp-link** to see a summary of the operational state of the system printer link.

See [status link](#) on page 358 for more details on links.

The following display shows a typical result of **status sp-link**.

```
status sp-link
                                SYSTEM PRINTER LINK STATUS

      Link State: down
Number of Retries: 0
Maintenance Busy? no
```


status sp-link field descriptions

status sp-link field descriptions

Field	Description
Link State	The operational state of the link: 1 up — A call is currently set up to the system printer. 1 down — The link is administered but a call is not currently set up to the printer. 1 extension not administered — An extension is not administered on the features-related system parameters screen for the system printer.
Number of Retries	The number of times the switch tried to establish the link since a request to set it up was received. This field appears only when the link is down.
Maintenance Busy	Whether maintenance testing is being performed on the system printer link. Blank if the system printer link is not administered.

test sp-link

test sp-link [long | short] [schedule]

Use **test sp-link** to perform tests on the system printer link to determine if the link is up, down, or if an extension was not administered. The system printer link is a link from the switch to an external printer.

See [status pms-link](#) on page 453 for more information. See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default
test sp-link	short long schedule	See Common Input Parameters on page 25.	init inads craft	short
		Examples: test sp-link test sp-link sh test sp-link l test sp-link schedule test sp-link sh sch		

ssh-keys

reset ssh-keys

reset ssh-keys board location

Use **reset ssh-keys board** (SAT command) to generate new SSH dynamic host keys on C-LAN and VAL circuit packs for craft/dadmin logins and higher. Before you reset the dynamic host keys with **reset ssh-keys board**, use **busyout board** to busyout the C-LAN and VAL circuit packs.

Action/Object	Qualifier	Qualifier Description	Login
reset ssh-keys board	<i>location</i>	location of the board on which to reset the dynamic host keys	craft dadmin (and higher)

Dynamic host keys

Dynamic keys are inherently more secure than static keys because:

- ┆ If static keys for one circuit pack are compromised, all circuit packs are compromised.
- ┆ The probability of compromise is reduced when each circuit pack has its own dynamic key.
- ┆ Users can change dynamic keys at any time.

Dynamic host keys include:

- IP address
- Host name
- Firmware

Public key exchange

TN circuit packs support dynamic host keys. Because clients have the server's public key information stored on them, when the server generates a new public/private key pair (which happens the first time the board initializes or when the user decides), the client prompts the user to accept the key when logging into the server. This is to make the client user aware that the server's public key is not what it used to be and this may, but not necessarily, imply a rogue server.

A technician encountering a situation where the server's public key is not what it used to be should determine if the server's keys were changed since the last servicing.

- ┆ If they were, the technician should continue login.

- 1 If not, there is a security issue, and the technician should notify the appropriate personnel.

station

See:

[add station](#) on page 515

[busyout station](#) on page 517

[change station](#) on page 518

[list station](#) on page 518

[list trace station](#) on page 611

[release station](#) on page 520

[status station](#) on page 521

[test station](#) on page 539

add station

`add station extension | next`

Use `add station` to administer a new station.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>add station</code>	<code>extension</code> <code>next</code>	Extension number of the new station Assigns the next available extension number to the new station		

The following screens show examples of the Station screen. For field descriptions, see *Administrator Guide for Avaya Communication Manager (03-300509)*.

Maintenance SAT Commands

add station 2000		Page 1 of 4
STATION		
Extension: 67403	Lock Messages? n	BCC: 0
Type: 8410D__	Security Code: 1234	TN: 1
Port: X__	Coverage Path 1:	COR: 1
Name: Vphone_____	Coverage Path 2:	COS: 1
	Hunt-to Station:	
STATION OPTIONS		
Loss Group: 2_	Personalized Ringing Pattern:	
Data Module? n	Message Lamp Ext: 67403	
Speakerphone:	Mute button enabled?	
Display Language?	Expansion Module?	
Model:		
Survivable GK Node Name:	Media Complex Ext:	
Survivable COR:	IP SoftPhone? n	
Survivable Trunk Dest?	Remote Office Phone? y	
	IP Video Softphone?	
	IP Video?	

add station 2000		Page 2 of 4
STATION		
FEATURE OPTIONS		
LWC Reception: spe	Auto Select Any Idle Appearance? n	
LWC Activation: y	Coverage Msg Retrieval? y	
LWC Log External Calls? n	Auto Answer: none	
CDR Privacy? n	Data Restriction? n	
Redirect Notification? y	Idle Appearance Preference? n	
Per Button Ring Control? n	Restrict Last Appearance? y	
Bridged Call Alerting? n		
Active Station Ringing: single		
H.320 Conversion? n	Per Station CPN - Send Calling Number? _	
Service Link Mode: as-needed	Busy Auto Callback without Flash? y	
Multimedia Mode: basic	Audible Message Waiting?	
MWI Served User Type: _____	Display Client Redirection? n	
Automatic Moves:		
AUDIX Name:	Select Last Used Appearance? n	
Recall Rotary Digit? n -	Coverage After Forwarding? _	
	Multimedia Early Answer? n	
Remote Softphone Emergency Calls: as-on-local	Direct IP-IP Audio Connections? n	
Emergency Location Ext: 75001	Always use? n	IP Audio Hairpinning? n
Precedence Call Waiting? y		

add station 2000		Page 3 of 4
		STATION
SITE DATA		
Room:		Headset? n
Jack:		Speaker? n
Cable:		Mounting: d
Floor:		Cord Length: 0
Building:		Set Color:
ABBREVIATED DIALING		
List1:	List2:	List3:
BUTTON ASSIGNMENTS		
1: call-appr	6:	
2: call_appr	7:	
3:	8:	
4:	9:	
5:	10:	

add station 2000		Page 4 of 4
		STATION
SOFTKEY BUTTON ASSIGNMENTS		
1: lwc-store	13:	
2: lwc-cancel	14:	
3: auto-cback	15:	
4: timer	16:	
5: call-fwd Ext:	17:	
6: call-park	18:	
7: date-time	19:	
8: priority	20:	
9: abr-prog	21:	
10: abr-spchar Char: ~p	22:	
11: abr-spchar Char: ~m	23:	
12: abr-spchar Char: ~w	24:	

busyout station

busyout station extension

Use `busyout station` to busyout an installed or uninstalled station extension.

Action/Object	Qualifier	Qualifier Description	Login
<code>busyout station</code>	<code>extension</code>	Extension number per dial plan Example: <code>busyout station 12345</code>	init inads craft

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

change station

`change station extension`

See [add station](#) on page 515 for examples of the Station screen. For field descriptions, see *Administrator Guide for Avaya Communication Manager (03-300509)*.

list station

```
list station [ext x] [to-ext x] | [port x] | [type x] | [movable x]
| [count n] | [schedule]
```

- | `list station movable always` – shows extensions available for moves anytime
- | `list station movable done` – shows extensions that had the Automatic Moves field set to once, and have moved
- | `list station movable error` – shows mis-administered, non-serialized extensions
- | `list station movable no` – shows extensions not available to be moved
- | `list station movable once` – shows extensions available to be moved once

Action/ Object	Qualifier	Qualifier Description	Login	Default
list station	ext <i>x</i>	first extension in the list		
	to-ext <i>x</i>	last extension in the list		
	port <i>x</i>	port number Shows IP Telephone port when IP Softphone and IP Telephone are in shared control.		
	type <i>x</i>	type of station		
	count <i>n</i>	number of stations in the list		
	movable always	shows extensions available for moves anytime		
	movable done	shows extensions that had the Automatic Moves field set to once, and have moved		
	movable error	shows mis-administered, non-serialized extensions		
	movable no	shows extensions not available to be moved		
	movable once	shows extensions available to be moved once		
	schedule	See Common Input Parameters on page 25.		

This is an example of `list station`.

list station							Page	1
STATIONS								
Ext/ Type	Port/ Hunt-to	Name/ Surv GK NN	Move	Room/ Data Ext	Cv1/ Cv2	COR/ COS	Cable/ Jack	
40000 2500	091V303	Thorsten Analog				1		
			no			1		
40001 2500	03B0601	Thorsten Analog Sim	Trunk			1		
			no			1		
40002 6408D+	091V203	Thor DCP				1		
			no			1		
40010 4620	S02976	Ext. 40010				1		
			no			1		

This is an example of **list station movable always**.

list station movable always										
STATIONS										
Ext/ Type	Port/ Hunt-to	Name/ Surv	GK	NN	Move	Room/ Data	Ext	Cv1/ Cv2	COR/ COS	Cable/ Jack
1001 6402D	01A0301	Digital	a0301		always			1	1	

The Port field shows information for only IP Telephone when an IP telephone and IP Softphone are in service on the same extension simultaneously.

release station

release station

Use **release station** to remove specified administered voice terminal extensions from a maintenance busy state.

For more information see [Busyout and Release Commands](#) on page 33.

Action/Object	Qualifier	Qualifier Description	Login
release station	extension	Extension number See your company's dial-plan	init inads craft cust

status station

status station extension

Use **status station** to see the internal software state information for a specific station. Use the information for diagnosis and to help locate the facilities to which the station is communicating.

Action/Object	Qualifier	Qualifier Description	Login	Default
status station	extension	Station extension (per dial plan)	init inads craft cust browse	
		Example: status station 30001		

status station, page 1

The following example shows the output for **status station 30001**.

status station 30001	page 1 of 7
GENERAL STATUS	
Administered Type: 6408D+	Service State: No hardware assigned
Connected Type: N/A	TCP Signal Status:
Extension: 30001	Download Status: pending
Port: X	Parameter Download:
Call Parked? no	SAC Activated? no
Ring Cut Off Act? no	
Active Coverage Option: 1	
Service Link Port: 05D1621	Service Link Ext: 93035389077
Softphone Port: S00013	
Softphone Signaling:	Shd TCP Signal Status:
EC 500 Status:	Off-PBX Service State:
Message Waiting:	
Connected Ports:	
Limit Incoming Calls?	
User Cntrl Restr:	HOSPITALITY STATUS
Group Cntrl Restr:	Awaken at:
	User DND: not activated
	Group DND: not activated
	Room Status: non-guest room

status station field descriptions

status station field descriptions, GENERAL STATUS and HOSPITALITY STATUS 1 of 4

Field	Description
GENERAL STATUS	
Active Coverage Option	Specifies the active coverage pa
Administered Type	Administered station type
Call Parked	Whether the station has a call parked (y/n)
Connected Ports	Port locations of the facilities to which the telephone/softphone is connected: cabinet-carrier-slot-circuit
Connected Type	The type of phone connected to this port
Download Status	Status of soft key download.
EC 500 Status	enabled = Extension to Cellular is enabled disabled = Extension to Cellular is disabled
Extension	Station or attendant extension
Group Cntrl Restr	One or two of the following ┆ none ┆ total ┆ stat-stat ┆ outward ┆ terminate
Limit Incoming Calls	State of the Limit Number of Concurrent Call (LNNC).
Message Waiting	Whether there is a message waiting for the station. ┆ AUDIX ┆ PMS ┆ blank if no messages are waiting
Off-PBX Service State	┆ inservice/idle = there is no OPTIM call at the station ┆ inservice/active = there is an OPTIM call at the station ┆ out-of-service = the station is busied out.
1 of 4	

status station field descriptions, GENERAL STATUS and HOSPITALITY STATUS 2 of 4

Field	Description
Parameter Download	Current status of downloading terminal parameter information ┆ complete = the information was successfully downloaded sometime in the past ┆ pending = the system is waiting to download the information. The download will complete through a background periodic test or demand test. ┆ not applicable = this is not a programmable station.
Port	Port location of the endpoint: cabinet-carrier-slot-circuit.
Ring Cut Off Activated	Whether ring cut-off is activated (y/n)
SAC Activated	Whether Send All Calls is activated on this extension (y/n)
Service Link Extension	Extension for the softphone off-premise destination on a telecommuter configuration
Service Link Port	Shows the port used to establish a connection to the softphone off-premise destination on a telecommuter configuration
Service State	State of the telephone endpoint ┆ in-service/on-hook (with no OPTIM calls, if applicable) ┆ in-service/off-hook ┆ in-service/disconnected (no OPTIM calls, if applicable) ┆ in-service/idle (the station is AWOH or hardware is otherwise not present, with no OPTIM calls if applicable) ┆ in-service/active (with OPTIM, has OPTIM calls and is not physically off-hook) ┆ in-service/in-tsa (Terminal Self Administration) ┆ out of service (the station is busied-out)
2 of 4	

status station field descriptions, GENERAL STATUS and HOSPITALITY STATUS 3 of 4

Field	Description
Shd TCP Signal Status:	Indicates whether a TCP signaling channel is established for the endpoint on a shared control connection. Appears only for IP Telephones and Softphones. connected = Endpoint is registered and TCP signaling link is established connecting = Endpoint is registered and TCP signaling link is in the process of being connected not connected = Endpoint is not registered on-demand = Endpoint is registered and TCP signaling link is not established. For IP endpoints with on-demand status, test station triggers TCP socket establishment. For all IP endpoints except "soft" IP endpoints such as IP Softphone and IP Agent, status station triggers TCP socket establishment.
Softphone Signaling	
Softphone Port	The port for the softphone controlling an IP telephone.
TCP Signal Status	Indicates whether a TCP signaling channel is established for the endpoint. Appears only for IP Telephones and Softphones. connected = Endpoint is registered and TCP signaling link is established connecting = Endpoint is registered and TCP signaling link is in the process of being connected not connected = Endpoint is not registered on-demand = Endpoint is registered and TCP signaling link is not established. For IP endpoints with on-demand status, test station triggers TCP socket establishment. For all IP endpoints except "soft" IP endpoints such as IP Softphone and IP Agent, status station triggers TCP socket establishment.
3 of 4	

status station field descriptions, GENERAL STATUS and HOSPITALITY STATUS 4 of 4

Field	Description
User Cntrl Restr	One or two of the following - none - total - stat-stat - outward - terminate
HOSPITALITY STATUS	
Awaken at	Time that Automatic Wakeup Call is scheduled
User DND	activated/not activated Status of Do Not Disturb
Group DND	activated/not activated Status of group Do Not Disturb
Room Status	Whether a room is occupied or not - non-guest room - vacant - occupied
4 of 4	

status station, page 2

Page 2 status station displays the part ID of the station for status station, if available.

```

status station 30001                                     page 2 of 7

                                GENERAL STATUS

CONNECTED STATION INFORMATION
      Part ID Number: unavailable
      Serial Number: unavailable

      Station Lock Active?                                TOD Station Lock?

UNICODE DISPLAY INFORMATION
      Native Name Scripts:N/A
      Display Message Scripts:0x08000001:latn;ChiS
      Station Supported Scripts:0x000801b7:Latn;Lat1;LatA;Grek;Cyrl;Hebr;Arab...

CF Destination Ext:
Enhanced Call Forwarding Destinations
      Internal                                External
      Unconditional:
      Busy:
      No Reply:

      Team Button
Monitoring Stations

```

status station field descriptions, page 2

status station field descriptions, CONNECTED STATION INFORMATION and UNICODE DISPLAY INFORMATION 1 of 2

Field	Description
GENERAL STATUS	
CONNECTED STATION INFORMATION	
Part ID Number	Part ID Number (comcode) of the telephone. If this field shows Unavailable, the software was unable to determine the Part ID Number.
1 of 2	

status station field descriptions, CONNECTED STATION INFORMATION and UNICODE DISPLAY INFORMATION 2 of 2

Field	Description
Serial Number	Serial number of the telephone. ┆ Unavailable = the software is unable to determine the Serial Number. ┆ Errored = the serial number received is not in the correct format.
Station Lock Active	Indicates whether the station has been locked using Station Lock.
TOD Station Lock	Indicates whether the station is within a Time of Day lock interval.
UNICODE DISPLAY INFORMATION	
Native Name Scripts	N/A, or on a Unicode-enabled station, the script used for the native name of the station: 0x plus the hex value of the script tag, and up to 7 language acronyms.
Display Message Scripts	N/A, or on a Unicode-enabled station, the script used for the display language of the station: 0x plus the hex value of the script tag, and up to 7 language acronyms.
Station Supported Scripts	N/A, or on a Unicode-enabled station, the script supported by the telephone: 0x plus the hex value of the script tag based on the scripts supported by Unicode capable endpoints, and up to 7 language acronyms.
CF Destination Ext	Call forwarding destination extension, if any. ┆ blank when Extension to Cellular is enabled ┆ appears for mapped extensions when Extension to Cellular is disabled
Enhanced Call Forwarding Destinations	Up to six Enhanced Call Forwarding destination numbers for Unconditional, Busy, or No Rely ECF types, and the internal or external destination for each.
Team Button Monitoring Stations	Shows all monitoring extensions that supervise the monitored station
2 of 2	

The following example shows the output for **status station** with Active IP Phone Conference call on an **S8700 IP-PNC**. This example shows IP audio parameters used for each IP hop. This data is dependent on the connected ports (page 1 of the **Status Station** screen).

status station, page 1, for a 3-way IP conference call

```
status station 70103                                     Page 1 of x

                                GENERAL STATUS
Administered Type: 4606           Service State: in-service/off-hook
Connected Type: 4606             Download Status: complete
Extension: 70103                 SAC Activated? no
Port: S00003                     User Cntrl Restr: none
Call Parked? no                 Group Cntrl Restr: none
Ring Cut Off Act? no
Active Coverage Option: 1

EC500 Status:                   Off-PBX Service State:
Message Waiting:
Connected Ports: 01B0824        02A0723

                                HOSPITALITY STATUS
Awaken at:
User DND: not activated
Group DND: not activated
Room Status: non-guest room
```

Field descriptions are the same as [status station field descriptions](#) on page 522.

status station, page 2, for a 3-way IP conference call

```
status station 70103                                     Page 2 of x

                                GENERAL STATUS
CONNECTED STATION INFORMATION

Part ID Number: unavailable
Serial Number: unavailable
Station Lock Active? no

UNICODE DISPLAY INFORMATION
Native Name Scripts:
Display Message Scripts:
Station Supported Scripts:
```

Field descriptions are the same as [status station, page 2](#) on page 526.

status station, page 3 for an IP call

status station 70103

Page 3 of x

CALL CONTROL SIGNALING

Port:S00588

	Switch	IP	IP
	Port	Switch-end IP Addr:Port	Set-end IP Addr:Port
IP Signaling:	01A0317	172. 22. 22.120 :1720	172. 25. 48 73:1032
H.245:			
Node Name:	gert_clan1		
Network Region:	1		1

Shared Port:S00011

	Switch	IP	IP
	Port	Switch-end IP Addr:Port	Set-end IP Addr:Port
IP Signaling:	01A0318	172. 22. 22.121 :1720	172. 25. 48 74:1032
H.245:			
Node Name:	gert_clan1		
Network Region:	1		1

status station 70103		Page x of x	
AUDIO CHANNEL			
Port: S00588			
	Switch	IP	IP
	Port	Other-end IP Addr :Port	Set-end IP Addr:Port
G.711MU	Audio: 01B0905	170. 20. 20.230 :2960	170. 20. 20. 0:2854
	Node Name:	gert_prow8	
	Network Region:	1	1
	Audio Connection Type:	ip-tdm	
		Port: S00588	Shared Port: S00011
	Product ID and Release:	IP_Tel 1.700	IP_Soft 5.000
	H.245 Tunneled in Q.931?	does not apply	does not apply
	Registration Status:	registered-authenticated	registered-authenticated
	MAC Address:	00:60:1d:24:65:18	unavailable
	Native NAT Address:	10.0.0.1	10.0.0.2
	ALG - NAT WAN IP address:		
	Media Encryption:		

status station field descriptions, CALL CONTROL SIGNALING**status station field descriptions, CALL CONTROL SIGNALING**

Field	Description
CALL CONTROL SIGNALING Call Control Signaling fields show information for both endpoints when an IP telephone and IP Softphone are in service on the same extension simultaneously (shared-control).	
IP Signaling: Switch Port	The C-LAN board location serving the switch end of the IP signaling link. The port number is always 17 for the "ethernet" port of the C-LAN. This field is blank for an unregistered H.323 station.
IP Signaling: Switch-end IP Addr and Port	Switch-end Q.931 (H.323 station) or CCMS (IP SoftPhone) IP signaling address and IP port. IP Port has a decimal value 0-65535. This field is blank for an unregistered H.323 station.
IP Signaling: Set-end IP Addr and Port	Set-end Q.931 IP signaling address and IP port. IP port is a decimal value 0-65535. This field is blank for an unregistered H.323 station.
H.245: Switch Port	The C-LAN port serving the H.245 signaling link. The port number is 17 for the "ethernet" port. This field is blank for an unregistered H.323 station, a VPhone, or when H.245 tunneling in Q.931 is used.
H.245: Switch-end IP Addr and Port	Switch-end H.245 IP signaling address and TCP/IP port. IP Port is 0-65535. This field is blank for IP SoftPhone endpoints, endpoints using Q.931 tunneling of H.245, and unregistered or inactive H.323 stations.
H.245: Set-end IP Addr and Port	Set-end H.245 IP signaling address and IP Port. IP Port is 0-65535. This field is blank for IP SoftPhone endpoints, endpoints using Q.931 tunneling of H.245, and unregistered or inactive H.323 stations.
Node Name (for Call Control)	Label administered for an IP address.
Network Region (for Call Control)	A number given to a set of IP addresses to indicate they have a common set of characteristics.

status station field descriptions AUDIO CHANNEL

status station field descriptions, AUDIO CHANNEL 1 of 3

Field	Description
AUDIO CHANNEL Audio Channel fields show information for only the IP Telephone when an IP telephone and IP Softphone are in service on the same extension simultaneously. Product Information fields show the information for both endpoints for Softphone and Telephone Shared Control.	
xxxxxxx Audio	The type of audio active for the station. xxxxxxxx is one of these values: G.711-MU, G.711-A, G.729A, G.723.1-6.3, G.723.1-5.3, PCM, 711-MU, 711-A, 729, 729A, 729B, 729-AB, or 723.1-5.3/6.3. ┆ PCM - the station is a telecommuter IP SoftPhone configuration with call-back audio ┆ blank - no audio path is present
Port / Shared Port	The physical port used to provide audio path for the endpoint. The port represents a MedPro port for H.323 stations, or for stations using a H.323 endpoint for audio. An idle IP SoftPhone or H.323 station with an as-needed service link shows no audio port. Blank - stations with no established audio path, or for telecommuter stations.
Other-end IP Addr and Port	Other-end IP audio address and IP port. Port is a decimal value 0-65535. This field is blank for an idle station with no audio link, or for a telecommuter IP SoftPhone with circuit-switched audio link.
Set-end IP Addr and Port	Set-end IP audio address and IP port. Port is a decimal value 0-65535. This field is blank for an idle station with no audio link, or for a telecommuter IP SoftPhone with circuit-switched audio link.
Node Name	Label administered for an IP address.
Network Region	A number given to a set of IP addresses to indicate they have a common set of characteristics.
Audio Connection Type	Audio codec selected. ┆ ip-tdm ┆ ip hairpin ┆ ip direct ┆ ip-idle ┆ blank - audio is carried directly to service link port
1 of 3	

status station field descriptions, AUDIO CHANNEL 2 of 3

Field	Description
Product ID and Release	Identifier submitted by the endpoint during registration, and the release number of the endpoint that is provided to the gatekeeper upon registration. This field appears only for Avaya or Lucent products. This field appears in the second column of the screen when the Shared Port field is populated. Value is one of the 30 allowed product IDs administered on the system-parameters customer-options screen, including: 1 IP_Tel - IP Telephone 1 IP_Soft - IP Softphone 1 IP_eCons - An IP soft console 1 IP_Agent - An IP soft agent phone 1 IP_ROMax - A remote office phone
H.245 Tunneled in Q.931	y = H.245 is contained within Q.931, and H.245 fields do not appear. Does not apply to IP SoftPhone endpoints. This field appears in the second column of the screen when the Shared Port field is populated.
Registration Status	Identifies the registration and authentication status of the IP endpoint. An unregistered IP SoftPhone cannot be identified as an IP endpoint. This field appears in the second column of the screen when the Shared Port field is populated. 1 unregistered (H.323 station only) — the endpoint is unregistered 1 registered-not-authenticated (H.323 station only) — the endpoint is registered, but has not been authenticated (the station is disallowed from making or receiving calls). 1 authenticated-not-registered (H.323 station only) — the endpoint has been authorized (by the associated IP SoftPhone), but is not yet registered 1 registered-authenticated — the endpoint is registered and authenticated (for example, an IP station that is able to make calls) 1 pending-unregistration — the endpoint is unregistered, but critical internal data structures have not yet been updated
2 of 3	

status station field descriptions, AUDIO CHANNEL 3 of 3

Field	Description
MAC Address	The Media Access Control (MAC) address received from the phone when the phone registers. This field appears in the second column of the screen when the Shared Port field is populated. ▮ not available - the phone registers but is unable to send a MAC address ▮ blank - the phone is not registered.
Native NAT Address	Specifies the network address translation (NAT) IP address of the endpoint when a network device provides the network address translation function for the endpoint. The network device provides the NAT address of the endpoint at the time of registration. The field is blank if the NAT address is not known. This field appears in the second column of the screen when the Shared Port field is populated.
ALG - NAT WAN IP address	This field is populated only when a special application turned on.
Media Encryption	aes indicates Advanced Encryption Standard encryption, the standard used by U.S. government to protect sensitive (unclassified) information. Reduces circuit-switched to IP call capacity by 25%. aea indicates Avaya Encryption Algorithm. Not as secure as AES. none indicates an unencrypted media stream.
3 of 3	

status station, NETWORK STATUS and SUMMARY, for an IP call.

This screen is available only to IP endpoints.

status station 70103		Page x of x
NETWORK STATUS		
Average Jitter (ms)	Packet Loss per Second	
Last Ten Seconds	Last Ten Seconds	
# - more than 255ms	* - 100% loss	
0	0	Per Call Info
0	0	
0	0	Out of Order Counter: 0
0	0	SSRC Change for Call: 0
0	0	Last Rx Sequence #: 5450
0	0	Last Tx Sequence #: 22932
0	0	Echo Return Loss (dB): 0
0	0	Bulk Delay (ms): 8
0	0	ERL Enhancement (dB): 25
0	0	
SUMMARY		
Worst Case this Call (ms): 1	Worst Case this Call: 0	
Average this Call (ms): 0	Average this Call: 0	
Current Buffer Size (ms): 8		

status station field descriptions, NETWORK STATUS and SUMMARY**status station field descriptions, NETWORK STATUS and SUMMARY 1 of 2**

Field	Description
NETWORK STATUS Network Status fields show information for only the IP Telephone when an IP telephone and IP Softphone are in service on the same extension simultaneously.	
Average Jitter Last Ten Seconds # - more than 255 ms	The average jitter in received packets from the last ten one-second intervals. # = maximum (100%) packet loss per second during the one-second interval.
Packet Loss per Second Last Ten Seconds * - 100% loss	The ten most recent one-second samples of the lost packet information for the requested endpoint. * = maximum (100%) packet loss per second during the one-second interval. * appears when silence suppression is y on the ip-codec-set screen, or when packet loss = 100%.
Out of Order Counter	A count of the number of out-of-order packets detected during the current connection.
1 of 2	

status station field descriptions, NETWORK STATUS and SUMMARY 2 of 2

Field	Description
SSRC Change for Call	The number of SSRC changes occurring during the current connection.
Last Rx Sequence No.	Last received data packet sequence number.
Last Tx Sequence No.	Last transmitted data packet sequence number.
Echo Return Loss	Loss of the echo signal, relative to the transmitted signal, due to the PSTN network including the hybrid.
Bulk Delay	Delay offset of the echo relative to the original signal.
ERL Enhancement	Loss introduced by the echo canceller. This is the measure of the effectiveness of the echo canceller.
SUMMARY	
Worst Case this Call	Jitter: the worst-case, 1-second jitter (ms) experienced during the current connection. Packet Loss: the worst-case, 1-second packet loss experienced during the current connection.
Average this Call	Jitter: the average jitter for the current connection (the running average of all the 1-second intervals during the connection). Packet Loss: the average packet loss number for the current connection (running average of all the 1-second intervals experienced during the connection).
Current Buffer Size	The current jitter buffer size.
2 of 2	

status station, CONNECTED PORTS, for an IP call

This screen shows the IP media processor resources used during a conference call.

status station 70103	Page x of x
CONNECTED PORTS	
src port: S00588	
ip-start: 172. 22. 22. 8:2854	
ip-end: 172. 22. 22.233:2960 01B0905	
audio: G.711MU encryption:none ss:off pkt:20ms	
ip-start: 172. 22. 22.182:2712	
ip-end: 172. 22. 22.234:2224 02A0107	
audio: G.711MU encryption:aes ss:off pkt:20ms	
ip-start:	
ip-end:	
audio:	
ip-start:	
ip-end:	
audio:	
dst port: 01B0824	

status station field descriptions, CONNECTED PORTS**status station field descriptions, CONNECTED PORTS 1 of 2**

Field	Description
CONNECTED PORTS Connected Ports fields show information for only the IP telephone when an IP telephone and IP Softphone are in service on the same extension simultaneously.	
src port	The port address of the statused station.
MP	The physical port location of the media processing circuit pack. The audio stream passes through a media processing circuit pack (either a Medpro or a VoIP module on a media gateway) when direct IP-IP audio connections are disabled or the connection cannot be direct for other reasons (for example, the call requires a codec conversion).
HP	Hairpinning. y appears when the audio stream is handled entirely on the media processing circuit pack. The audio connection does not require more extensive processing (for example, some codec conversion), and does not use TDM bus resources.
ip-start	The IP address of one end of a direct connection.
1 of 2	

status station field descriptions, CONNECTED PORTS 2 of 2

Field	Description
ip-end	The IP address of the other end of a direct connection.
audio	Type of audio codec active for the connection. G.711-MU, G711-A, G.729A, G.723.1-6.3, G.723.1-5.3, PCM, 711-MU, 711-A, 729, 729A, 729B, 729-AB, or 723.1-5.3/6.3.
encryption	Type of media encryption as entered on the ip-codec-set form. aes = Advanced Encryption Standard encryption, standard used by U.S. government to protect sensitive (unclassified) information. Reduces circuit-switched to IP call capacity by 25%. aea = Avaya Encryption Algorithm. Not as secure as AES. none = an unencrypted media stream.
ss	Indicates whether silence suppression is active on this audio stream. on/ off
pkt	Size of the packet carrying the audio.
dst port	The port address of one of the other parties to which the statused station has a connection on this call.
2 of 2	

status station, ACD STATUS

This screen shows the ACD status of the station.

status station 70103					Page x of x
ACD STATUS					
Grp/Mod	Grp/Mod	Grp/Mod	Grp/Mod	Grp/Mod	
/	/	/	/	/	On ACD Call? no
/	/	/	/	/	Occupancy: 0.0
/	/	/	/	/	
/	/	/	/	/	
/	/	/	/	/	
/	/	/	/	/	
/	/	/	/	/	

status station field descriptions, ACD STATUS**status station field descriptions, ACD STATUS**

Field	Description
Grp	Hunt Group number
Mod	ACD Work Mode
On ACD Call	Whether the agent is on an ACD call (y/n)
Occupancy	

status station, ATM VPI.VCI DATA

This screen shows the ATM VPI.VCI DATA for the station.

status station 40000		ATM VPI.VCI DATA		Page x of x
Port	Talk	Connected Port	Listen	
091V303	n/a			

status station, SRC PORT TO DEST PORT TALKPATH

This screen shows SRTP as the encryption algorithm when in use for the currently active H.323 IP station and corresponds with AES Media Encryption requirements.

status station 1012	Page x of x
SRC PORT TO DEST PORT TALKPATH	
src port: S00119	
S00119:TX:172.28.8.14:2712/g729a/20ms/srtp	
01A0801:RX:172.28.8.6:2576/g729a/20ms/srtp TX: tdm:a222	
01A1401:RX:tdm:a222	
dst port: 01A1401	

status station field descriptions, SRC PORT TO DEST PORT TALKPATH

status station field descriptions, SRC PORT TO DEST PORT TALKPATH

Field	Description
src port	port number

test station

test station

Use **test station** to perform hardware diagnostic tests on an individual port circuit assigned to that extension. The technician must specify the extension and a translation is automatically done to the physical port location.

Action/Object	Qualifier	Qualifier Description	Login	Default
test station	extension	The station extension (per dial-plan) See Common Input Parameters on page 25.	init inads craft cust nms	short 1
	short long repeat <i>n</i> clear	Examples: test station 81709 1 test station 85136 s r 2 test station 85036 l r 25 test station 84297 r 4 test station 81709 c		



WARNING:

Since the “clear long” options clear all counters if tests pass, it is possible to clear firmware counters even when a problem exists. In some cases customer service might degrade since calls might be routed over defective equipment.

survivable-processor

list survivable-processor

list survivable-processor

Use **list survivable-processor** on the primary controller to see the status of LSPs or ESSs administered on the Survivable Processors screen (**add survivable-processor**) or the System Parameters-ESS screen (**add system-parameters ess**). Verify that the LSP or ESS(s) register, and that translations are updated.

Action/Object	Qualifier	Qualifier Description
list survivable-processor		

The following display shows a typical result for **list survivable-processor**:

list survivable-processor						
SURVIVABLE PROCESSORS						
Name	Type	IP Address	Reg	LSP Act	Translations Updated	Net Rgn
sv-st12-lspa	LSP	172.22 .21 .111	y	n	1:00 5/29/2007	1
st12SIMlsp002	LSP	172.20 .148.2	n	n		1
st12SIMlsp004	LSP	172.20 .148.4	n	n		1
sv-st12-lspe	LSP	172.22 .21 .122	y	n	1:00 5/29/2007	1
st12SIMlsp006	LSP	172.20 .148.6	n	n		1
st12SIMlsp007	LSP	172.20 .148.7	n	n		1
st12SIMlsp008	LSP	172.20 .148.8	n	n		1
st12SIMlsp009	LSP	172.20 .148.9	n	n		1
st12SIMlsp010	LSP	172.20 .148.10	n	n		1
st12SIMlsp011	LSP	172.20 .148.11	n	n		1
st12SIMlsp012	LSP	172.20 .148.12	n	n		1
st12SIMlsp013	LSP	172.20 .148.13	n	n		1
st12SIMlsp014	LSP	172.20 .148.14	n	n		1
st12SIMlsp015	LSP	172.20 .148.15	n	n		1
st12SIMlsp016	LSP	172.20 .148.16	n	n		1

The following display shows a typical result for **list survivable-processor**

list survivable-processor						
SURVIVABLE PROCESSORS						
Name	Type	ID	IP Address	Service State?	Translations Updated	
sv-st12-lspa	LSP	04	172.22 .21 .111	in-service/idle	1:00 5/29/2007	
st12SIMlsp002	LSP	05	172.20 .148.2	out-of-service	1:00 5/29/2007	

list survivable-processor field descriptions

list survivable-processor field descriptions

Field	Description
Name	Name of the LSP or ESS as administered on the Survivable Processors screen (add survivable-processor) or the System Parameters-ESS screen (add system-parameters ess)
Type	LSP, ESS Survivable processor type as listed on the Survivable processor- processor ethernet form (add survivable-processor node-name).
ID	Server ID number (cluster ID) of the ESS or LSP.
IP Address	IP address of the node name as it appears in the IP Node Name screen and on the Survivable Processor ethernet screen.
Reg LSP Act	
Service State	in-service/idle: the LSP is registered out-of-service
Translations Updated	Time and date of the translation update to the LSP or ESS
Net Rgn	Network region in which the PE interface of the LSP or ESS resides, as listed on the Survivable Processor ethernet screen.

suspend-alm-orig

See:

[disable suspend-alm-orig](#) on page 542

[enable suspend-alm-orig](#) on page 542

[list suspend-alm-orig](#) on page 543

disable suspend-alm-orig

Use **disable suspend-alm-orig** to stop entries from the active Suspend Alarm Origination table. This command disables all board entries that match a specific physical board location.

Note:

disable suspend-alm-orig does not disable port entries.

Action/Object	Qualifier	Qualifier Description	Login	Default
disable suspend-alm-orig	board location	Physical location of the replaced or corrected board (does not support port location)	init inads craft cust rcust	
		Examples: disable suspend-alm-orig 1C03 disable suspend-alm-orig 1E07		

enable suspend-alm-orig

enable suspend-alm-orig [*location*] [*off-board-only*] **expires-in-hrs** *hrs*

Use **enable suspend-alm-orig** to suspend alarm origination for alarms generated by the specified board (*location*) or port (*location*) for a the specified amount of time (*hrs*).

enable suspend-alm-orig does not support circuit packs without a board location. Enter **enable suspend-alm-orig** multiple times to suspend alarms on different boards or ports. If a physical location is specified for which there is already a suspension in effect, the most recent suspension request replaces the previous request.

Use **enable suspend-alm-orig** to improve control over situations such as:

- 1 Quieting a hyperactive port board during installation or troubleshooting.
- 1 Improving control over customer requests. For example, use **enable suspend-alm-orig** to temporarily suspend off-board DS1 alarms for customers who periodically disconnect DS1 trunks for testing or other business purposes.

- 1 Improving control over external (non-Avaya) problems. For example, use **enable suspend-alm-orig** to suspend off-board DS1 alarms before a customer resolves facility problems, such as working with the vendor of a T1 trunk that has developed an off-board condition.
- 1 Improving control over internal (Avaya) problems that cannot be immediately resolved. For example, use **enable suspend-alm-orig** to suspend alarm origination for a bad circuit pack detected late Friday night if personnel cannot be dispatched until Monday.

To see a list of active alarm origination suspensions, use **list suspend-alm-orig**. To disable a suspension, use **disable suspend-alm-orig**.

Action/Object	Qualifier	Qualifier Description	Login	Default
enable suspend-alm-orig	board/port location off-board-only expires-in-hrs	Physical location of the hardware optional; if not specified, both on-and off-board alarms suspended Number of hours (1-72)	init inads craft cust rcust	on- and off-board alarms
		Examples: enable suspend-alm-orig 1B03 expires-in-hrs 3 enable suspend-alm-orig 1B0701 expires-in-hrs 72 enable suspend-alm-orig 1B07 off-board-only expires-in-hrs 24		

list suspend-alm-orig

Use **list suspend-alm-orig** to see active entries in the Suspend Alarm Origination table. Even though this command only lists active entries, an entry that expires during the list process still appears in the output. If the Suspend Alarm Origination table is empty, the output contain only the title and field headings.

Action/Object	Qualifier	Qualifier Description	Login	Default
list suspend-alm-orig			init inads craft	

```
list suspend-alm-orig
Suspend Alarm Origination Entries

Physical  Board      Expires At
01C03     off-only    06/11/15:06
01E0407   on-and-off  06/11/17:26
01E0406   on-and-off  06/12/45:34
```

switch-node

status switch-node

status switch-node *SN#*

Use **status switch-node** to see the operational status and attributes of the user specified switch node. The operational status of the active and standby Switch Node Clock (SNC) circuit packs for the switch node appear along with any alarms logged against the specified switch node.

Action/Object	Qualifier	Qualifier Description	Default
status switch-node	<i>SN#</i>	Normally switch node 1 resides in the PN cabinet, and switch node 2, if present, resides in the nearest PN cabinet.	1

The following display shows a typical result for **status switch-node**.

status switch-node 1							page 1 of 1	
SWITCH NODE STATUS								
Switch Node	Location	Mode	Major Alarms	Minor Alarms	Warning Alarms	Active SNC Location	Standby SNC Location	
1 A-PNC	01E	active	0	0	0	01E10	01E12	
1 B-PNC	01D	standby	0	1	2	01D10	01D12	

status switch-node field descriptions

A line of information appears for each switch node carrier.

status switch-node field descriptions 1 of 2

Field	Description
Switch Node	The switch node number, 1 or 2. If the PNC is duplicated, the A and B PNCs are reported separately.
Location	The physical location of the switch node carrier ┆ A high-reliability system shows one switch node location. ┆ A critical-reliability shows the active and standby switch node locations.
1 of 2	

status switch-node field descriptions 2 of 2

Field	Description
Mode	Current role of the switch node carrier. active = SN is providing normal circuit and control functions for PNC standby = SN is ready to become active, but is currently not active blanks = PNC is not duplicated
Major Alarms	Number of major alarms logged against the switch node carrier
Minor Alarms	Number of minor alarms logged against the switch node carrier.
Warning Alarms	Number of warning alarms logged against the switch node carrier.
Active SNC Location	The physical location of the standby switch node Clock circuit pack no board if an SNC is administered but not inserted
Standby SNC Location	The physical location of the standby switch node Clock circuit pack no board if an SNC is administered but not inserted Blanks if there is no standby switch node Clock for a given switch node
2 of 2	

switch-node clock

set switch-node-clock

set switch-node-clock *location* [*override*]

Use **set switch-node-clock** to set the active switch node clock (SNC) circuit pack in a given switch node carrier.

Set switch-node-clock is valid only for a simplex PNC with a Center State Switch (CSS).

Action/Object	Qualifier	Qualifier Description	Login	Default
set switch-node-clock	<i>override</i>	Set the active switch node clock regardless of the health of the standby SNC circuit pack.		

synchronization

See:

[change synchronization](#) on page 547

[display synchronization](#) on page 550

[list synchronization](#) on page 553

[set synchronization](#) on page 554

[status synchronization](#) on page 554

[test synchronization](#) on page 557

change synchronization

change synchronization

[atm | css | port-network n] parameters are available on their respective port networks.

Use **change synchronization** to change the synchronization source for the system. After running **change synchronization**, clocks may momentarily lose synchronization.

Use **change synchronization atm** to administer primary and secondary references for the Stratum 4 option, or ATM-Switch, indicating that the synchronization references are input directly to the ATM switch.

Action/Object	Qualifier	Qualifier Description	Login	Feature Interaction
change synchronization	atm	change ATM-connected PNs	init inads craft cust rcust bcms	DS1 interface, BRI trunk, or UDS1 board selected as either a primary or secondary synch source cannot be removed on the DS1 circuit pack administration form or the regular circuit pack administration form.
	css	change CSS-connected PNs		
	port network n	change the PN number entered		

This is an example of **change synchronization port-network 3** on **S8700 IP-PNC**.

```
change synchronization port-network 3                                     Page 1 of 2
                                SYNCHRONIZATION PLAN
                                PORT-NETWORK 31
                                SYNCHRONIZATION SOURCE (circuit pack location)

                                Stratum: 4

                                Primary: 03B02      Secondary: 03A08

                                CIRCUIT PACKS AVAILABLE FOR SYNCHRONIZATION
                                Location  Type  Name          Slip      Location  Type  Name          Slip
03B05      DS1  to gert 13a06      n
03A09      DS1  GERT Loop 414    y
03A14      DS1  Gert Loop 415    y
03A08      DS1  Gertrude <> 5E    y
03B02      DS1  gertrude <> st1  y
03B13      DS1  GERT<>ST13    y
03B07      DS1  SIP<>TEST      n

NOTE: DS1 and BRI TRUNK sources result in stratum 4, type II synchronization
```

This is an example of **change synchronization css** on **S8700 MC**.

```
change synchronization css                                             Page 1 of 10
                                SYNCHRONIZATION PLAN
                                SYNCHRONIZATION SOURCE (circuit pack location)

                                Stratum: 4

                                Primary: 01B02      Secondary: 01A08

                                CIRCUIT PACKS AVAILABLE FOR SYNCHRONIZATION
                                Location  Type  Name          Slip      Location  Type  Name          Slip
01B05      DS1  2a18          n
01A08      DS1  1a17          y
01A09      DS1  1b12          y
01B02      DS1  5b06          y

NOTE: DS1 and BRI TRUNK sources result in stratum 4, type II synchronization
```

This is an example of **change synchronization atm** on **S8700 IP-PNC**.

change synchronization atm				Page 1 of 2			
SYNCHRONIZATION PLAN							
ATM SYNCHRONIZATION REFERENCE (circuit pack location)							
Stratum: 4							
Primary: ATM-SW				Secondary: STM-SW			
CIRCUIT PACKS AVAILABLE FOR SYNCHRONIZATION							
Location	Type	Name	Slip	Location	Type	Name	Slip
02D07	DS1	TKG37<>ST13	n	06E06	DS1	DS1<>ST12	n
02D08	DS1	TKG36<>ST13	n	06E04	DS1	DS1<>MANTA	n
04E03	DS1	DS1<>ST11	n	06E07	DS1	DS1<>ST12	n
04E04	DS1	TKG 8<>ST13	n	14B20	DS1	Engl Loop 14B20	n
05E03	DS1	CAB 5 <> LOOP	n	14C20	DS1	Agile Loop 1	n
05E04	DS1	LOOP<>ST10	n	06A18	DS1	uds1-tq32	n
05E05	DS1	QSIG<>ST12	n	02D20	DS1	atm tn464 2d20	n
06E05	DS1	DS1<>LOOP	n	03A19	DS1	uds1-tg35	n
NOTE: DS1 and BRI TRUNK sources result in stratum 4, type II synchronization							

change synchronization field descriptions

change synchronization field descriptions 1 of 2

Field	Description
Stratum	Enter 3 for stratum-3 clocking or 4 for stratum 4 clocking.
Primary	First choice system synchronization source. Blank means no synchronization. Enter 5-character board location on any system ┆ ATM PNC: Enter atm-switch. ATM PNC port networks can get synchronization only from the ATM switch. Entering a circuit pack location only monitors that pack for errors. ┆ CSS, S8700 IP-PNC: Sync source must be in the cabinet being administered
Secondary	5-character board location for second choice system synchronization source. Blank means no synchronization. S8700 IP-PNC: Sync source must be in the cabinet being administered.
1 of 2	

change synchronization field descriptions 2 of 2

Field	Description
Location	Circuit pack location of all administered DS1 circuit packs (port network, carrier and board slot)
Type	Type of circuit pack
Name	User-defined name for the DS1 circuit pack
Slip	y/n Slip alarm enabled on DS1 circuit pack
Port Network	Display-only. Port network that supplies synchronization through the tone clock circuit pack (valid for stratum 3 synchronization)
2 of 2	

display synchronization

display synchronization

[atm | css | port-network n] [schedule] parameters are available on on their respective port networks.

Use **display synchronization** to see a synchronization plan. On an **S8700 IP-PNC**, specify the port network number.

Use **display synchronization** to display the synchronization form, with the administered synchronization stratum and reference sources.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
display synchronization	atm	display ATM-connected PNs	init	No default. A DS1 interface or a UDS1 board that is selected as a primary or secondary synchronization source cannot be removed on the DS1 circuit pack administration form or the regular circuit pack administration form.	
	css	display CSS-connected PNs	inads		
	port network n	display the PN number entered	craft		
	schedule	See Common Input Parameters on page 25.	cust rcust bcms browse		

This is an example of **display synchronization port-network 2**.

```

display synchronization port-network 2                                     Page 1 of 2
                                SYNCHRONIZATION PLAN
                                PORT NETWORK 2
                                SYNCHRONIZATION SOURCE (circuit pack location)
                                Stratum: 4

                                Primary: 02A08      Secondary:

                                CIRCUIT PACKS AVAILABLE FOR SYNCHRONIZATION
Location   Type   Name           Slip      Location   Type   Name
02A05     DS1    Gert Loop 415   y          02A05     DS1    Gert Loop 415
02A08     DS1    Gert<>ST13      y          02A08     DS1    Gert<>ST13

NOTE: DS1 and BRI TRUNK sources result in stratum 4, type II synchronization

```

This is an example of **display synchronization css**.

```

display synchronization css                                             Page 1 of 2
                                SYNCHRONIZATION PLAN
                                SYNCHRONIZATION SOURCE (circuit pack location)
                                Stratum: 4

                                Primary: 02A08      Secondary:

                                CIRCUIT PACKS AVAILABLE FOR SYNCHRONIZATION
Location   Type   Name           Slip      Location   Type   Name
02A05     DS1    Gert Loop 415   y          02A05     DS1    Gert Loop 415
02A08     DS1    Gert<>ST13      y          02A08     DS1    Gert<>ST13

NOTE: DS1 and BRI TRUNK sources result in stratum 4, type II synchronization

```

This is an example of **display synchronization atm**.

display synchronization atm

Page 1 of 10

SYNCHRONIZATION PLAN

SYNCHRONIZATION SOURCE (circuit pack location)

Stratum: 4

Primary: ATM-SW

Secondary:ATM-SW

CIRCUIT PACKS AVAILABLE FOR SYNCHRONIZATION

Location	Type	Name	Slip	Location	Type	Name	Slip
02A05	DS1	DS1-2a05	y	08B20	DS1	DS1-8b20	n
02A08	DS1	DS1-2a08	y	08B17	DS1	DS1-8b17	n
01A17	DS1	DS1-1a17	n	06B04	DS1	DS1-6b04	n
01B12	DS1	DS1-1b12	n	08A19	DS1	DS1-8a19	n
05B06	DS1	DS1-5b06	n	08A20	DS1	DS1-8a20	n
05B05	DS1	DS1-5b05	n	02B18	DS1	DS1-2b18	n

NOTE: DS1 and BRI TRUNK sources result in stratum 4, type II synchronization

display synchronization field descriptions

display synchronization field descriptions

Field	Description
Stratum	Specifies the synchronization stratum used. S8700 IP-PNC: 4 S8700 MC with ATM/CSS: 3 and 4
Primary	Designates the first choice system synchronization source. Blank = no synchronization. S8700 MC : this field is valid only if Stratum is 4 .
Secondary	Designates the second choice system synchronization source. S8700 MC : this field is valid only if Stratum is 4 .
Location	The circuit pack location (cabinet-carrier-slot) of all circuit packs administered to serve as synchronization references.
Name	The user-defined name of the circuit pack. If blank, no name was administered.
Slip	y If the circuit pack has slip detection enabled.

list synchronization

list synchronization [schedule]

Use **list synchronization** on to see the stratum clock and primary and secondary synchronization sources administered for all the cabinets.

Action/Object	Qualifier	Qualifier Description	Login	Default
list synchronization	schedule	See Common Input Parameters on page 25.		

This is an example of **list synchronization atm**.

list synchronization atm			
SYNCHRONIZATION PLAN			
Location	Stratum	Primary	Secondary
ATM	4	ATM-SW	ATM-SW
PN 33	4	33B02	33B01
PN 34	4	34A04	
PN 35	4	35A06	
PN 36	4		
PN 37	4		
PN 38	4		
PN 39	4		
PN 40	4		

This is an example of **list synchronization css**.

list synchronization css			
SYNCHRONIZATION PLAN			
Location	Stratum	Primary	Secondary
CSS	4	01C08	01C14
PN 33	4	33B01	33A01
PN 34	4	34A04	
PN 35	4	35A06	
PN 36	4		
PN 37	4		
PN 38	4		
PN 39	4		
PN 40	4		

set synchronization

set synchronization location

Use **set synchronization** to set a specific synchronization-capable circuit pack as the reference source for system synchronization signals. Synchronization-capable circuit packs include:

- | DS1 Trunks
- | BRI Trunks
- | IPSIs
- | ATM CES
- | Tone-Clocks

Specify the synchronization source location according to your system configuration:

- | **S8700 IP-PNC**: specify a synchronization source location for each port network. The default is the Tone-Clock in that port network.
- | On **S8700 MC**, set per system.
- | On gateways, set per gateway.

Use **set synchronization** only after automatic synchronization has been disabled with **disable synchronization-switch**.

Any administered circuit pack that is synchronization-capable may be specified with **set synchronization**. The circuit pack remains the synchronization reference until **set synchronization** specifies another circuit pack, or **enable synchronization** is entered.

After **enable synchronization**, the administered primary or secondary synchronization source becomes the synchronization reference. If no primary or secondary source is administered, an IPSI's Tone-Clock circuit, or a Tone-Clock circuit pack provides the port network's timing source.

Set synchronization is not supported when ATM-PNC is enabled.

Action/Object	Qualifier	Qualifier Description
set synchronization	<i>location</i>	Specifies the physical position of the synchronization-capable circuit pack that supplies a reference for synchronization.

status synchronization

status synchronization [atm | css | port network <n> | all]

Use **status synchronization** to see the current synchronization reference.

Synchronization can be established for:

- 1 Fiber-PNCs, established through the server-connected PN, in a direct, CSS, or ATM network.
- 1 IP-PNCs, established by individual PN. The synchronization source can be the same source as the ATM or CSS PNs in a Fiber-PNC network.

Action/Object	Qualifier	Qualifier Description	Login	Default
status synchronization	atm css port network n all	status of ATM-connected PNs status of CSS-connected PNs status of the PN number status for all PNs	init inads craft cust browse	all

The following example shows the output for **status synchronization** on a CSS system.

status synchronization					
SYNCHRONIZATION STATUS					
Location	Stratum Level	Source Maintenance Name	Source Physical Location	Switching Capability	Excessive Reference Switching
CSS	4	UDS1-BD	01C14	Enabled	No
PN 33	4	USD1-BD	33A10	Enabled	No
PN 34	4	TONE-BD	34A	Enabled	No
PN 35	4	TONE-BD	35A	Enabled	No
PN 36	4	TONE-BD	36A	Enabled	No
PN 37	4	TONE-BD	37A	Enabled	No
PN 38	4	TONE-BD	38A	Enabled	No
PN 39	4	TONE-BD	39A	Enabled	No
PN 40	4	TONE-BD	40A	Enabled	No
PN 41	4	TONE-BD	41A	Enabled	No

The following example shows the output for **status synchronization** on an ATM system.

status synchronization					
SYNCHRONIZATION STATUS					
Location	Stratum Level	Source Maintenance Name	Source Physical Location	Switching Capability	Excessive Reference Switching
ATM	4	ATM-SWITCH			No
PN 33	4	USD1-BD	33A10	Enabled	No
PN 34	4	TONE-BD	34A	Enabled	No
PN 35	4	TONE-BD	35A	Enabled	No
PN 36	4	TONE-BD	36A	Enabled	No

status synchronization field descriptions

status synchronization field descriptions

Field	Description
Location	Cabinet location of synchronization: port network number ATM CSS
Stratum Level	The stratum level of the current system synchronization reference. If Stratum 3 appears, and no DS1s are connected to the Stratum-3 clock or no DS1 connection existed to the Stratum-3 clock for over 24 hours, then the Stratum-3 clock is in free run mode.
Source Maintenance Name	Maintenance object name of the circuit pack that is providing the current system synchronization reference. IPSI or TONE-BD = the switch is operating in free run mode. ATM-SWITCH = Switching Capability , Excessive Reference Switching , and Physical Location fields do not appear.
Source Physical Location	The carrier of the PN. Blank when Source Maintenance Name is ATM-SWITCH .
Switching Capability	Indicates whether the online reference can be switched or not. Blank when Source Maintenance Name is ATM-SWITCH .
Excessive Reference Switching	y/n Excessive reference switching is taking place (sync error 1793 is at threshold) Blank when Source Maintenance Name is ATM-SWITCH .

test synchronization

```
test synchronization [ atm | css | port network <n> | all ]
```

Use **test synchronization** to check the timing synchronization source and update circuit packs with the correct synchronization parameters. The synchronization-capable circuit packs are sent down-link messages to place them in the correct synchronization configuration given the current on-line synchronization reference. The synchronization-capable circuit packs include:

- ┆ DS1s
- ┆ IPSIs
- ┆ EIs
- ┆ Tone-Clocks

The synchronization subsystem provides error-free digital communication between the switch and other PBXs, COs, or customer premises equipment. The subsystem is made up of the TDM bus clock, DS1 trunk circuit packs, and maintenance and administration software.

Action/Object	Qualifier	Qualifier Description	Login	Default
test synchronization	atm	check ATM-connected PNs	init	all
	css	check CSS-connected PNs	inads	
	port network n	check the PN number	craft	
	all	check all PNs	cust super-user	

test synchronization field descriptions

test synchronization field descriptions

Field	Description
Port	┆ port network number ┆ ATM ┆ CSS
Maintenance Name	ATM-SYNC = ATM port networks Sync = CSS port networks or IP-PNCs
Alt Name	blank
Test No.	The test number, 417, associated with the synchronization test
Error Code	The maintenance error code if the test fails.

synchronization-switch

See:

[disable synchronization-switch](#) on page 558

[enable synchronization-switch](#) on page 558

disable synchronization-switch

disable synchronization-switch

[all | css | port-network n] parameters are available on on their respective port networks.

disable synchronization-switch does not apply to ATM-connected port networks.

Use **disable synchronization-switch** to disable the automatic clock-switching capability of the Synchronization Maintenance subsystem. The synchronization subsystem (TDM bus clock, DS1 trunk board, and maintenance and administration software) provides error-free digital communication between the switch and other PBXs, COs, or customer equipment.

Note:

When adding fiber-connect PNs to a configuration, the PNs must be added before enabling synchronization. If synchronization is enabled, use **disable synchronization-switch** to disable synchronization before adding fiber-connect PNs.

Action/Object	Qualifier	Qualifier Description	Login	Default
disable synchronization-switch	all	disable all PN	init inads craft	
	css	disable CSS-connected PNs		
	port network n	disable the PN number entered		

enable synchronization-switch

enable synchronization-switch

[all | css | port-network n] parameters are available on on their respective port networks.

enable synchronization-switch does not apply to ATM-connected port networks.

Use **enable synchronization-switch** to return control of the selection of the synchronization source to the Synchronization Maintenance subsystem after being previously turned off by **disable synchronization-switch**.

The synchronization subsystem consists of the TDM bus clock, DS1 trunk board, maintenance and administration software, and provides error free digital communication between the switch and other PBXs, COs, or customer-premise equipment (CPE). See [SYNC \(Port Network Synchronization\)](#) on page 1253 in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)*.

Note:

When adding fiber-connect PNs to a configuration, the PNs must be added before enabling synchronization. If synchronization is enabled, use **disable synchronization-switch** to disable synchronization before adding fiber-connect PNs.

Action/Object	Qualifier	Qualifier Description	Login	Default
enable synchronization-switch	all css port network n	disable all PNs disable CSS-connected PNs disable the PN number entered	init inads craft	

sys-link

See:

[list sys-link](#) on page 559

[status sys-link](#) on page 561

[test sys-link](#) on page 566

list sys-link

list sys-link [schedule]

Use **list sys-link** to see every system link. Each link's location, type and dlci number, state, current path status, faulted path status, and last recorded fault (if any) are displayed. See [SYS-LINK \(System Links\)](#) on page 1284 in *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)* for details. See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description
list sys-link	schedule	See Common Input Parameters on page 25.

The following display shows a typical result for **list sys-link**.

list sys-link						Page 1
SYSTEM LINKS INFORMATION						
Location	Type/dlci	State	Current Path	Faulted Path	Last Fault Recorded	
01A0001	RSL/030	up	present	none		
01B0101	EAL	up	present	present	03/12/2007 17:11	
02A0001	EAL	up	present	none		
02B0101	EAL	up	present	present	03/12/2007 17:11	
03A0001	EAL	up	present	none		
03B0101	EAL	up	present	present	03/12/2007 17:11	
04A0101	EAL	up	present	none		
04B0201	EAL	up	present	none		
05A0001	EAL	up	present	none		
05B0101	EAL	up	present	present	03/12/2007 17:11	
06A0001	EAL	up	present	none		
06B0101	EAL	up	present	present	03/12/2007 17:11	
07A0001	EAL	up	present	none		
07B0101	EAL	up	present	present	03/12/2007 17:11	

The output below for the last screen of **list sys-link** shows bearer fault detection links (BFDLs). These links exist only for port networks with IPSIs.

SYSTEM LINKS INFORMATION						
Location	Type/dlci	State	Current Path	Faulted Path	Last Fault Recorded	
01A0101	BFDL	up	present	none		
01B0201	BFDL	up	present	none		
02A0101	BFDL	up	present	none		
02B0201	BFDL	up	present	none		
03A0101	BFDL	up	present	none		
03B0201	BFDL	up	present	none		
05A0101	BFDL	up	present	none		
05B0201	BFDL	up	present	none		
06A0101	BFDL	up	present	none		
06B0201	BFDL	up	present	none		
07A0101	BFDL	up	present	none		
07B0201	BFDL	up	present	none		
08A0101	BFDL	up	present	none		
08B0201	BFDL	up	present	none		

list sys-link field descriptions

list sys-link field descriptions

Field	Description
Location	The physical location of the far endpoint associated with the system link (cabinet-carrier-slot-circuit).
Type/dlci	The type of system-link and the dlci of the link (if there is one). System links include the following (see SYNC (Port Network Synchronization) on page 1253 in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430)</i> (formerly 03-300190): ┆ BFDL - Bearer Fault Detection Link ┆ EAL - Expansion Archangel Link ┆ INL - Indirect Neighbor Link (center stage switch) ┆ MBL - Maintenance Board Link ┆ MPCL - Medpro Control Link ┆ PACL - Port-Network Connectivity ATM Control Link ┆ PRI - ISDN-PRI signaling link ┆ RSCL - Remote Socket Control Link (C-LAN/VAL) ┆ RSL - Remote Socket Link ┆ TACL - Trunk ATM Control Link
State	Whether the system link is “up” or “down.”
Current Path	This field specifies the status of the current path. This field displays “none” if the link is down or “present” if the current path is functional.
Faulted Path	This field shows whether the link has experienced a fault and been switched to another path. “Present” indicates that the link has been faulted at least once. “None” appears if the link has not gone down. “Default” appears if the default faulted path is being used.
Last Fault Recorded	The date and time that the most recent fault on the link took place.

status sys-link

```
status sys-link port-location [dlci #]
```

Maintenance SAT Commands

Use **status sys-link** to see status data for a specified system link. The report includes the type and operational state of the link, the associated processor dlci, if any, active alarms and path status, and a list of all hardware components making up the link's path. If, in addition to the current path, a faulted path exists, the components making up the faulted path are displayed on page 2 of the report.

For port networks with IPSI, **status sys-link** also provides status for a BFD link. The information shown is similar to other link types.

See [status link](#) on page 358 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default
status sys-link	<i>port-location</i> dlci #	The location of the port associated with the link. The dlci number associated with an RSL link. Examples: status sys-link 1e0201 status sys-link 1a1001 dlci 030		

The following display shows a typical result for **status sys-link 8a02**.

status sys-link 8a02				Page 1 of 2	
Location: 08A0201		Type/dlci: EAL		Alarms: none	
Current Path: present		State: up		Time Up: 10/20/2007 15:49	
Faulted Path: none				Last Fault:	
Current Hardware Path					
Maintenance				Maintenance	
Location	Name	Alarms		Location	Alarms
08A	PKT-INT	none			
PN 08	PKT-BUS	none			
08A	IP-SVR	none			

For **S8700 MC**, **status sys-link** provides status for a bearer fault detection link (BFDL) for the specific link location. The screen shows status about BFDLs, which only exist in port networks with IPSIs.

status sys-link 2a0101			Page 1 of 2		
Location: 02A0101		Type/dlci: BFDL	Alarms: none		
Current Path: present		State: up	Time up: 10/25/2007 15:49		
Faulted Path: none		Last Fault:			
Current Hardware Path					
Maintenance			Maintenance		
Location	Name	Alarms	Location	Name	Alarms
03A	PKT-INT	none			
PN 03	PKT-BUS	none			
03A01	EXP-INTF	none			
3 A-PNC	FIBER-LK	none			
01E02	SNI-BD	none			
01E03	SNI-BD	none			
2 A-PNC	FIBER-LK	none			
02A01	EXP-INTF	none			

Maintenance SAT Commands

The following display shows a typical result for **status sys-link 2a0101**. In the following case, the link encountered a fault and recovered by switching to a different inter-switch-node fiber.

```

status sys-link 2a0101
Page 1 of 2

Location: 02A0101      Type/dlci: EAL      Alarms: none
Current Path: present   State: up      Time Up: 10/12/2007 10:48
Faulted Path: present   Last Fault: 10/17/2007 11:37

Current Hardware Path

Location      Maintenance      Maintenance
Name          Alarms          Location      Name          Alarms

01A1          PKT-INT         none
PN 01         PKT-BUS         none
01E01         EXP-INTF        none
1 A-PNC       FIBER-LK        none
01E02         SNI-BD          none
01E09         SNI-BD          none
7 A-PNC       FIBER-LK        none
02E09         SNI-BD          none
02E02         SNI-BD          none
2 A-PNC       FIBER-LK        none
02A01         EXP-INTF        none

```

status sys-link 2a0101			Page 2 of 2		
Location: 02A0101		Type/dlci: EAL	Alarms: none		
Current Path: present		State: up	Time Up: 10/12/2007 10:48		
Faulted Path: present			Last Fault: 10/17/2007 11:37		
Faulted Hardware Path					
Maintenance			Maintenance		
Location	Name	Alarms	Location	Name	Alarms
01A1	PKT-INT	none			
PN 01	PKT-BUS	none			
01E01	EXP-INTF	none			
1 A-PNC	FIBER-LK	none			
01E02	SNI-BD	none			
01E13	SNI-BD	none			
6 A-PNC	FIBER-LK	none			
02E13	SNI-BD	none			
02E02	SNI-BD	none			
2 A-PNC	FIBER-LK	none			
02A01	EXP-INTF	none			

The following display shows a typical result for **status sys-link 1a1001 dlci 030**.

status sys-link 1a1001

Page1 of 2

Location: 01A1001

Type/dlci: RSL/030

Alarms: none

Current Path: present

State: up

Time Up: 03/20/2007 15:49

Faulted Path: none

Last Fault:

Current Hardware Path

Maintenance			Maintenance		
Location	Name	Alarms	Location	Name	Alarms
01A	PKT-INT	none			
PN 01	PKT-BUS	none			
01A10	CLAN-BD	none			

status sys-link field descriptions

status sys-link field descriptions 1 of 2

Field	Description
Location	The location of the port associated with the system link (cabinet-carrier-slot-circuit).
Type/dlci	The type of system link and dlci number (RSL link). See Type/dlci under list sys-link for the link types.
Alarms	The highest level of alarm currently logged against the components making up the link.
Current Path	The operational status of the current path: - none: The link is down. - present: The current path displayed below is valid.
State	Whether the system link is “up” or “down.”
Time Up	The date and time that the link came up
Faulted Path	The status of the faulted path, if any: - present: The path of the link has been faulted at least once. - none: There is no record of the link having gone down. - default: The default faulted path is being used.
Last Fault	The date and time at which the most recent fault occurred.
1 of 2	

status sys-link field descriptions 2 of 2

Field	Description
Current Hardware Path	The location, maintenance name, and alarm information for each hardware component making up the current path of the link. The path begins at the Packet Interface on the IPSI and terminates at the circuit path that terminates the other end of the link.
Faulted Hardware Path	If the link encounters a fault, the system will reroute it if possible over an alternate route. If this has taken place, the faulted path appears on page 2 of the report. The location, maintenance name, and alarm information for each hardware component making up the most recent faulted path is shown.
2 of 2	

test sys-link

```
test sys-link location [dlci # ] [current | faulted] [short | long]
[repeat# | clear] [schedule]
```

Use **test sys-link** to validate the existence of the specified link and runs diagnostic tests on the hardware path that comprises the system link. Use **current** or **faulted** to run tests on every hardware object that comprises the specified link. If **current** or **faulted** is not specified, only the end-to-end sys-link connection is tested.

The hardware path that comprises a system link consists of up to 21 hardware components that affect the behavior of the link. The number of components of a given system link hardware path depends on the system configuration and type of system link. The following links are examples of system links: EAL (Expansion Archangel Link), INL (Indirect Neighbor Link), and PRI (PRI signaling link).

See [status link](#) on page 358 for more details on links.

Action/ Object	Qualifier	Qualifier Description	Login	Default
test sys-link	location dlci # current faulted short long repeat n clear	Port location associated with the system link. Current hardware path tested dlci number Tests the hardware path of the system link as it was constituted when a fault last caused the link to go down. See Common Input Parameters on page 25. Examples: test sys-link 2e0201 current test sys-link 2e0201 faulted r 10	init inads craft	

system

See:

[monitor system](#) on page 567

[reset system](#) on page 571

monitor system

`monitor system [ view1 | view2 | conn [ pnn pnn-1 pnn-2 pnn-3] ]`

Use `monitor system` to see a summary of the overall condition of the system, real-time status for time slots and buses, call rates, intervals, etc. Press **CANCEL** to clear the command.

Action/ Object	Qualifier	Qualifier Description	Login
<code>monitor system</code>		Example: <code>monitor system view1</code> <code>monitor system view2</code> <code>monitor system conn</code> <code>monitor system conn pnn 1 5 7</code>	system technician inads cust init nms browse
	<code>view1</code>	show attendant status, the maintenance status, the last hour's measurement of trunk groups, hunt groups, and the attendant group, and the time of day.	
	<code>view2</code>	show the view1 screen except the last hour's hunt group measurements	
	<code>connection</code>	show the connection monitor output for key information	
	<code>conn pnn</code> <code>pnn-1</code> <code>pnn-2</code> <code>pnn-3</code>	<code>pnn</code> shows data for PNN's 1, 2 and 3 <code>pnn pnn-n</code> shows data for specific PNNs (up to 3).	

Maintenance SAT Commands

Use **monitor system view1** and **monitor system view2** to see the condition, or health, of the system.

- ▮ **view1** shows attendant, maintenance, and traffic status. Attendant and maintenance status are updated every minute and traffic status is updated on an hourly basis. Pressing **CANCEL** forces a logout of the current login ID.

- ▮ **view2** shows the **view1** screen except the hunt group measurements

Use **monitor system connection** to see the status of connections, compiled by the connection manager. This on-line status report is automatically updated every minute or by pressing the **UPDATE** key. Pressing **CANCEL** forces a logout of the current login ID. Use **monitor system conn pnn** to specify PNNs for the report.

The following is an example of **monitor system view1**.

```
monitor system view1
      MAINTENANCE STATUS

      # of alarms for trunks: 4
      # of alarms for stations: 2
      # of alarms for other res: 1
      First OSS number has been informed? n

      TRAFFIC STATUS
      Measurement Hour: 18

      Trunk Group Measurement          Hunt groups Measurement
(4 grps with highest %time ATB)      (4 grps with highest # of qued calls)
      Grp no: 78                      Grp no: 16
      Grp dir:                        Calls qued: 2
Calls qued: 1                        Calls aban: 1
      %Out blkg:                      Attendant Group Measurement
      %Time ATB:                      Calls qued: 1      Calls aban: 0

                                      16:06 TUE MAR 6 2007
```

monitor system view1 and monitor system view2 field descriptions

monitor system view1 and monitor system view2 field descriptions 1 of 2

Field	Description
# of alarms for trunks	The number of existing minor and major alarms on trunk ports.
# of alarms for stations	The number of existing minor and major alarms on stations.
1 of 2	

monitor system view1 and monitor system view2 field descriptions 2 of 2

Field	Description
# of alarms for other resources	The number of existing minor and major alarms on every maintainable object in the system except trunks and stations.
First OSS number has been informed	Has every alarm been reported and acknowledged by the first OSS telephone number? If "Alarm Origination" is not enabled or there are no active alarms, this is n.
Measurement Hour	The starting time of the period for which the measurement was taken. For example, if the measurement hour is shown as 18, the traffic status data is for the time period from 6 PM to 7 PM. The measurement is taken on an hourly basis).
Grp no	The trunk-group or hunt-group number.
Grp dir	Group direction: incoming, outgoing, or two way.
Calls qued	Total calls that arrived and were placed in the queue for trunk groups.
Calls aban	Total calls that were abandoned by the caller.
%Out blkg	The ratio of outgoing calls that are not carried, due to overload conditions, on a trunk group to the outgoing calls offered.
% Time ATB	The percentage of time within the polling interval that every trunk in the trunk group was unavailable for use.
Time of day	The current time of day acquired from the system.
2 of 2	

The following display shows the output for **monitor system conn.**

Time Slot Status				Bus Status		
Pnn	Bus	State	*Idle Count	Pnn	Bus	State
10	0	Maint	0	10	0	Avail
10	1	Normal	233	10	1	Avail
10	0	Maint	0	22	0	Avail
10	1	Normal	233	22	1	Avail
22	0	Maint	0	1	0	Avail
22	1	Normal	233	1	1	Avail
22	0	Maint	0			
22	1	Normal	233			*Callrate: 20
1	0	Maint	0			*Interval: 60
1	1	Normal	233			*Max_callrate:45
1	0	Maint	0			*Next_hour: 70
1	1	Normal	233			
tot_ts_req :0F24 0000 3CE2 ts_count :0010 0920 0200 Requests-TN748 TTRs :0014						
ts_denied :0E46 3CE2 0000 ts_total :0000 0090 0028 Requests-TN748 CPTRs:0041						
tot_fts_req:0000 53D2 2231 fts_count:02E0 0910 0784 Requests-TN744 CPTRs:0082						
fts_total:0320 0192 7048 Requests-TN744 TTRs :0082						
Requests-TN744 MFCs :0082						
Note: * Denotes Base 10, All Other Figures are in Base 16						

monitor system conn field descriptions

monitor system conn field descriptions 1 of 2

Field	Description
Max_callrate	The maximum call rate hit during the time since the last hour has passed. For example, if monitor system conn is executed at 20 minutes past 12:00, this shows the maximum call rate obtained during the past 20 minutes.
Next_hour	0 or 1, depending upon if the measurements being taken are for this hour or the next. It is related to the previous field in that the maximum call rate is reflected for this hour. When this flag is set, statistics begin to accumulate for the next hour. Shortly thereafter, the maximum call rate becomes zero and new accumulations begin.
tot_ts_req	Number of time slots in use during the time period elapsed since the top of the last hour. Data is collected every 100 seconds. When the timer fires and the data collection occurs, a check is made as to how many time slots are currently in use. One number appears for each PNN requested.
ts_denied	Number of time slots requests that were denied during the time period elapsed since the top of the last hour. Data is collected every 100 seconds. One number appears for each PNN requested.
1 of 2	

monitor system conn field descriptions 2 of 2

Field	Description
tot_fts_req	Number of fiber time slots that have been requested. One number appears for each PNN requested.
ts_count	The number of time slots in use during the last 100-second polling period. One number appears for each PNN requested.
ts_total	Number of time slots requested since the top of the last hour.
fts_count	Number of fiber time slots in use during the last 100-second polling period. One number appears for each PNN requested.
fts_total	Number of fiber time slots requested since the top of the last hour.
Requests-TN748 TTRs	Number of currently active touch-tone receivers requested on the TN748 circuit pack.
Requests-TN748 CPTRs	Number of currently active call progress tone receivers requested on the TN748 circuit pack.
Requests-TN744 CPTRs	Number of currently active call progress tone receivers requested on the TN744 circuit pack.
Requests-TN744 TTRs	Number of currently active touch-tone receivers requested on the TN744 circuit pack.
Requests-TN744 MFC	Number of currently active multifrequency receivers requested on the TN744 circuit pack.
2 of 2	

reset system

```
reset system [level#]
```

**CAUTION:**

All system resets are service affecting, with higher levels being increasingly destructive. Some resets may take up to one-half hour to complete. Certain conditions may result in a higher reset level than the one requested. Unless you are experienced with resetting a system, follow normal escalation procedures.

Use **reset system** to reload Communication Manager software. All system resets are disruptive and terminate the SAT login.

Note:

Connections are preserved on H.248 media gateways on reset system 2 and reset system 4 conditions. To reset media gateways from the SAT, use **reset media-gateway**.

Reset system resets the system in the following manner:

- 1 A mini-coredump is generated for non-interchange related restarts and placed under /var/log/defty/dumps.
- 1 the restart is performed

System software generally does not escalate a demand system reset to a higher level. There are certain conditions that result in a higher level reset than that requested. These include:

- 1 A PNC interchange is already in progress.
- 1 A change in translation administration is in progress.

Action/Object	Qualifier	Qualifier Description	Login	Feature Interaction
reset system	Level 1 2 4	1 = Warm Restart 2 = Cold 2 3 = Reboot (G3 systems only) 4 = Reboot 5 = Reboot (G3 systems only) See Table 39: Approximate Recovery Time for S8700 series System Resets (min:sec) System reset times differ between different configurations on page 572. Example: reset system 1	init inads craft	see reset system feature interactions on page 572

Table 39: Approximate Recovery Time for S8700 series System Resets (min:sec)
System reset times differ between different configurations

Level	Recovery	2,400 lines	5,000 lines	15,000 lines
		Disk	Disk	Disk
1	Warm Restart	:10	:10	:10
2	Cold-2	1:00	2:00	4:00
4	Reload	4:00	6:30	11:00

reset system feature interactions

- 1 **reset** invokes system initialization like low-level maintenance. Software never escalates requested reset levels; technicians determine the levels.

Reset system cannot be canceled. The screen shows the results of various initialization tests. If **reset system** is successful, the user is logged off. Several conditions may prevent a requested reset.

See also [display initcauses](#) on page 315.

Reset system specifications

Reset Level 1 (warm restart) duration, causes, and effects 1 of 2

Duration	Up to 10 seconds, typically 4 seconds
Causes	reset system 1 command from Communication Manager (SAT/ASA) command line
	Spontaneous server interchange (those caused by hardware faults) Software faults that are not service affecting
	Demand server interchange
	Software escalation
Effects	Stable calls are preserved; queued ACD calls, H.323 calls, and H.320 (multimedia) calls stay up.
Effects (cont.)	System links such as ISDN-PRI D-channel signaling links, CMS, AUDIX, DCS links over C-LAN are preserved. The CMS, DCS, and AUDIX links could lose buffered messages.
	Error and alarm logs are preserved, but every alarm is resolved except busyouts.
	Stable features are preserved.
	Transient calls (not yet connected) and some user stimuli are dropped.
	New calls are not processed during the reset.
	Encrypted system links may be dropped and reestablished.
	Every administrative session except those over the TN799 C-LAN are dropped.
	If the reset resulted from a spontaneous server interchange, memory shadowing is turned off, and the standby server will not be available for service until memory is refreshed (several minutes).
	Application links such as those to AUDIX and CDR are dropped and re-established in under 2½ minutes.
1 of 2	

Reset Level 1 (warm restart) duration, causes, and effects 2 of 2

	Translation data is preserved in memory. If save translation is in progress, an SAT-requested warm restart would be aborted. A software-requested warm restart would result in an unsuccessful save translation and possibly corrupt translations.
2 of 2	

Reset Level 2 (cold restart) duration, causes, and effects 1 of 2

Duration	Up to 3.75 minutes
Causes	reset system 2 command from Communication Manager (SAT/ASA) command line
	Escalation from SAT's reset level 1
	An attempted SAT's reset level 1 during a PNC interchange
	Spontaneous interchange into an unrefreshed standby server
Effects	Every system and application link is dropped.
	Gateways are <i>not</i> reset.
	Every call is dropped.
	Every administrative session is dropped.
	Every system link is dropped and re-established.
	Every application link is dropped and re-established.
	Non-translation feature data, such as Automatic Wakeup calls, are lost and must be re-entered.
	Translation data is preserved in memory. If save translation is in progress, a SAT-requested cold-2 restart would be aborted. A software-requested cold-2 restart would result in an unsuccessful save translation and possibly corrupt translations.
	Every login, including remote access and system port logins, is dropped.
	Initialization firmware runs diagnostics and displays results on the screen.
	Server memory shadowing is turned off, leaving the standby server unavailable for service for up to several minutes.
	Every hardware component is reset <i>except</i> ┆ Active TN2312 IPSI in any PN. ┆ Active EI in a non-IPSI connected PN. ┆ SNIs. ┆ SNCs. ┆ DS1 clocks.

1 of 2

Reset Level 2 (cold restart) duration, causes, and effects 2 of 2

Effects (cont.)	For a critical-reliability system (duplicated PNC), a global refresh of the standby PNC is performed after the reset.
	Every busied-out MO is released and can be rebusied.
	Circuit packs are reinitialized. (Translations are verified by comparison to physical boards' locations.)
	Error and alarm logs are preserved, and every Communication Manager alarm is resolved.
2 of 2	

Reset Level 4 (reload) duration, causes, and effects

Duration	Typically 11 to 14 minutes
Causes	<code>reset system 4</code> command from Communication Manager (SAT/ASA) command line
	Escalation from SAT's <code>reset level 2</code>
	Power up
	Recovery attempt from server-down mode
Effects	System software (boot image) is reloaded and every process is re-initialized.
	Communication Manager administration (translations) are reloaded from the hard disk.
	Before reboot, the system attempts to save the alarm and error logs.
	After reboot, error and alarm logs are restored. Some error and alarm information may be lost if the last save before the reboot save does not succeed.
	Other effects are the same as those in reset level 2, except that more extensive diagnostics are performed.
	A core dump is automatically enabled for this reset level and is saved to the <code>/var/log/defty/dumps/</code> directory. The reboot is delayed until the core dump is finished.

system-parameters

See:

[system-parameters duplication](#) on page 577

[system-parameters ipserver-interface](#) on page 580

[system-parameters maintenance](#) on page 583

system-parameters duplication

See:

[change system-parameters duplication](#) on page 577

[display system-parameters duplication](#) on page 579

change system-parameters duplication

change system-parameters duplication

Use **change system-parameters duplication** to enable or disable PNC and/or IPSI duplication.

If only IPSI duplication is administrable, it is because PNC duplication is disabled on the **change system-parameters customer-options** screen. IPSI duplication can be enabled without PNC duplication, but if PNC duplication is enabled, IPSI duplication must also be enabled.

Enabling IPSI duplication requires that all IPSI-connected port networks with direct-connect, CSS, or ATM fiber connections have both primary and secondary IPSI boards. Disabling IPSI duplication requires that all primary IPSI boards be active.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
change system-parameters duplication			init super-user inads craft dadmin		

This is an example for **change system-parameters duplication** on [S8700 MC](#).

change system-parameters duplication	Page 1 of 1
DUPLICATION RELATED SYSTEM PARAMETERS	
Enable Operation of PNC Duplication? y	
Enable Operation of IPSI Duplication? y	

change system-parameters duplication field descriptions

change system-parameters duplication field descriptions

Field	Description
Enable Operation of PNC Duplication	y/n
Enable Operation of IPSI Duplication	y/n Defaults to n if a CMC1 or media gateway exists if y , all fiber-connected PNs must have duplicated IPSIs

display system-parameters duplication

display system-parameters duplication

Use **display system-parameters duplication** to see if IPSI (processing element) and PNC (port network connectivity) duplication is enabled. The following must be duplicated:

- 1 Each switch node record and every switch node with its duplicate. Cabinets must be administered.
- 1 Every fiber link containing either an EI circuit pack as an endpoint, or a DS1-C. Fiber links must be administered, including circuit pack administration and then duplication administration.

Every unduplicated SNI (switch node interface) to an SNI fiber link is automatically duplicated.

Note:

Release every PNC-A and -B board from the “busyout” state before PNC duplication, and be sure **PNC Duplication** is **y** on the Duplication Related System Parameters screen before you administer duplication. You must obtain a license file to enable this option.

Action/Object	Qualifier	Qualifier Description	Login	Default
display system-parameters duplication			init inads craft	

The following shows an example from **display system-parameters duplication**.

```
display system-parameters duplication

          DUPLICATION RELATED SYSTEM PARAMETERS

Enable Operation of PNC Duplication? y
Enable Operation of IPSI Duplication? y
```

display system-parameters duplication field descriptions

display system-parameters duplication field descriptions

Field	Description
Enable Operation of PNC Duplication	y/n PNC duplication enabled. Appears when PNC Duplication is y on System-Parameters Customer-Options screen.
Enable Operation of IPSI Duplication	y/n IPSI duplication enabled.

system-parameters ipserver-interface

See:

[change system-parameters ipserver-interface](#) on page 580

[display system-parameters ipserver-interface](#) on page 582

change system-parameters ipserver-interface

change system-parameters ipserver-interface

Use **change system parameters ipserver-interface** to:

- | display the subnet address of the two servers on a duplicated system
- | administer the switch identifier
- | turn on/off IPSI control of port networks
- | turn on/off IPSI preference switching
- | set the socket sanity timeout interval

Note:

Run **change system-parameters ipserver-interface** before running **add ipserver-interface**.

change system-parameters ipserver-interface	Page 1 of 1
IP SERVER INTERFACE (IPSI) SYSTEM PARAMETERS	
SERVER INFORMATION	
Primary Control Subnet Address: 198.152.254. 0	
Secondary Control Subnet Address: 198.152.255. *	
OPTIONS	
Switch Identifier: A	
IPSI Control of Port Networks: enabled	
Preference switching to A-side IPSI: enabled	
IPSI Socket Sanity Timeout: 15	
NOTE: * indicates data changed on the Server	

change system-parameters ipserver-interface, field descriptions 1 of 2

Field	Description
SERVER INFORMATION	
Primary Control Subnet Address	The control subnetwork addresses typically match the first three groups of digits in the IP address of the server. An asterisk (*) to the right of the Control Subnet Address fields means that Communication Manager does not have the subnetwork information and the subnetwork address displayed is incorrect. Select the configure server command on the Maintenance Web Interface to see the IP address of the server.
Secondary Control Subnet Address	
OPTIONS	
Switch Identifier	[A-J], [a-j] The ID letter of the switch. Default is A .
IPSI Control of Port Networks	enabled disabled

change system-parameters ipserver-interface, field descriptions 2 of 2

Field	Description
Preference switching to A-side IPSI	The automatic preference to the A-side IPSI (duplicated IPSIs). enable - If a fault causes an interchange away from IPSI-A to IPSI-B, the system will automatically return to IPSI-A when the fault heals. Changing this field to disable stops the automatic return.
IPSI Socket Sanity Timeout	Number of seconds between 3-15 for IPSI connections to recover from a network outage before closing the IPSI signaling connections that result in data loss and port network warm restarts. Default is 3. When the field is set to a value higher than 3 seconds, the IPSI media gateway is less prone to warm restarts and is more resilient to short network outages. Even when set at 15 seconds, IPSI Socket Sanity Timeout accommodates only short control network outages of up to approximately 7 seconds. Resynchronization of the TCP connections between the media server and the IPSI once the network recovers requires additional time. Actual network outages of longer than 7 seconds may still result in IPSI socket sanity timeouts.

display system-parameters ipserver-interface

```
display system-parameters ipserver-interface [schedule]
```

Use `display system-parameters ipserver-interface` to display the information for the primary and secondary servers.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>display system-parameters ipserver-interface</code>	<code>schedule</code>	See Common Input Parameters on page 25.	init inads craft dadmin customer super-user	

The following shows an example for **display system-parameters ipserver-interface**.

```
display system-parameters ipserver-interface

                IP SERVER INTERFACE (IPSI) SYSTEM PARAMETERS
SERVER INFORMATION
    IPSI Host Name Prefix:
    Primary Control Subnet Address: 135.122. 50.  0
    Secondary Control Subnet Address:  .  .  .

OPTIONS
    Switch Identifier: A
    IPSI Control of Port Networks: enabled
    Preference switching to A-side IPSI: enabled
    IPSI Socket Sanity Timeout: 3

NOTE: * indicates data changed on the Server
```

For field descriptions, see [change system-parameters ipserver-interface](#) on page 580.

system-parameters maintenance

See:

[change system-parameters maintenance](#) on page 583

[display system-parameters maintenance](#) on page 589

change system-parameters maintenance

change system-parameters maintenance

Use **change system-parameters maintenance** to specify and display scheduled maintenance operations and maintenance support functions. It also activates and deactivates INADS alarm origination during repairs. Fields on this screen may differ depending on the configuration of the system (duplicated or not).

Action/Object	Qualifier	Qualifier Description	Login	Default
change system-parameters maintenance			init inads craft cust rcust	

This is an example of page 1 of **change system-parameters maintenance**.

change system-parameters maintenance	Page 1 of 3
MAINTENANCE-RELATED SYSTEM PARAMETERS	
OPERATIONS SUPPORT PARAMETERS	
CPE Alarm Activation Level: minor	
SCHEDULED MAINTENANCE	
	Start Time: 01 : 00
	Stop Time: 06 : 00
	Save Translation: daily
Update LSP and ESS Servers When Saving Translations:	y
	Command Time-out (minutes):
	Control Channel Interchange: daily
	System Clocks/IPSI Interchange: daily

The following table explains the fields on Page 1 of the **change system-parameters maintenance** screen.

change system-parameters maintenance field descriptions page 1

OPERATIONS SUPPPORT PARAMETERS	
CPE Alarm Activation Level	Indicates the minimum level (Major, Minor or Warning) to activate Customer-Provided Equipment (CPE) alarm. If the level is none , the CPE does not activate for any alarm. (none) When the switch goes into Emergency Transfer, the CPE alarm activates regardless of the CPE Alarm Activation Level setting.
SCHEDULED MAINTENANCE	
Start Time	Hour and minute (24-hour notation) when daily scheduled maintenance starts.
Stop Time	The hour and minute when scheduled daily maintenance ceases. If any daily maintenance operations are not completed by this time, the system notes its stopped sequence location and includes those operations during the next scheduled daily maintenance.
Save Translation	Indicates days that translation data in memory automatically saves to the hard disk during scheduled maintenance. The operation saves to disk, then completes a backup to tape. Translation data saves to both servers. n prevents automatic saves.
Update LSP and ESS Servers When Saving Translations	y/n Enable filesync to LSP and ESS Servers during scheduled maintenance save translations.
1 of 2	

change system-parameters maintenance field descriptions page 1

OPERATIONS SUPPPORT PARAMETERS	
Command Time-out (minutes)	10-360 Enter the number of inactive minutes after which an active SAT screen reverts to a Linux screen or the user is logged off of the system. Default is 120.
Control Channel Interchange	Each port network has a pair of TDM busses (A and B). Each has a set of time slots dedicated to the control channel. One bus at a time carries the control channel in each PN. "Daily", days of the week, or n prevents interchanges.
System Clocks/ IPSI Interchange	The days that interchanges occur (daily, days of the week, or no). n prevents interchanges. For high-reliability configurations, there are duplicate IPSIs on IPSI-controlled port networks. For critical-reliability configurations, there are both duplicate Tone-Clock circuit packs on non-IPSI controlled port networks and duplicate IPSIs on IPSI-controlled port networks. When this is turned on, a system clock or IPSI interchange is automatically initiated on each port network possessing duplicated Tone-Clock circuit packs or IPSIs. Each port network interchanges in the standby system clock or IPSI for 20 seconds. During this time the newly-active circuit pack is tested and system health is monitored. Then an interchange is made back to the originally-active circuit pack. This field indicates the days that interchanges occur: daily, days of the week, or no. No prevents interchanges. Does not apply to duplex-reliability configurations since the IPSIs are not duplicated in the port networks.
2 of 2	

This is an example of page 2 of **change system-parameters maintenance**.

change system-parameters maintenance	Page 2 of 3
MAINTENANCE-RELATED SYSTEM PARAMETERS	
MINIMUM MAINTENANCE THRESHOLDS (Before Notification)	
TTRs: 4	CPTRs: 1 Call Classifier Ports: 0
MMIs: 0	VCs: 0
TERMINATING TRUNK TRANSMISSION TEST (Extension)	
Test Type 100:	Test Type 102:
Test Type 105:	
ISDN MAINTENANCE	
ISDN-PRI Test Call Extension:	
ISDN-BRI Service SPID: 68888	
DS1 & MF MAINTENANCE	
DS0 Loop-Around Test Call Extension: 44003	
MF Test Call Extension:	

The following table describes the fields on page 2 of the **change system-parameters maintenance** screen.

change system-parameters maintenance field descriptions page 2: 1 of 3

MINIMUM MAINTENANCE THRESHOLDS (Before Notification)	
TTRs	When the number of touch-tone receivers (TTRs) in service falls below this number (4 to 200), a warning alarm is raised against TTR-LEV. These are also known as dual-tone multifrequency receivers (DTMRs). There are 4 TTRs on each TN748, TN718, TN420, or TN756; TN2182 and TN744 (suffix C or later) each have 8 TTRs. To alarm the first occurrence of a TTR being taken out of service, set this field to the total number of TTRs in the switch.
CPTRs	When the number of call progress tone receivers in service falls below this number (2 to 100), a warning alarm is raised against TTR-LEV. These are also known as general purpose Tone Detectors (GPTDs). There are 2 CPTRs on each TN748, TN718, TN420, or TN756; TN2182 and TN744 (suffix C or later) each have 8 CPTRs. To alarm the first occurrence of a CPTR being taken out of service, set this field to the total number of CPTRs in the switch.
Call Classifier Ports	When the number of call classifier ports (CLSFY-PTs) in service falls below this number, a warning alarm is raised against TTR-LEV. Valid entries are 1 to 200. There are eight ports on each TN744 or TN2182 circuit pack. To alarm the first occurrence of a CLSFY-PT being taken out of service, set this field to the total number of CLSFY-PTs. If there are no TN744 or TN2182 circuit packs in the system, leave this field blank.
MMIs	The minimum number of MMI ports needed for the Multimedia Call Handling (MMCH) feature to run efficiently. The MMCH feature must be enabled on the system-parameters customer-options screen before the MMIs field can be changed to a number greater than zero. If the number of in-service Multimedia Interface (MMI) ports falls below the minimum port capacity (valid entries between 0-128), a MMI-LEV error is logged. Each MMI circuit pack contains a maximum of 32 ports. To alarm the first occurrence of an MMI being taken out of service, set this field to the total number of MMI ports. If this outage continues for 15 minutes, a major alarm is raised.
VCs	The minimum number of VC ports needed for the Multimedia Call Handling (MMCH) feature. The MMCH feature must be enabled on the system-parameters customer-options screen before the VCs field can be changed to a number greater than 0. Each VC circuit pack contains 16 physical ports: eight ports are reserved for VC-DSPPT ports, and the remaining eight ports are designated as VC-SUMPT ports. The eight DSP ports are made up of four encoder and four decoder resources that encode and decode audio formats. Thus, <i>one VC circuit pack is required for every eight ports of MMCH port capacity</i> . If the number of in-service VC ports falls below the MMCH port capacity (valid entries between 0 and 128), a VEC-LEV error is logged. To alarm the first occurrence of a VC port being taken out of service, set this field to the total number of VC ports. If this outage continues for 15 minutes a major alarm is raised.
1 of 3	

change system-parameters maintenance field descriptions page 2: 2 of 3

MINIMUM MAINTENANCE THRESHOLDS (Before Notification)	
TERMINATING TRUNK TRANSMISSION TEST (Extension)	
Test Type 100	Specifies extensions assigned to receive tie-trunk calls from other switches that have test line origination capability. The system responds by sending a sequence of test tones. Test type 100 tests far-end to near-end loss and C-message by sending: ┆ 5.5 seconds of 1004-Hz tone at 0 dB ┆ Quiet until disconnect; disconnect is forced after 1 minute
Test Type 102	Test Type 102 tests far-end to near-end loss by sending: ┆ 9 seconds of 1004-Hz tone at 0 dB ┆ 1 second of quiet ┆ This cycle is repeated until disconnect; disconnect is forced after 24 hours.
Test Type 105	Test Type 105 tests 2-way loss, gain slope, and C-message and C-notch noise by sending: ┆ 9 seconds of 1004-Hz tone at -16 dB ┆ 1 second of quiet ┆ 9 seconds of 404-Hz tone at -16 dB ┆ 1 second of quiet ┆ 9 seconds of 2804-Hz tone at -16 dB ┆ 30 seconds of quiet ┆ ½ second of 2225-Hz test progress tone ┆ approximately 5 seconds of quiet ┆ forced disconnect
ISDN MAINTENANCE	
ISDN-PRI Test Call Extension	Indicates the extension used by far-end ISDN nodes to place calls to the system, for testing ISDN-PRI trunks between the far end and the system.
ISDN-BRI Service SPID	Shows if the link associates with the Service SPID. If the link is associated with the Service SPID. This number is the test SPID (0 – 99999) (under BRI-SET MO). Otherwise, this field is blank. Service SPID is a feature used by the system technician to check building wiring between the switch and the BRI endpoint.
2 of 3	

change system-parameters maintenance field descriptions page 2: 3 of 3

MINIMUM MAINTENANCE THRESHOLDS (Before Notification)	
DS1 & MF MAINTENANCE	
DS0 Loop-Around Test Call Extension	The extension used to set up a DS0 loop-around connection for testing non-PRI DS1 trunks. Use DS0 Loop-Around Test Call to test DS0 channels associated with non-PRI trunks. Activate the loop-around by dialing the test extension. Establish multiple DS0 loop-around connections by placing multiple calls to the loop-around extension. For more information, see DS0 Loop-Around test call on page 335 in <i>Maintenance Procedures for Avaya Communication Manager 4.0, Media Gateways and Servers (03-300432)</i> .
MF Test Call Extension	Enter the multifrequency test call extension. To allow COs in different locations to use different DID numbers to reach the MF test call extension, administer one number as the MF test call extension. Administer additional DID numbers as x-port stations, and call forward from the x-port stations to the MF test call extension.
3 of 3	

This is an example of page 3 of **change system-parameters maintenance**.

display system-parameters maintenance	Page 3 of 3
MAINTENANCE-RELATED SYSTEM PARAMETERS	
MAINTENANCE SAVE TRANSLATION CORRUPTION AUDIT	
Enable Translation Audit? y	
Display Warning When Detected? n	
Alarm When Detected? n	
Block Save Translation When Detected? n	

The following table describes the fields on page 3 of the **change system-parameters maintenance** screen.

change system-parameters maintenance field descriptions page 3:

MAINTENANCE SAVE TRANSLATION CORRUPTION AUDIT	
Enable Translation Audit	y/n Set to y to have a translation audit performed prior to every scheduled save translation operation. A translation audit detects corruption in the translation data. y applies when Save Translation on the first page of this screen is y .
Display Warning When Detected	y/n Display a warning on the SAT at login if translation corruption is detected by a translation audit. Write the event to the command history log. n is recommended. Set to y when translation corruption is actively being diagnosed. Appears when Enable Translation Audit is y .
Alarm When Detected	y/n Issue an alarm if translation corruption is detected by a translation audit. n is recommended. Set to y when translation corruption is actively being diagnosed. Appears when Enable Translation Audit is y .
Block Save Translation When Detected	y/n Block save translation if corruption is detected. n is recommended. Set to y when translation corruption is actively being diagnosed. Appears when Enable Translation Audit is y .

display system-parameters maintenance

display system-parameters maintenance [schedule]

Use **display system-parameters maintenance** to display translation data for maintenance-related system parameters.

Action/Object	Qualifier	Qualifier Description	Login	Default
display system-parameters maintenance	schedule	See Common Input Parameters on page 25.	craft inads init super-user logins with Maintain Switch Circuit Packs permissions	

A series of maintenance tests and operations runs automatically every day according to the schedule and settings specified in the following fields.

See [change system-parameters maintenance](#) on page 583 for examples of screens and field descriptions.

terminal

erase terminal

```
erase terminal {extension} {log | customizations | all}
```

Use **erase terminal** to erase local data items from 2410 Release 2 and 2420 Release 4 DCP telephones. A system administrator can use **erase terminal** to reassign a phone without having a technician erase the data manually. **Erase terminal** fails if the extension is busy on a call or on a local task.

Erase terminal deletes:

- ┆ call logs
- ┆ speed dial lists
- ┆ button labels
- ┆ user option settings
- ┆ language

Action/Object	Qualifier	Qualifier Description	Default
erase terminal	<i>extension</i>	Extension of the phone	
	<i>log</i>	erase the call log	
	<i>customizations</i>	erase customizations: call log, button labels, speed dial list, user option settings	
	<i>all</i>	erase all data: call log, button labels, speed dial list, user option settings, language	
		Example: erase terminal	

tdm

See:

[busyout tdm](#) on page 591

[release tdm](#) on page 591

[set tdm](#) on page 592

[test tdm](#) on page 593

busyout tdm

busyout tdm *pn# bus*

Use **busyout tdm** to busyout a specified tdm bus.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
busyout tdm	<i>pn# bus a bus a</i>	TDM bus Port Network number default control bus default tone bus (Each 512 timeslot TDM bus configures as 2 duplicate 256 time slot buses. This division allows duplication of control channels and dedicated tone time slots.) Example: busyout tdm 1a	init inads craft		Move dedicated tone time slots to another bus (the other half of the duplicated bus) before you busyout a particular bus.

For more information, see [Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

release tdm

release tdm

Use **release tdm** to remove specified tdm buses from a maintenance busy state.

For more information see [Busyout and Release Commands](#) on page 33.

Action/Object	Qualifier	Qualifier Description	Login	Feature Interaction
release tdm	<i>port-network pn bus bus</i>	Port network number of the TDM bus ("a" or "b") specifies desired half of the TDM bus. Each 512 time slot TDM bus is configured as two duplicate 256 time slot buses. This division allows for duplication of control channels and dedicated tone time slots. The default control bus (carrying the control channel) is the "a" bus, while the default tone bus (carrying dedicated tones) is the "b" bus. (1 - 3)	init inads craft	see below

set tdm

```
set tdm port-network PN# bus a | b [override]
```

Use `set tdm port-network` to specify which of the paired TDM buses (A or B) on a port network carries the control channel and dedicated tone time slots. Each port network has a 512 time-slot TDM bus configured as two separate 256 time-slot buses. This division allows for duplication of control channels and time slots dedicated for use by system tones. On power-up, the control channel is carried on the A bus, and the tone time slots are carried on the B bus. Execution of `set tdm port-network` puts both the control channel and the tone time slots on the specified bus.

Under extremely heavy traffic load, tone time slots on the bus that is not currently carrying the tones may be used for call processing. Use of `override` under these conditions causes calls to be dropped.

See [TDM-BUS \(TDM Bus\)](#) on page 1311 in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)* for details.

Action/Object	Qualifier	Qualifier Description	Feature Interaction
<code>set tdm port-network</code>	<code>PN#</code> <code>bus</code> <code>override</code>	Port Network number of the TDM bus to be set. Use <code>list cabinet</code> to see port network numbers for a given cabinet. One of the paired TDM buses, a or b. Sets a bus which is out of service, or a bus whose dedicated tone time slots are in use by call processing.  CAUTION: Use of override option disrupts service. Example: <code>set tdm port-network 2 bus a</code>	See set tdm feature interactions on page 592

set tdm feature interactions

New calls go to time slots reserved for tones on the bus that have not other time slots when:

- 1 Time slots on a specified bus are in use
- 1 Dedicated tone time slots are on the other half of the bus

A `set` command to buses that have calls on dedicated tone time slots drops these calls.

test tdm

`test tdm port-network PN# [short | long] [repeat# | clear] [schedule]`

Use `test tdm` to run hardware diagnostic tests on the time slots of the specified TDM bus. Both halves ("a" and "b") of the TDM bus are tested. This command tests all the time slots on a bus associated with a PPN or an EPN.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>test tdm</code>	<code>pn number</code> <code>short</code> <code>long</code> <code>repeat n</code> <code>clear</code>	<i>nn</i> = number of the port network to have its TDM bus tested. Both halves ("a" and "b") of the TDM bus are tested. See Common Command Parameters on page 20. Examples: <pre>test tdm port-network 1 1 test tdm port-network 2 sh r 2 test tdm port-network 1 1 r 25 test tdm port-network 2 test tdm port-network 1 c</pre>	init inads craft	short 1

test-number

See:

[disable test-number](#) on page 593

[enable test-number](#) on page 593

disable test-number

Use `disable test-number` to prohibit selected maintenance tests.

Use `enable test-number` to run a disabled test.

Action/Object	Qualifier	Qualifier Description	Login
<code>disable test-number</code>	<code>number</code>	Maintenance test number	init inads

enable test-number

`enable test-number test#`

Use `enable test-number` to re-enable a specified test that was previously turned off with `disable test`. While disabled, a test cannot be run by background or demand maintenance. Before enabling a test, ascertain why it was disabled, and inform INADS that it has been turned back on.

Use `display disabled-tests` to list all disabled tests.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>enable test-number</code>	<code>test#</code>	The number of the test to be re-enabled Descriptions of each test appear under the relevant MO in <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430)</i> (formerly 03-300190) Example: <code>enable test-number 102</code>		

test-schedule

display test-schedule

`display test-schedule`

Use `display test-schedule` to see the test schedule for an ATMS trunk.

Automatic Transmission Measurement System (ATMS) provides advanced maintenance procedures for monitoring system trunk facilities. This system performs transmission tests on system trunks to determine whether trunks are performing satisfactorily.

See [Common Input Parameters](#) on page 25.

display test schedule field descriptions 2 of 2

Field	Description
Test Type	One of the following types of test to be performed on the trunk group/ members in this schedule: full runs the most comprehensive test and collects every associated measurement for each TTL type. supv performs a supervision test and only confirms the presence of the test set at the far end. No measurements are taken for this test. no-st runs the “full” test, but skips any self-test sequences. This saves about 20 seconds on the type 105 test and does not have any effect on type 100 or 102 tests. no-rl runs the “full” test, but skips any return-loss sequences. This saves about 20 seconds on the type 105 test and does not have any effect on type 100 or 102 tests. no-st/rl runs the “full” test, but skips every self-test and return-loss sequence. This saves about 40 seconds on the type 105 test and does not have any effect on type 100 or 102 tests.
Duration	The maximum number of hours (1 to 24) a schedule can remain active. Schedules continue to run until every trunk group/member for that particular schedule is tested or until the scheduled duration elapses. If the duration elapses before every trunk group/member can be tested, the schedule stops.
Trk Trp	The trunk-group numbers to be tested when this schedule runs. There is no limit to the number of times that a trunk group can appear on any particular schedule, or to the number of different schedules in which a trunk group can appear. Default is blank.
Bgn Mbr	The beginning member number of the trunk group to be tested; default is 1 .
End Mbr	The ending member number of the trunk group to be tested. This value must be greater than or equal to the value of the beginning member field.
2 of 2	

testcalls

list testcalls

Use **list testcalls** to generate an Automatic Transmission Measurement System (ATMS) report. The ATMS allows the voice and data trunk facilities to be measured for satisfactory transmission performance. The performance of the trunks is evaluated according to measurements produced by a series of analog tests (**test analog-testcall**) and are compared against user-defined threshold values. The purpose of the report is to provide measurement data to help determine the quality of trunk lines. The measurement report contains data on trunk signal loss, noise, singing return loss, and echo return loss.

The measurements are produced by a set of analog trunk tests (**test analog-testcall**). The tests are initiated by a maintenance demand test or by a set of scheduled tests. The largest portion of these measurements are generated through scheduled testing during system quiet hours (hours where the traffic volume is low). Each trunk test performed by the system stores the results in a database. The trunk measurements in this database reflect the state of each trunk at the time of its last test.

The **test analog-testcall** test aborts when attempting a test call on these trunk groups:

- ┆ ISDN-PRI: The ATMS Summary Report (**list testcalls** command) shows a 0 in the in the Busy Out Trunks field when **test analog-testcall** is run on an ISDN-PRI trunk.
- ┆ SIP
- ┆ DID
- ┆ Any incoming trunk group (transmission tests can only be run on outgoing trunks)

Action/Object	Qualifiers/Options	Qualifier/Option description
list testcalls	detail summary	Detailed measurement report displayed Summary measurement report displayed
	grp group number	Measurements for a specific trunk group displayed. When used with the to-grp option, this option is the starting trunk group in a range of user-specified trunk groups.
	to-grp group number	Measurements for all trunk groups from 1 to the specified "to-grp" trunk group are displayed. When used with the grp option, this option is the ending trunk group in a range of user-specified trunk groups.
	mem member number	Measurements for a specific trunk group member displayed. When used with the to-mem option, this option is the starting trunk group member in a range of user-specified trunk group members.
1 of 2		

Action/Object	Qualifiers/Options	Qualifier/Option description
	to-mem <i>member number</i>	Measurements for all trunk group members from 1 to the specified "to-mem" trunk group member displayed. With mem , this option is the ending trunk group member in a range of user-specified trunk group members.
	port <i>location</i>	Measurements for a specific trunk circuit (port) displayed
	result identifier	Filter out the measurement results that do not match the user-specified result. Only measurement results that match the specified result appear. Examples of results are pass, marg, fail.
	not-result identifier	Filter out the measurement results that do match the user-specified result. Only measurement results that do not match the user specified result appear. Examples of results are pass, marg, fail.
	count <i>number</i>	Specify the number of records displayed.
2 of 2		

Examples

```
list testcalls detail
list testcalls detail grp 78
list testcalls detail grp 78 to-grp 80
list testcalls detail grp 78 to-grp 80 mem 1 not-result pass
list testcalls detail grp 78 to-grp 80 mem 1 to-mem 5
list testcalls detail mem 1 count 3 result pass
list testcalls detail to-grp 78 to-mem 4 count 3 result pass
list testcalls detail to-mem 3 result pass
list testcalls detail port 1c1504t
list testcalls summary
list testcalls summary grp 78
list testcalls summary grp 78 count 5
list testcalls summary grp 78 to-grp 80
list testcalls summary grp 78 to-grp 80 count 3
list testcalls summary to-grp 78
list testcalls detail grp 78 to-grp 80 mem 1 to-mem 5 count 3 result
pass
```

The following example is of the output for **list testcalls detail grp 80**.

```
list testcalls detail grp 80

                                ATMS MEASUREMENT REPORT
Group: 80   Type: co           Vendor:           TTL Type: 105-w-rl

THRESHOLD VALUES                Loss dev at

                                1004Hz-loss   404Hz 2804Hz C-msg C-ntch SRL SRL
                                Min    Max    -  +    -  +    Noise Noise LO  HI    ERL
Marginal      -2    21    9  9  9  9      55    74    0   0    0
Unacceptable  -2    21    9  9  9  9      55    74    0   0    0

Trk Test  Test  Test -16dBm  0dBm
Mem Date  Time  Rslt  NE FE NE FE  NE FE NE FE  NE FE NE FE  NE FE NE FE
1
2
3
4
5
6
7
8
9
```

list testcalls detail report field descriptions

list testcalls detail report field descriptions 1 of 2

Field	Description
Group	trunk group number selected
Type	trunk group type
Vendor	vendor of this trunk group
TTL Type	kind of test line for this trunk group
Threshold Values	The list of marginal and unacceptable threshold values defined on the trunk group form. The following fields appear on the lower section of the form. Many of the column headings contain the abbreviations "FE" for far end and "NE" for near end. These abbreviations define which end took the measurements.
Trk Mem	The trunk member within the trunk group.
Test Date	The month and day this trunk was tested.
1 of 2	

list testcalls detail report field descriptions 2 of 2

Field	Description
Test Time	The time of day this trunk was tested.
Tst Rslt	This field describes the results of the trunk transmission test.
1004Hz-loss Min	Far-to-near and near-to-far measurements of 1004-Hz loss from low-level tone.
1004Hz-loss Max	Far-to-near and near-to-far measurements of 1004-Hz loss at 0 dBm.
Loss dev at 404Hz	Transmission tests at low frequency. These tests measure a maximum positive and negative deviation of +9 and -9 dB from the 1004-Hz loss measurements.
Loss dev at 2804Hz	Transmission tests at high frequency. These tests measure a maximum positive and negative deviation of +9 and -9 dB from the 1004-Hz loss measurements.
C-msg Noise	Maximum noise interference (in dBrnC: decibels above reference noise, which is B(EQ)10 sup -12E(EQ) watts) terminating on a voice terminal within the voice-band frequency range (500 to 2500 Hz) between 15 and 55 dBrnC.
C-ntch Noise	Maximum signal-dependent noise interference on a line between 34 and 74 dBrnC.
SRL-LO	Singing return loss from 0 to 40 dB between the sum of the circuit (repeater) gains and the sum of the circuit losses. SRL-LO occurs most often in the frequency range of 200 to 500 Hz.
SRL-HI	Singing return loss from 0 to 40 dB between the sum of the circuit (repeater) gains on a circuit and the sum of the circuit losses. SRL-HI occurs most often in the frequency range of 2500 to 3200 Hz.
ERL	Echo return loss from 0 to 40 dB between the level of signal strength transmitted and the level of signal strength reflected. ERL occurs most often in the frequency range of 500 to 2500 Hz.
2 of 2	

The following example is the output from **list testcalls summary grp 80**.

list testcalls summary grp 80										
ATMS MEASUREMENT SUMMARY REPORT										
Trk	Num	Last	Last	Trunks	Trunks	Trunks		Trks	Trks	Busied
Grp	Of	Test	Test	Passed	Failed	Failed		In-	Not	Out
Num	Trks	Date	Time	Transm	Marginal	Unaccept		Use	Test	Trunks
				Test	Threshld	Threshld				
80	19			0	0	0		0	0	0

list testcalls summary report field descriptions

list testcalls summary report field descriptions

Field	Description
Trk Grp Num	The trunk group number which is being summarized. Only outgoing or two-way analog trunks will be listed.
Num Of Trks	Total number of members per trunk group.
Last Test Date	Date of the oldest measurement in the trunk group.
Last Test Time	Time of the oldest measurement in the trunk group.
Trunks Passed Transm Test	Number of trunks that have passed the trunk transmission tests.
Trunks Failed Marginal Threshld	Number of trunks that failed a marginal threshold, but not an unacceptable threshold according to the threshold values defined on the trunk group form.
Trunks Failed Unaccept Threshld	Unacceptable threshold administered on the Trunk group form.
Trks In-Use	Number of trunks that were in-use at the time of testing.
Trks Not Test	Number of trunks that were not tested due to error conditions.
Busied Out Trunks	Number of trunks that were busied out at the time. This could be due to hardware problems, incorrect threshold values, etc.

tftp-server

See:

[change tftp-server](#) on page 602

[display tftp-server](#) on page 602

change tftp-server

Use **change tftp-server** to copy a firmware image from the FTP file server into Communication Manager memory.

Action/Object	Qualifier	Qualifier Description
change tftp-server		

This is an example of **change tftp-server**.

```
change tftp-server
                                TFTP Server Configuration
      Local Node Name:
TFTP Server Node Name:
      TFTP Server Port: 69
      File to Retrieve:

      File Status:
      File Size:
      Filename in Memory:
```

display tftp-server

display tftp-server

Use **display tftp-server** to see the status of the TFTP Server, and to verify the status of a firmware image file download.

See [disable suspend-alm-orig](#) on page 542.

time

See:

[display time](#) on page 603

[set time](#) on page 604

display time

display time [**schedule**]

Use **display time** to display the system date and time that is used by software processes for scheduling and so on.

Action/Object	Qualifier	Qualifier Description
display time	schedule	See Common Input Parameters on page 25.

The following example shows the output for **display time**.

```
display time
                                DATE AND TIME
DATE
    Day of the Week: Tuesday      Month: October
    Day of the Month: 16          Year: 2007

TIME
Hour: 8   Minute: 5   Second: 51

WARNING: Changing the date or time will impact BCMS, CDR and MEASUREMENTS
```

display time field descriptions

display time field descriptions

Field	Description
Day of the Week	The day of the week that the system has stored.
Day of the Month	The numerical day of the month.
Month	The month of the year stored by the system.
Year	The current year stored by the system.
Hour	The hour of the current day.
Minute	The number of minutes into the hour.
Second	The number of seconds into the minute stored by the system.

set time

`set time`

Use `set time` to show and edit the current day, date, month, year and time kept by the system clock. The second field is set to zero when the time on the clock is altered.

set time input screen

set time	Page 1 of 1
DATE AND TIME	
DATE	
Day of the Week: Thursday	Month: October
Day of the Month: 11	Year: 2007
TIME	
Hour: 8 Minute: 16	Second: 31 Type: Standard
Daylight Savings Rule: 0	
WARNING: Changing the date or time may impact BCMS, CDR, SCHEDULED EVENTS, and MEASUREMENTS	

Note:

When the system clock is upgraded from an earlier release, the daylight savings time rule on the `set time` screen defaults to **0** (no rule). When you change the daylight savings time rule, the system clock automatically adjusts during the next transition of the rule.

set time field descriptions

These are the fields on the `set time` input screen. The current time, or default time appears in the fields.

set time field descriptions 1 of 2

Field	Description
Day of the Week	Valid entries are Monday through Sunday.
Day of the Month	1-31 are valid entries. A check for leap year is also made.
Month	January through December.
1 of 2	

set time field descriptions 2 of 2

Field	Description
Year	The year must be saved as translation data and passed to the kernel whenever kernel memory is corrupted (system reboot or cold I restart), or the data is changed.
Hour	0-23 are valid entries.
Minute	0-59 are valid entries.
Second	This field is reset automatically and cannot be altered.
Type	Daylight-savings = daylight savings time Standard = standard time
Daylight Savings Rule	The daylight savings time rule number (0 to 15). Rule 0 is no daylight savings time, and rule 1 defaults to U.S. daylight savings time rule.
2 of 2	

tone-clock

See:

[set tone-clock](#) on page 605

[test tone-clock](#) on page 606

set tone-clock

set tone-clock cabinetc [carrier] [override]

On port networks not controlled by an IPSI, use **set tone-clock** to force a Tone-Clock interchange.

On port networks with duplicated Tone-Clocks, use **set tone-clock** to select which of the two Tone-Clock circuit packs is to be active.

On port networks with an IPSI for a Tone-Clock, **set tone-clock** is blocked.

In PNs, the A-carrier Tone-Clock is the preferred Tone-Clock. It is always active unless a failure, maintenance testing, or **set tone-clock** caused an interchange to the B-carrier Tone-Clock. If you use **set tone-clock** during a maintenance session, set the PN Tone-Clock back to the A carrier when you are finished, assuming it is healthy.

Maintenance SAT Commands

Tone-clock interchanges executed by scheduled daily maintenance cause the standby to become active for 20 seconds and then interchange back to whichever Tone-Clock was originally active.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>set tone-clock</code>	<code>cabinet</code>	Cabinet number of the Tone-Clock to be activated.	init inads craft	1
	<code>carrier</code> <code>override</code>	Carrier of the Tone-Clock to be activated. Executes the set command regardless of the health of the Tone-Clock circuit pack.  CAUTION: Use of this option is destructive to an entire port network for PNs. Examples: <code>set tone-clock 01c override</code> <code>set tone-clock a</code>		

test tone-clock

`test tone-clock UUC [short | long] [repeat# | clear] [schedule]`

Use `test tone-clock` to perform hardware diagnostic tests on the three maintenance objects on a specified IPSI, or Tone-Clock circuit pack on **S8700 MC**: TONE-BD, TONE-PT, TDM-CLK.

See the MO information for [TONE-BD \(Tone-Clock Circuit Pack\)](#), [TONE-PT \(Tone Generator\)](#), and [TDM-CLK \(TDM Bus Clock\)](#) in *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)*.

trace

list trace

```
list trace station ext | tac tac# | attendant | data-module | previous
| advocate | ewt | media-gateway | ras | vdn | vector
```

Use `list trace` to view:

- | the Virtual Path Identifier (VPI) and Virtual Channel Identifier (VCI) data, including incoming (`list trace tac`) and outgoing (`list trace station`) MFC signaling information
- | the source of the audio for a call being traced

Use `list trace` to troubleshoot:

- | misdirected calls
- | trunking/routing problems
- | call denials
- | DS1 connectivity to other vendor equipment

List trace commands can be used with Tenant Partitioning only with an init login.

See:

[list trace media-gateway](#) on page 609

[list trace ras](#) on page 609

[list trace station](#) on page 611

[list trace tac](#) on page 614

[list trace vdn](#) on page 615

[list trace vector](#) on page 616

list trace command options 1 of 2

Action/ Object	Qualifier	Qualifier Description	Login
list trace			init inads craft cust
	advocate	Examples: list trace advocate agent <agent_loginID> list trace advocate skill <skill_number>	
	attendant	Trace calls to and from the attendant extension to monitor attendant-activated console features.	
	data-module	Trace calls to and from data modules	
	ewt	Observe processing events of all calls, to verify that Expected Wait Time is operating as expected. list trace ewt traces all events that change the ewt for that skill at that priority level. list trace ewt is blocked when Tenant Partitioning is enabled. Examples: list trace ewt low <skill_number> list trace ewt medium <skill_number> list trace ewt high <skill_number> list trace ewt top <skill_number>	
	media-gateway	Trace media-gateway registration messages. See list trace media-gateway on page 609.	
	previous	Show the results of the previous trace	
	ras	Observe Avaya Communication Manager processed RAS messages (registration, keepalive, admission, status, unregistration) between two H.323 entities for gatekeeper discovery and endpoint registration. See list trace ras on page 609	
	station ext	Trace calls originating from and terminating to a specific station extension. See list trace station on page 611.	
	tac tac#	Trace calls entering and leaving the server on a specific trunk group number. See list trace tac on page 614.	
	vdn	Trace vdn (Vector Directory Number) operations. Show the next call that enters the VDN, through all vectors, until the call leaves vector processing. A list trace vdn command resembles list trace vector, except that list trace vdn follows the call through multiple vectors. See list trace vdn on page 615.	

1 of 2

list trace command options 2 of 2

Action/ Object	Qualifier	Qualifier Description	Login
	vector	Trace vector operations. For a specific vector, show the next call that enters the vector, each vector step being executed, and data for steps associated with Best Service Routing until the call leaves the vector. See list trace vector on page 616.	
list trace (cont.)		Examples: list trace attendant 12345 list trace previous list trace media-gateway ip-address	
			2 of 2

list trace media-gateway

list trace media-gateway ip-address | identifier

Use **list trace media-gateway** to trace media-gateway registration messages and denial events. **List trace media-gateway** traces registration messages:

- ┆ ServiceChangeRequest
- ┆ ServiceChangeReply
- ┆ NotificationRequest (only Keep Alives)
- ┆ NotificationReply (only Keep Alives)

list trace ras

list trace ras [ip-address x | ip-stations x | forced_urqs]

Use **list trace ras** to see the RAS (registration, admission, status) messages that Communication Manager is processing between:

- ┆ servers in an ESS configuration
- ┆ servers in an LSP/ESS configuration
- ┆ gatekeepers and endpoints

This can be limited to a single station or expanded to the whole system. It shows registration, keepalive, and unregistration requests.

Maintenance SAT Commands

This information is helpful when an endpoint fails to register. For example, use **list trace ras** for a particular endpoint, then register the endpoint. If no commands appear on the output screen, the gatekeeper is not receiving the message from the endpoint. Check for a network problem.

- | **list trace ras ip-address x** shows RAS messages between the entity owning the IP address and the recipients of its messages. To monitor registration requests from the ESS, use **list trace ras ip-address** to display registration requests from the ESS and the associated response from the Main server.
- | **list trace ras ip-stations x** shows RAS messages between the gatekeeper and endpoints using the extensions specified in the command.
- | **list trace ras forced_urqs** shows some RAS unregistration request (URQ) messages sent by the gatekeeper to force unregister endpoints. Not all gatekeeper-originated URQ messages are captured here. See the denial event log (**display events**, Category = denial) for a complete record.

The following example shows a typical output for **list trace ras ip-address** for an ESS in an ESS configuration.

The first message exchange is the ESS sending a Registration Request (RRQ) to the Main server. The Main responds with a Registration Confirmation (RCF). The ESS and Main continue a conversation where the ESS sends a Keep-Alive message (KARRQ) and the Main confirms it (RCF). Note that under normal operation a Keep-Alive (KA) message is periodically sent from the ESS to the Main server. This should not be confused with a registration failure.

```
list trace ras ip-address 135.9.78.143                                Page 1
                                                                    LIST TRACE
time      data
11:01:02  rcv RRQ endpt 135.9.78.143:1719 switch 135.9.72.168:1719 ext
11:01:02  snd RCF endpt 135.9.78.143:1719 switch 135.9.72.168:1719 ext
11:03:02  rcv KARRQ endpt 135.9.78.143:1719 switch 135.9.72.168:1719 ext
11:03:02  snd RCF endpt 135.9.78.143:1719 switch 135.9.72.168:1719 ext
11:04:02  rcv KARRQ endpt 135.9.78.143:1719 switch 135.9.72.168:1719 ext
11:04:02  snd RCF endpt 135.9.78.143:1719 switch 135.9.72.168:1719 ext
11:05:02  rcv KARRQ endpt 135.9.78.143:1719 switch 135.9.72.168:1719 ext
11:05:02  snd RCF endpt 135.9.78.143:1719 switch 135.9.72.168:1719 ext
11:06:02  rcv KARRQ endpt 135.9.78.143:1719 switch 135.9.72.168:1719 ext
11:06:02  snd RCF endpt 135.9.78.143:1719 switch 135.9.72.168:1719 ext
11:07:02  rcv KARRQ endpt 135.9.78.143:1719 switch 135.9.72.168:1719 ext
```

The following example shows another output for **list trace ras ip-address** for an ESS in an ESS configuration.

In this example the ESS sends a Registration Request (these appear as KARRQ messages at the main) and the Main server responds with Registration Confirmation (RCF) messages.

list trace ras ip-address 135.9.72.168									
									Page 1
LIST TRACE									
time	data								
11:01:02	snd	RRQ	endpt	135.9.72.168:1719	switch	135.9.78.143:1719	ext		
11:01:02	rcv	RCF	endpt	135.9.72.168:1719	switch	135.9.78.143:1719	ext		
11:03:02	snd	RRQ	endpt	135.9.72.168:1719	switch	135.9.78.143:1719	ext		
11:03:02	rcv	RCF	endpt	135.9.72.168:1719	switch	135.9.78.143:1719	ext		
11:04:02	snd	RRQ	endpt	135.9.72.168:1719	switch	135.9.78.143:1719	ext		
11:04:02	rcv	RCF	endpt	135.9.72.168:1719	switch	135.9.78.143:1719	ext		
11:05:02	snd	RRQ	endpt	135.9.72.168:1719	switch	135.9.78.143:1719	ext		
11:05:02	rcv	RCF	endpt	135.9.72.168:1719	switch	135.9.78.143:1719	ext		
11:06:02	snd	RRQ	endpt	135.9.72.168:1719	switch	135.9.78.143:1719	ext		
11:06:02	rcv	RCF	endpt	135.9.72.168:1719	switch	135.9.78.143:1719	ext		

In this example, the ESS is incorrectly configured on the Configure Identities page of Configure Server to have Server ID 98, but it is administered on the SAT command **change system-parameters ess** screen to have Server ID 97 on the Main server. Notice that on the Main a denial event occurs when the ESS attempts to register. Use **display events** to see Denial Event information.

list trace ras ip-address 135.9.78.143										Page	1
LIST TRACE											
time		data									
12:47:42		rcv RRQ endpt 135.9.78.143:1719 switch 135.9.72.168:1719 ext									
12:47:42		denial event 3600: IP RRJ-ESS not admin endpt 135.9.78.143 data0:0x0									
12:47:42		snd RRJ endpt 135.9.78.143:1719 switch 135.9.72.168:1719 ext									

list trace station

list trace station ext

Use **list trace station** to trace the time and activity on a specific station.

Maintenance SAT Commands

The following example shows the output for **list trace station** for an outgoing MFC call with ANI. Check the outgoing MFC signaling with the entries that show when the far end requests ANI (send ANI), signals end-of-dial, and that the called party is free (ring).

list trace station 52501		Page 1
LIST TRACE		
Time	Data	
19:24:29	active station 52051 cid 0x10	
19:24:32	dial *07535	
19:24:32	term trunk-group 111 cid 0x10	
19:24:32	dial *07535	
19:24:32	seize trunk-group 111 member 2 cid 0x10	
19:24:33	send ANI 5352051	
19:24:33	end-of-dial cid 0x10	
19:24:33	dial *075351001	
19:24:33	ring 5351001	
19:24:33	active trunk-group	
19:24:35	idle station 52051 cid 0x10	
19:24:44	TRACE COMPLETE station 52051 cid 0x10	

Use **list trace station** to check VPI.VCI data for a specific station. Add **/a** after the extension (**ext/a**) to request ATM-specific trace data.

The following screen shows VPI.VCI and ATM-specific trace data for a successful 2-party call setup.

list trace station 52501/a		Page 1
LIST TRACE		
Time	Data	
15:12:07	Calling party station 57405 cid 0x20	
15:12:09	dial 52501	
15:12:09	ring station 52501 cid 0x20	
15:12:09	ATM setup PN01-0081 to PN03-0045	
15:12:09	ATM setup PN03-0046 to PN01-0082	
15:12:11	active station 52501 cid 0x20	
15:12:22	idle station 57405 cid 0x20	

The following screen shows a sample output of **list trace station** with an announcement connection. The announcement information in the Data section of the screen begins with hear and may include the audio group number and member number, music on hold and port, and network region and extension.

```
list trace station 51001                                     Page 1
                                                                LIST TRACE

    Time      Data
11:38:33    dial 52099
11:38:33    ring vector 1 cid 516
11:38:34    hear audio group 1 member 201 netrgrn 3 ext 50505
11:38:41    hear annnc ext 55526
11:38:41    TRACE COMPLETE station 51001 cid 516
```

The following screen shows a sample output of **list trace station** following Call Type Digit Analysis. Calltype analysis messages are logged when the station makes a logdialing request. After the modified string is passed to existing dial plan analysis routines (UDP, AAR, ARS) and the call is handed off, list trace continues to work on the call.

List trace station shows the phone's location in the logdial row of the output screen.

```
list trace station 11                                         Page 1
                                                                LIST TRACE

time data
10:18:34    active station 11 cid 0x7
10:18:34    G711MU ss:off ps:20 rn:1/1 135.9.170.99:2374 135.9.97.94:2148
10:18:34    xoip: fax:Relay modem:off tty:US 135.9.97.94:2148 uid:0x9
10:18:35    dial 6000
10:18:35    ring station 6000 cid 0x7
10:18:35    calltype 6000# match=6000
10:18:35    calltype 6000 call_type EXT,loc=ALL,match=6000
10:18:35    G711MU ss:off ps:20 rn:1/1 135.9.170.78:2388 135.9.97.94:2152
10:18:35    xoip: fax:Relay modem:off tty:US 135.9.97.94:2152 uid:0x1
10:18:36    active station 6000 cid 0x7
10:18:36    G711MU ss:off ps:20 rn:1/1 135.9.170.99:2374 135.9.170.78:2388
10:18:36    G711MU ss:off ps:20 rn:1/1 135.9.170.78:2388 135.9.170.99:2374
10:18:36    idle station 6000 cid 0x7
```

list trace tac

```
list trace tac tac# [ / [q] [d] [a] ]
```

Use `list trace tac` to trace calls entering and leaving the server via a trunk group. To request additional trace data, follow `tac#` with a slash (/) and then one or more of these qualifiers:

q	Requests trace data of QSIG operations, such as diversion, diversion with reroute and path replacement, performed on the specified trunk. QSIG trace data displayed includes reject and invoke information and return errors.
d	Requests trace data on calls made over a specified trunk group.
a	Requests ATM-specific trace data for specified trunk.

Examples

```
list trace tac 48
list trace tac *14/q
list trace tac 284/dqa
```

The following example shows the output for `list trace tac tac#/q` requesting QSIG trace data with an outgoing call on trunk *14 to a station that had call forwarding turned on. The "DV_RR" data line shows the attempted QSIG diversion reroute.

list trace tac *14/q		Page 1
		LIST TRACE
time	data	
14:08:56	dial 86242000	
14:08:56	route-pattern 14 preference 1 cid 0xb	
14:08:56	seize trunk-group 14 member 2 cid 0xb	
14:08:56	Setup digits 2000	
14:08:56	Calling Number & Name 5382500 stat 2500	
14:08:56	Proceed trunk-group 14 member 2 cid 0xb	
14:08:56	Alert trunk-group 14 member 2 cid 0xb	
14:09:07	QSIG<in DV_RR Invk 6242001 invkid 0x17	
14:09:07	dial 8624	
14:09:07	term trunk-group 14 cid 0xb	
14:09:07	QSIG>out DV_L2 Invk 3035382000 invkid 0x19	
14:09:07	QSIG>out DV_L2 Invk 3035382000 invkid 0x19	
14:09:07	dial 86242001#	
14:09:07	route-pattern 14 preference 1 cid 0xb	
14:09:07	seize trunk-group 14 member 3 cid 0xb	

The following example shows the output for **list trace tac tac#/q** requesting QSIG trace data on a call incoming on trunk *15 that is call forward no response, attempting a QSIG diversion reroute.

```
list trace tac *15/q                                     Page 1
LIST TRACE
time          data
14:10:20      Calling party trunk-group 15 member 4 cid 0xf
14:10:20      Calling Number & Name 5382500 stat 2500
14:10:20      active trunk-group 15 member 4 cid 0xf
14:10:20      dial 2000
14:10:20      ring station 2000 cid0xf
14:10:30 QSIG>out DV_RR Invk 6242001 invkid 0x22
14:10:30      idle trunk-group 15 member 4 cid 0xf
```

The following example shows the output for **list trace tac** on an incoming call with MFC signaling, showing the call Category (1) and the Calling Party Number (532010).

```
list trace tac 692                                     Page 1
LIST TRACE
Time          Data
19:31:19      active trunk-group 112 member 3 cid 0x23
19:31:21      dial 51001
19:31:21      Category + CPN 1532010
19:31:31      active station 51001 cid 0x23
19:31:41      idle trunk-group 112 member 3 cid0x23
19:31:41 TRACE COMPLETE trunk-group 112 cid 0x23
```

list trace vdn

list trace vdn vdn#

Use **list trace vdn** to trace vdn (Vector Directory Number) operations. Show the next call that enters the VDN, through all vectors, until the call leaves vector processing. A **list trace vdn** command resembles **list trace vector**, except that **list trace vdn** follows the call through multiple vectors. See *Avaya Call Center Release 4.01 Call Vectoring and Expert Agent Selection (EAS) Guide*, 07-600780 (formerly 07-300477, 07-300186, 555-230-714) for more information.

The following example shows the output for **list trace vdn**.

```
list trace vdn 2000

                                LIST TRACE

time      vec st data
08:56:22  0  0 ENTERING TRACE cid 3
08:56:22  1  1 vdn e2000 bsr appl 0 strategy 1st-found override n
08:56:22  1  1 goto
08:56:22  1  1 time-of-day(5:08:56)
08:56:22  1  1 vector=2, step=1
08:56:22  2  1 disconnect
08:56:22  2  1 announcement: board 01A05 ann ext: 4503
08:56:26  2  2 LEAVING VECTOR PROCESSING cid 3
08:56:26  2  2 TRACE COMPLETE cid 3
```

list trace vector

list trace vector #

Use **list trace vector** to trace vector operations. For a specific vector, see the next call that enters the vector, each vector step being executed, and data for steps associated with Best Service Routing until the call leaves the vector. See *Avaya Call Center Release 4.01 Call Vectoring and Expert Agent Selection (EAS) Guide, 07-600780 (formerly 07-300477, 07-300186, 555-230-714)* for more information.

The following examples show the output for **list trace vector**.

```
list trace vector 1

                                LIST TRACE

time vec st data
08:56:51 0 0 ENTERING TRACE cid 4
08:56:51 1 1 vdn e2000 bsr appl 0 strategy 1st-found override n
08:56:51 1 1 goto
08:56:51 1 1 time-of-day(5:08:56)
08:56:51 1 1 TRACE COMPLETE cid 4
```

```
list trace vector 2
LIST TRACE
time vec st data
08:57:25 2 0 ENTERING TRACE cid 5
08:57:25 2 1 disconnect
08:57:25 2 1 announcement: board 01A05 ann ext: 4503
08:57:28 2 2 LEAVING VECTOR PROCESSING cid 5
08:57:28 2 2 TRACE COMPLETE cid 5
```


Here are examples of messages from `list trace vector`.

List trace vector messages 1 of 3

All messages start with the hour, minute, second, vector and step	
ALL PLATFORMS HH:MM:SS VVVV SS ENTERING TRACE cid <cid> HH:MM:SS VVVV SS vdn <vdn> bsr appl ### strategy 1st-found override <ovr> HH:MM:SS VVVV SS vdn <vdn> bsr appl ### strategy EAD-LOA override <ovr> HH:MM:SS VVVV SS vdn <vdn> bsr appl ### strategy EAD-MIA override <ovr> HH:MM:SS VVVV SS vdn <vdn> bsr appl ### strategy UCD-LOA override <ovr> HH:MM:SS VVVV SS vdn <vdn> bsr appl ### strategy UCD-MIA override <ovr> HH:MM:SS VVVV SS LEAVING VECTOR PROCESSING cid <cid> HH:MM:SS VVVV SS TRACE COMPLETE cid <cid> HH:MM:SS VVVV SS TRACE BUFFER FULL HH:MM:SS VVVV SS TRACE TIMED OUT HH:MM:SS VVVV SS HH:MM:SS VVVV SS adjunct HH:MM:SS VVVV SS announcement HH:MM:SS VVVV SS busy HH:MM:SS VVVV SS check HH:MM:SS VVVV SS collect HH:MM:SS VVVV SS consider HH:MM:SS VVVV SS converse-on HH:MM:SS VVVV SS disconnect HH:MM:SS VVVV SS goto HH:MM:SS VVVV SS messaging HH:MM:SS VVVV SS queue-to HH:MM:SS VVVV SS reply-best HH:MM:SS VVVV SS return HH:MM:SS VVVV SS route-to HH:MM:SS VVVV SS route-to Meet-me Conference	
1 of 3	

List trace vector messages 2 of 3

All messages start with the hour, minute, second, vector and step

```

HH:MM:SS VVVV SS set
HH:MM:SS VVVV SS stop
HH:MM:SS VVVV SS wait-time
HH:MM:SS VVVV SS consider skill ### pri <pri> ewt <ewt> adjusted ewt <aewt>
HH:MM:SS VVVV SS consider location ### ewt <ewt> adjusted ewt <aewt>
HH:MM:SS VVVV SS consider skill ### pri <pri> idle time <idle>
HH:MM:SS VVVV SS consider location ### idle time <idle>
HH:MM:SS VVVV SS consider skill ### pri <pri> occupancy <occ>
HH:MM:SS VVVV SS consider location ### occupancy <occ>
HH:MM:SS VVVV SS consider skill ### pri <pri> idle time <idle> skill level <lvl>
HH:MM:SS VVVV SS consider location ### idle time <idle> skill level <lvl>
HH:MM:SS VVVV SS consider skill ### pri <pri> occupancy <occ> skill level <lvl>
HH:MM:SS VVVV SS consider location ### occupancy <idle> skill level <lvl>
HH:MM:SS VVVV SS ADJUSTING: local adj ### rem adj ## adj idle time <idle>
HH:MM:SS VVVV SS ADJUSTING: local adj ### rem adj ## adj occ time <occ>
HH:MM:SS VVVV SS reply-best ewt <ewt> adjustment #### idle time ####
HH:MM:SS VVVV SS occupancy ### skill level ##
HH:MM:SS VVVV SS queueing to skill ### pri <pri>
HH:MM:SS VVVV SS queueing to location ### interflow vdn <vdn>
HH:MM:SS VVVV SS location ### being suppressed for ### seconds
HH:MM:SS VVVV SS consider location ### polling suppressed
HH:MM:SS VVVV SS consider location ### ignored, available agent found
HH:MM:SS VVVV SS consider skill ### ignored, available agent found
HH:MM:SS VVVV SS queue attempt FAILED
HH:MM:SS VVVV SS NO BEST DATA DEFINED
HH:MM:SS VVVV SS consider location ### POLL FAILED
HH:MM:SS VVVV SS consider location ### NO DATA RETURNED FROM POLL
HH:MM:SS VVVV SS consider location ### BAD DATA RETURNED FROM POLL
HH:MM:SS VVVV SS consider location ### BAD RESPONSE FROM POLL
HH:MM:SS VVVV SS consider location ### LOCATION NOT ADMINISTERED
HH:MM:SS VVVV SS consider location INVALID, NOT CONSIDERED
HH:MM:SS VVVV SS consider location ### POLLING VDN NOT ADMINISTERED
HH:MM:SS VVVV SS consider location ### BSR PLAN NOT ADMINISTERED
HH:MM:SS VVVV SS location ### INTERFLOW FAILED
HH:MM:SS VVVV SS DELAYED BRI DOWN location ### trkgrp <tgrp>
HH:MM:SS VVVV SS NCR: No NCT PSTN service tgrp <tgrp> err_rc <err>
HH:MM:SS VVVV SS NCR: No NCT outgoing trk tgrp <tgrp> err_rc <err>
HH:MM:SS VVVV SS NCR: NCT outgo trk drop tgrp <tgrp> err_rc <err>
HH:MM:SS VVVV SS NCR: PSTN NCT invoke err tgrp <tgrp> net_rc <err>
HH:MM:SS VVVV SS NCR: PSTN NCT netwrk err tgrp <tgrp> net_rc <err>
HH:MM:SS VVVV SS NCR: Used NCT trk-to-trk tgrp <tgrp> net_rc <err>
HH:MM:SS VVVV SS NCR: No NCD PSTN service tgrp <tgrp> net_rc <err>
HH:MM:SS VVVV SS NCR: NCD invalid PSTN nmbr tgrp <tgrp> net_rc <err>
HH:MM:SS VVVV SS NCR: NCD call connect err tgrp <tgrp> err_rc <err>

```

2 of 3

List trace vector messages 3 of 3

All messages start with the hour, minute, second, vector and step	
HH:MM:SS VVVV SS	NCR: PSTN NCD invoke err tgrp <tgrp> net_rc <err>
HH:MM:SS VVVV SS	NCR: PSTN NCD netwrk err tgrp <tgrp> net_rc <err>
HH:MM:SS VVVV SS	NCR: PSTN NCD max redirs tgrp <tgrp> net_rc <err>
HH:MM:SS VVVV SS	NCR: PSTN NCD no disc tgrp <tgrp> err_rc <err>
HH:MM:SS VVVV SS	NCR: NCR internal system error cid <cid>
HH:MM:SS VVVV SS	variable <var> = [<assign>] <aux>
HH:MM:SS VVVV SS	variable V<var> = [<assign>] <aux>
HH:MM:SS VVVV SS	digits = [<assign>] <aux>
HH:MM:SS VVVV SS	===== ADD =====
HH:MM:SS VVVV SS	===== SUB =====
HH:MM:SS VVVV SS	===== MUL =====
HH:MM:SS VVVV SS	===== DIV =====
HH:MM:SS VVVV SS	===== CATL =====
HH:MM:SS VVVV SS	===== CALR =====
HH:MM:SS VVVV SS	===== MOD =====
HH:MM:SS VVVV SS	===== MOD10 =====
HH:MM:SS VVVV SS	===== SEL =====
HH:MM:SS VVVV SS	time-of-day(<assign>) <aux>
HH:MM:SS VVVV SS	EWT:<assign> - New EWT:<aux>
HH:MM:SS VVVV SS	operand = [<assign>] <aux>
HH:MM:SS VVVV SS	vector=<vec>, step=<step>
HH:MM:SS VVVV SS	no return destination
HH:MM:SS VVVV SS	hear moh port <port>
HH:MM:SS VVVV SS	Local Agent Preference=n
HH:MM:SS VVVV SS	Local Call Preference=n
HH:MM:SS VVVV SS	Local Agent Preference=y Call Location ID=<id>
HH:MM:SS VVVV SS	Local Call Preference=y Agent Location ID=<id>
HH:MM:SS VVVV SS	Agent Login ID: <login> Logged in at station: <station>
HH:MM:SS VVVV SS	Local Preference: No local agents
HH:MM:SS VVVV SS	Alternate BSR Tie Strategy: Best
HH:MM:SS VVVV SS	Alternate BSR Tie Strategy: Not best
ONLY IF NOT GAZ:	
HH:MM:SS VVVV SS	announcement: board <port> ann ext: <ext>
HH:MM:SS VVVV SS	music announcement: board <port> ann ext: <ext>
3 of 3	

trace-route

trace-route *ip-address ip-address | node-name node-name [board board | source source] [clan-port clan-port]*

Use **trace-route ip-address** to trace the route of packets originated from TN IP circuit packs through the LAN. The output shows the IP address of each router or host (hop) that the packets encounter and the time elapsed between each hop. If a TN IP circuit pack has trouble

Maintenance SAT Commands

communicating with a far-end device, **trace-route** can determine “how far” packets get toward the destination.

TN IP circuit packs include:

- ┆ TN799B (or later suffix) C-LAN board
- ┆ TN802B Medpro board
- ┆ TN2302 IP Medpro board
- ┆ TN2602 IP Medpro board

The output screen lists:

- ┆ Hops traversed from source to destination
- ┆ IP addresses of the hop points and the final destination
- ┆ Observed round-trip delay from the source to each hop point

If no reply is received from a potential hop point, **IP Address** contains stars (*), which indicates a timeout condition.

The primary use of **trace-route** is to determine quickly and unambiguously if the fault lies within Avaya-provided equipment, or if the fault is with the LAN or LAN administration to which the server switch is connected.

Action/ Object	Qualifier	Qualifier Description	Login	Default
trace-route	ip-address ip-address node-name node-name board board clan-port clan-port source schedule	Where IP address is www.xxx.yyy.zzz From node-name screen Cabinet-carrier-slot address of the active (not busied-out) IP circuit pack Port 1-17 (port must be translated) An endpoint's virtual port ID See Common Input Parameters on page 25.	init inads craft cust	primary ip address
		Examples: trace-route node-name srlclan1 source S00015 trace-route ip-address 123.4.56.789 board 1C14 clan-port 2		

Note:

The default DiffServ and 802.1p/Q parameters downloaded to a IP Media Processor board are used for **ping** and **trace-route** commands which are sourced from that IP Media Processor. The recipient of a **ping** replies with the same QoS value found in the received packet, and the measurements reported should reflect the behavior of the type of packets sent. IP Media Processor-sourced pings should reflect audio transport performance and C-LAN-sourced pings should reflect control information transport performance.

The following shows an example output for a C-LAN **trace-route**. For Medpro boards, the **clan-port** qualifier (1-17) does not appear.

trace-route ip-address 135.9.1.22 board 1C14 clan-port 2		
TRACE ROUTE RESULTS		
Hop	Time (ms)	IP Address
0	from address	130.9.1.20
1	03,10,05	130.9.14.20
2	11,20,03	130.9.5.100
3	22,01,25	100.245.20.200
4	22,01,25 !N	100.245.27.200

trace-route field descriptions**trace-route field descriptions 1 of 2**

Field	Description
clan-port	Port on the C-LAN board from which trace-route is issued. Note: If no C-LAN port is specified for trace-route on a ppp link, traceroute defaults to the ethernet port (port 17, SAT passed port 0). This field appears only if the board is a C-LAN board.
Hop	The node number (in sequence). The 0 node is the address from which traceroute is issued.
1 of 2	

trace-route field descriptions 2 of 2

Field	Description
Time (ms)	Time from the board to each intermediate destination and back in milliseconds. If an error occurs at a node, the entry is repeated with an error code immediately following the time. Error codes and their meanings are: ! - Unable to reach port !N - Unable to reach network !H - Unable to reach host !P - Failure between endpoints !F - Need fragmentation of data packet !S - Source return failure !X - Packet blocked by filter " - Timeout - no data available
IP Address	The 32-bit network address.
2 of 2	

trace-route error messages**trace-route command error messages**

Message	Interpretation
Port not up	Port or link is down
Out of service	RSCL is down
Try later	No socket is available
Ethernet port not translated	Ethernet port is not administered

traffic**monitor traffic**

```
monitor traffic trunk-groups [starting-group#]
monitor traffic hunt-groups [starting-group#]
```

Use **monitor traffic** to see the current load on specified trunk and hunt groups, the number of trunk group and hunt group calls waiting to be serviced, and the length of time that the oldest call in the group has been waiting.

Action/Object	Qualifier	Qualifier Description	Login	Default
monitor traffic trunk-groups	starting-group#	Number of calls in the queue waiting to be serviced for each trunk group. The number of members in the group and the number of members active on calls appear for comparative analysis. Only administered trunk groups up to a maximum of 60 appear. Use # to specify the starting trunk group. For example, enter 5 to see trunk groups from group 5 and up.		
monitor traffic hunt-groups	starting-group#	Shows trunk-group report information plus how long the oldest call in each group's queue has been waiting. Updated every minute. Unadministered hunt groups are blank.		

The following display shows a typical result for **monitor traffic hunt-groups**.

monitor traffic hunt-groups												
						HUNT GROUP		STATUS		22:49 THU OCT 25 2007		
#	S	A	Q	W	LCIQ	#	S	A	Q	W	LCIQ	
1	1	0	n	0	0	17						
2	0	0	y	0	0	18						
3	0	0	y	0	0							
4						20						
5						21						
6						22						
7						23						
8						24	16	5	0	0	10	
9						25						
10						26						
11						27						
12						28						
13						29						
14						30						
15						31						
16						32						
#: Group; S: Grp Size; A: Active Members; Q: Queue?; W: Calls Waiting)												
(LCIQ: Longest Call In Queue in seconds)												

The following display shows a typical result for **monitor traffic trunk-groups**.

monitor traffic trunk-groups																			
										TRUNK GROUP STATUS					22:49 Thu OCT 25, 2007				
#	S	A	Q	W	#	S	A	Q	W	#	S	A	Q	W	#	S	A	Q	W
1	15	10	0	0															
2	22	21	10	10															
9	31	12	20	0															
65	5	5	10	8															
99	12	0	0	0															
(#: Group; S: Grp Size; A: Active Members; Q: Q Length; W: Calls Waiting)																			

monitor traffic field descriptions

monitor traffic hunt-groups and monitor traffic trunk-groups field descriptions

Field	Description
#	Group number for the trunk group or hunt group.
S	The number of members administered for each trunk or hunt group.
A	The number of members in a group that are active on a call. This does not include busied out members.
Q	The length of the queue administered for a group.
W	The number of calls waiting in the group queue to be serviced.
LCIQ	The time, in seconds, the oldest call in the hunt group queue has been waiting to be serviced.

translation

save translation

```
save translation [ all | ess | lsp ]
```


Note:

save translation can take up to 5 minutes to complete. Avoid pressing the ENTER key on the keyboard during this time, or result messages will be lost.

Use **save translation** to commit the active server translations (volatile) in memory to a file (non-volatile). It either completes or fails. For Linux platforms, the translation file is copied to the standby server by a filesync process.

Action/Object	Qualifier	Qualifier Description
save translation		Commit the active server translations (volatile) in memory to a file (non-volatile). It either completes or fails. For S8700 series servers, the translation file is copied to the standby server by a filesync process. ┆ On ESS, saves translation changes only on the main server pair.
	all	Save translations to all ESSs, Local Survivable Processors (LSPs) and the main server pair.
	ess	From the Server, send changed translations to the active server and to the standby for S8700 series servers, and to the ESS by a filesync process.
	lsp	From the Server, send changed translations to the active server and to the standby for S8700 series servers, and to the LSP by a filesync process.

All translation data is kept in volatile system memory or on the hard drive during normal operation. In the event of a power outage or certain system failures, data in memory is lost. **Save translation** stores on disk the translation data currently in memory.

When a SAT user issues **save translation** on a duplicated system, translations are saved on both the active and standby servers. If an update of the standby server is already in progress, subsequent **save translation** commands fail with the message "**save translations has a command conflict**".

Save translation will not run and an error message appears when:

- ┆ translation data is being changed by an administration command
- ┆ translations are locked by use of the Communication Manager web interface Pre-Upgrade Step.

Run **save translation** as part of scheduled background maintenance or on demand. See [change system-parameters maintenance](#) on page 583 for more information

The following display shows a typical result for **save translation**.

save translation	
SAVE TRANSLATION	
Command Completion Status	Error Code
Success	0
Command Successfully Completed	

save translation field descriptions

save translation field descriptions

Field	Description
Command Completion Status	Identifies the success or failure of the command.
Error Code	Identifier for any error that occurred during translation.

tti-ip-stations

list tti-ip-stations

list tti-ip-stations

Use **list tti-ip-stations** to see information on the stations administered as in TTI service.

Stations in TTI service do not show up on the **list multimedia ip-unregistered** screen.

The following example shows the output from **monitor trunk 78/1**.

list tti-ip-stationd					
TTI SERVICE IP STATIONS					
Station	Product	Prod	Net	Gatekeeper	
IP Address	ID	Rel	Rgn	IP Address	Port
135.9.159.130	IP_Phone	2.200	1	135.9.159.128	S00074

trunk

See:

[busyout trunk](#) on page 627

[monitor trunk](#) on page 627

[release trunk](#) on page 629

[status trunk](#) on page 629

[test trunk](#) on page 634

busyout trunk

`busyout trunk group# [/member#]`

Use `busyout trunk` to put an entire trunk group or a single trunk-group member in a maintenance busy state, whether it is installed or uninstalled. Entering only the group number busies out every member in the group.

Note:

Entering a group number and a slash (/) without a member number busies-out the member with the lowest-numbered port location. This is not recommended.

Action/Object	Qualifier	Qualifier Description	Login
<code>busyout trunk</code>	<i>group#</i> <i>member#</i>	Trunk group number Number of particular trunk in a group Examples: <code>busyout trunk 78</code> <code>busyout trunk 78/1</code>	init inads craft

For more information, see [Common Input Parameters](#) on page 25, list, and [Busyout and Release Commands](#) on page 33.

monitor trunk

`monitor trunk group# / member#`

Maintenance SAT Commands

Use **monitor trunk** to see same information as [status trunk](#) on page 629. **Monitor trunk** updates the data automatically every minute, or manually with the **UPDATE** key. The terminal login is not dropped when you press **CANCEL** to cancel **monitor trunk**.

Action/Object	Qualifier	Qualifier Description	Login
monitor trunk	<i>trunk-groups</i> <i>hunt-groups</i>		init inads craft cust rcust bcms browse

The following example shows the output from **monitor trunk 78/1**.

monitor trunk 78/1	
TRUNK STATUS	
Trunk Group/Member: 078/001	Service State: in-service/idle
Port: 01C1505	Maintenance Busy? no
Signaling Group ID:	CA-TSC State:
Connected Ports:	

monitor trunk field descriptions

monitor trunk field descriptions 1 of 2

Field	Description
Trunk Group/Member	Trunk group and group member number. (1-99/1-99).
Port	The port location (cabinet-carrier-slot-circuit) for trunks.
Signaling Group ID	If the trunk is ISDN, this field contains the number of the ISDN Signaling Group. Otherwise, this field is blank.
Connected Ports	Port locations (cabinet-carrier-slot-circuit) connected to the trunk.
Service State	In-service/active, in-service/idle, out-of-service, out-of-service-NE (Near End), out-of-service-FE (Far End), maint-NE/active, maint-FE/active, maint-NE/idle, maint-FE/idle, pending-in-service, pending-maint, or disconnected. NE (Near End) and FE (Far End) refer to the "end" of the trunk that has placed the facility in its current state.
1 of 2	

monitor trunk field descriptions 2 of 2

Field	Description
Maintenance Busy	Identifies maintenance testing that occurs on the trunk.
CA-TSC State	The state of temporary signaling connections. (connection set up to pass call information over PRI signaling links).
2 of 2	

release trunk**release trunk**

Use **release trunk** to remove specified trunk groups or trunk group members from a maintenance busy state. Specifying the group number releases a single group member and the member number; specifying the trunk group number releases members in a trunk group.

For more information see [Busyout and Release Commands](#) on page 33.

Action/Object	Qualifier	Qualifier Description	Login
release trunk	group member	trunk group number trunk group member number	init inads craft

status trunk**status trunk group# [/ member#]**

Use **status trunk** to see information about the current status of a single trunk or of all members of a trunk group. You can also use **status trunk** to locate facilities with which the trunk is communicating.

Note:

If you use **status trunk** for a trunk that uses a 1d interface, you receive different information with **status trunk** on the near end of the trunk from **status trunk** on the far end of the trunk.

- 1 If you execute **status trunk** on the near end of the trunk, it correctly indicates whether or not the trunk is in a maintenance state.
- 1 If you execute **status trunk** on the far end of the trunk, it never indicates that the trunk is in a maintenance state. This is because the near end is unable to inform the far end of its maintenance state status.

Maintenance SAT Commands

See [monitor trunk](#) on page 627, which shows the same information as **status trunk** and updates the screen automatically every minute or on demand.

Action/Object	Qualifier	Qualifier Description	Login
status trunk	group# group#/ group#/ member#	Status all members of the trunk group. Status member number 1. Status a specific member of a trunk group. Examples: status trunk 78 status trunk 80/2	init inads craft cust rcust bcms browse

The following screen shows typical results for **status trunk** on [S8700 IP-PNC](#).

```

status trunk 20/1

                                TRUNK STATUS

Trunk Group/Member: 0020/001                Service State: in-service/idle
      Port: T00016                        Maintenance Busy? no
Signaling Group ID:                        CA-TSC state: none

Connected Ports:

      Port      Near-end IP Addr : Port      Far-end IP Addr : Port
Q.931: 08A0617  192.168. 18. 41   : 10071   172. 17. 17.107 : 7020
H.245:
Audio:

H.245 Tunneled in Q.931? no
      Audio Connection Type: ip-tdm                Media Encryption: aes

```

status trunk on [S8700 IP-PNC](#) field descriptions **1 of 2**

Field	Description
Trunk Group/ Member	Group and member numbers of specified trunks.
Port	The location of the port associated with the trunk.
Signaling Group ID	For ISDN trunks, the number of the signaling group to which the trunk group belongs. For other trunk types, the field is blank.
Connected Ports	Locations of ports currently connected to the trunk.
1 of 2	

status trunk on S8700 IP-PNC field descriptions 2 of 2

Field	Description
Service State	One of the following states appears: in-service/active, in-service/idle, out-of-service, out-of-service-NE (Near End), out-of-service-FE (Far End), maint-NE/active, maint-FE/active, maint-NE/idle, maint-FE/idle, pending-in-service, pending-maint, or disconnected. NE (Near End) and FE (Far End) refer to which end of the trunk has placed the facility in its current state. Explanations of these service states for each type of trunk appear in the maintenance object descriptions in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers (03-300430) (formerly 03-300190)</i> .
Maintenance Busy	Whether maintenance testing is currently being performed upon the trunk.
CA-TSC State	The status of the call-associated temporary signaling connection, if any. A TSC is a temporary connection set up to pass call information over ISDN-PRI signaling links.
Audio Connection Type	Shows ip-tdm, ip hairpin, ip direct, or ip idle.
Audio Switch Port	Shows a virtual port number (i.e., one starting with T). If a trunk is in ip-idle state, the Audio Switch Port field is blank.
Media Encryption	Enter aes for Advanced Encryption Standard encryption, standard used by U.S. government to protect sensitive (unclassified) information. Reduces circuit-switched to IP call capacity by 25%. Enter aea for Avaya Encryption Algorithm. Not as secure as AES. Enter none for an unencrypted media stream.
2 of 2	

Maintenance SAT Commands

For an IP-TDM call, the Audio Switch Port field shows one of ports 1-8 on a TN2302 Prowler board.

```
status trunk 1/19

                                     TRUNK STATUS

Trunk Group/Member: 01/19           Service State: in-service/active
      Port: T00123                 Maintenance Busy? no
Signaling Group ID: 1               CA-TSC state: not allowed
                                     MM Conference ID: 8
                                     MM Endpoint ID: 2

      Connected Ports: S00004

Switch                               IP                               IP
      Port      Near-end IP Addr: Port      Far-end IP Addr : Port
      Q.931: 12B1217 xxx.xxx.xxx.xxx : nnnnn xxx.xxx.xxx.xxx : nnnnn
      H.245: 12B1217 xxx.xxx.xxx.xxx : nnnnn xxx.xxx.xxx.xxx : nnnnn
G.711-MU   Audio: 12B11  xxx.xxx.xxx.xxx : nnnnn xxx.xxx.xxx.xxx : nnnnn

H.245 Tunneled in Q.931? no
      Audio Connection Type: ip hairpin
```

For an IP-MEDPRO-IP hairpin call, the Audio Switch Port field shows a cabinet and slot, but not a port, on a TN2302 Prowler board.

```
status trunk 1/19

                                     TRUNK STATUS

Trunk Group/Member: 01/19           Service State: in-service/active
      Port: T00123                 Maintenance Busy? no
Signaling Group ID: 1               CA-TSC state: not allowed
                                     MM Conference ID: 8
                                     MM Endpoint ID: 2

      Connected Ports: S00004

      Switch                               IP                               IP
      Port      Near-end IP Addr: Port      Far-end IP Addr : Port
      Q.931: 12B1217 xxx.xxx.xxx.xxx : nnnnn xxx.xxx.xxx.xxx : nnnnn
      H.245: 12B1217 xxx.xxx.xxx.xxx : nnnnn xxx.xxx.xxx.xxx : nnnnn
G.711-MU   Audio: T00123 xxx.xxx.xxx.xxx : nnnnn xxx.xxx.xxx.xxx : nnnnn

H.245 Tunneled in Q.931? no
      Audio Connection Type: ip direct
```


The following display shows a typical result when **status trunk** is entered for a trunk group with two members.

```
status trunk 1
```

TRUNK GROUP STATUS					
Member	Port	Service State	Mtce Busy	Connected Ports	
01/01	01A0101	in-service/idle	no	01A0501	02B0607
01/02	04A0702	in-service/idle	no	04C0604	

Use **status trunk** to generate a snapshot jitter and packet loss report for a particular trunk-group member.

In this instance, jitter is the variability in the amount of time (in milliseconds) that packets are received over the network. When jitter increases, the user experiences a noisy connection, delays, and a general loss of quality, making speech unintelligible.

If you issue **status trunk** for a non-IP station or the connection is hairpinned or shuffled, then the packet loss and jitter size information (page 2) does not appear. Refer to *Administration for Network Connectivity for Avaya Communication Manager*, (555-233-504) for more information.

```

status trunk 11/3
                                     Page      2 of      2

                                TRUNK STATUS

NETWORK STATUS

    Average Jitter (ms)                Packet Loss per Second
    Last Ten Seconds                    Last Ten Seconds
    # - more than 255ms                * - 100% loss

                                0                                0
                                0                                0
                                0                                0
                                0                                0
                                0                                0
                                0                                0
                                0                                0
                                0                                0
                                0                                0
                                0                                0
                                0                                0
                                0                                0
                                0                                0
                                0                                0
                                0                                0
                                0                                0
                                0                                0
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```

status trunk field descriptions

status trunk

Field	Description
Average Jitter Last Ten Seconds # - more than 255 ms	The average jitter in received packets from the last ten one-second intervals. # = more than 255 ms
Packet Loss per Second Last Ten Seconds * - 100% loss	The ten most recent one-second samples of the lost packet information for the requested endpoint. * = maximum (100%) packet loss per second during the one-second interval. * appears when silence suppression is y on the ip-codec-set screen, or when packet loss = 100%.
Out of Order Counter	A count of the number of out-of-order packets detected during the current connection.
SSRC Change for Call	The number of SSRC changes occurring during the current connection.
Last Rx Sequence No.	Last received data packet sequence number.
Last Tx Sequence No.	Last transmitted data packet sequence number.
Worst Case this Call	Jitter: the worst-case, 1-second jitter (ms) experienced during the current connection. Packet Loss: the worst-case, 1-second packet loss experienced during the current connection.
Average this Call	Jitter: the average jitter for the current connection (the running average of all the 1-second intervals during the connection). Packet Loss: the average packet loss number for the current connection (running average of all the 1-second intervals experienced during the connection).
Current Buffer Size	The current jitter buffer size.

test trunk

```
test trunk group# [/ member#] [short | long] [repeat# | clear]
[schedule]
```

Use `test trunk` to perform hardware diagnostic tests on an entire trunk group or an individual trunk-group member, depending on the options entered.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>test trunk</code>	<code>group number</code>	Administered group number	init inad s craft cust	short
	<code>member number</code>	Administered number identifying a particular trunk within a trunk group		1
	<code>short</code>	See Common Input Parameters on page 25.		
	<code>long</code>			
	<code>repeat n</code> <code>clear</code>	Examples: <code>test trunk 78 1</code> <code>test trunk 80/1 sh r 2</code> <code>test trunk 78/2 1 r 25</code> <code>test trunk 78 r 4</code> <code>test trunk 78 c</code>		

trunk-group

list trunk-group

For more information about `list trunk-group`, see Trunk Groups in *Administrator Guide for Avaya Communication Manager (03-300509)*.

tsc-administered

See:

[status tsc-administered](#) on page 635

[test tsc-administered](#) on page 638

status tsc-administered

```
status tsc-administered signaling-group# [/tsc-index]
```

Use **status tsc-administered** to see the operational status of temporary signaling connections (TSCs) administered for a specified signaling group.

Action/Object	Qualifier	Qualifier Description	Login
status tsc-administered	signaling-group# tsc-index	Administered signaling group number. TSC number in the signaling group	init inads craft
		Examples: status tsc-administered 1 status tsc-administered 1/2	

The following display shows a typical result for **status tsc-administered 1/1**.

status tsc-administered 1/1				
ADMINISTERED NON-CALL-ASSOCIATED TSC STATUS				
TSC Index	TSC State	Establish	Enabled	Congested
1	inactive	as-needed	yes	no

status tsc-administered field descriptions

status tsc-administered field descriptions 1 of 2

Field	Description
TSC Index	The administered TSC index (1-759).
TSC State	inactive: the administered TSC is not functioning (D-channel out-of-service, disabled, etc.). active: the administered TSC is up and user information can be exchanged end-to-end. pending-inactive: the TSC is being released. pending-active: the TSC is about to come up.
Establish	This field pertains to the switch responsible for the origination of the administered TSC. as-needed: the TSC is established on an as needed basis. permanent: the TSC is permanently established.
1 of 2	

status tsc-administered field descriptions 2 of 2

Field	Description
Enabled	y : indicates that the administered TSCs have been enabled.
Congested	A congested state indicates that the network cannot handle the receipt of USER INFORMATION messages for the administered TSC. y : the administered TSC is congested. n : the administered TSC is not congested. clear : the TSC was congested during its active period and the congestion has been cleared.
2 of 2	

test tsc-administered

```
test tsc-administered signaling-group# / tsc-index [repeat#]  
[schedule]
```

Use `test tsc-administered` to run diagnostic tests on any type of administered TSCs (Temporary Signaling Connections) on a signaling group. A switched services request to run the TSC heartbeat test is also performed.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>test tsc-administered</code>	<code>signaling group number/ tsc index</code> <code>repeat n</code>	Signaling group number The number associated with each TSC in a signaling group. The number of times each test in sequence is repeated.	init inads craft	1	Additional data available after running the test. See status tsc-administered for how to access additional data.

tti

status tti

```
status tti
```

Use `status tti` to see the TTI/PSA status screen and see if the TTI background maintenance task is active. If the TTI background maintenance task is active, the screen shows whether TTI ports are being generated or removed, the number of TTI-supported boards that have processed, and the number of TTI-supported boards that have not yet been processed. The screen also shows the elapsed time since the background maintenance task started.

To activate the TTI background maintenance task, enter **y** in the TTI field on the Feature-Related System-Parameters screen.

Use **status psa** to also see the TTI/PSA status screen. It shows that the status of PSA is dependent on the state of TTI.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status tti			init inads craft cust nms browse		TTI background maintenance task is activated by enabling TTI on the System-Parameters Features screen.

The following example shows the output for **status tti** and **status psa**.

```
status tti
status psa

                        TTI/PSA STATUS

      TTI Background Task State:  completed - all ports translated
                        TTI State:  voice
      # of Boards Completed:    30
      # of Boards Left to Process: 0
                        Percent Complete: 100
      Elapsed Time since Task Started: 0 :0 :1

NOTE: TTI state must be 'voice', TTI task state 'completed' and PSA
customer-option enabled, for PSA to operate properly
```

status tti and status psa field descriptions

status tti and status psa field descriptions 1 of 2

Field	Description
TTI Background Task State	generating TTI ports removing TTI ports suspended not active completed - all ports translated: The last background maintenance task completed normally. completed - some ports not translated: The last background maintenance task stopped when resources were exhausted, and some ports were not translated.
1 of 2	

status tti and status psa field descriptions 2 of 2

Field	Description
TTI State	off means that TTI is disabled voice, data shows the type of TTI ports that are being generated or removed
# of Boards Completed	Number of TTI-supported circuit packs that were processed by the background maintenance task. The ports on a “completed” circuit pack: 1 if unadministered, were translated as TTI ports 1 if administered, the administration was removed
# of Boards Left to Process	The number of TTI-supported circuit packs that were not processed by the background maintenance task.
Percent Complete	A ratio of the of number of circuit packs completed to the total number of circuit packs.
Elapsed Time Since Task Started	Elapsed time in hours:minutes:seconds since the TTI background task was started. This field is blank if the task is not active. If the task is completed or suspended, this field shows the elapsed time up to when the job finished or was suspended.
2 of 2	

usage

list usage

```
list usage [ button-type | cti-link | digit-string | extension |
holiday-table | hunt-group | integ-annc-board | ip-address | node-name
| variables | vector ]
```


Use `list usage` to see where an extension or object is used.

Action/ Object	Qualifier	Qualifier Description
<code>list usage</code>	<code>schedule</code>	See Common Input Parameters on page 25.
	<code>button-type</code> <code>crss-alert</code> <code>night-serv</code> <code>hunt-ns</code> <code>trunk-ns</code>	List extension and button number for buttons administered as: crisis alert night service night service hunt group night service trunk group See list usage button-type night-serve screen on page 642.
	<code>cti-link n</code>	List vectors and ip-services that use the specified CTI link, and indicate whether the link is currently used to monitor a hunt-group as a controlling link, and/or through an event notification or domain control association. See list usage cti-link on page 218.
	<code>digit-string</code>	List the vectors, vector routing tables, and Best Service Routing Plans that use the specified digit string.
	<code>extension x</code> <code>xvector</code>	List all the uses of the extension in stations administered with an off-PBX telephone application, announcements, bridged appearance buttons, coverage paths, data module extensions, hunt groups, intercom groups, vector steps, or anywhere that the extension can be used that might interfere with removal of the extension.
	<code>holiday-table</code>	List vectors and vector steps that refer to the specified Holiday Table.
	<code>hunt-group x</code>	List hunt group number and member number. See list usage hunt group screen on page 642.
	<code>integ-annc- board</code> <code>location</code>	List information on the announcements and audio groups on an announcement circuit pack. See list usage integ-annc-board on page 317.
	<code>ip-address</code>	List the forms on which the specified address is used. List the extension (as Station Extension) for a shared-control IP Telephone address or a shared-control IP Softphone's IP address. See list usage ip-address screen on page 643
	<code>node-name</code>	List the forms on which the specified node-name is used. See list usage ip-address node-name on page 643.
	<code>variables x</code>	List vectors that use variables, and which administered variable is used in each vector.
	<code>vector x</code>	List all the vector numbers and step where the extension is used in a vector step. Example: list vector extension 300

list usage button-type night-serve screen

The following example shows the output for **list usage button-type night-serv.**

```
list usage button-type night-serv
                                LIST USAGE REPORT
Located on

Attendant Number      3          Button 5
Station Extension      51001      Feature Button 15
Station Extension      51001      Feat Mod Button 12
Station Extension      51001      Cov Mod Button 18
```

list usage extension screen

The following example shows the output for **list usage extension.**

```
list usage extension 12345
                                LIST USAGE REPORT
Used By

Vector                Vector Number      128          Step      12
Vector                Vector Number      234          Step      31
Hunt Group            Group Number       85          Member    136
Hunt Group            Group Number       79          Member    53
Station Button        Station Extension   51001        Step      12
Station Button        Station Extension   1002        Step      12
Coverage Path         Coverage Path Number  2          Coverage Point  2
Announcement
```

list usage hunt group screen

The following example shows the output for **list usage hunt group.**

```
list usage hunt group
                                LIST USAGE REPORT
Used By

Vector                Vector Number      128          Step      12
Vector                Vector Number      234          Step      31
Attendant Button      Attendant Number    3           Button     15
Station Button        Station Extension   51001        Button     9
Station Button        Station Extension   1002        Button     25
Coverage Path         Coverage Path Number  6          Coverage Point  2
Agent Login ID        Agent Extension     1021        Skill      3
VDN                   VDN Extension      51004        Skill      2
```

list usage ip-address node-name

The following example shows the output for **list usage node-name** for a local node.

```
list usage node-name inde-e72

                                LIST USAGE REPORT
Used By
Processor Channel   Channel Number 4   Destination Node
TFTP Server                               Local Node
```

The following example shows the output for **list usage node-name** for a server node.

```
list usage node-name inde-e72

                                LIST USAGE REPORT
Used By
Processor Channel   Channel Number 4   Destination Node
TFTP Server                               Server Node Name
```

The TFTP Server is displayed as Local Node or Server Node Name depending on its administration on the **TFTP-SERVER** screen.

list usage ip-address screen

See [list usage ip-address field descriptions](#) on page 645.

The following example shows the output for **list usage ip-address** for a local node.

```
list usage ip-address 135.9.76.72

                                LIST USAGE REPORT
Used By
IP Route           Route Number  2           Destination Node
Node Name           IP Name           inde-372   IP Address
Processor Channel   Channel Number 4           Destination Node
TFTP Server                               Local Node
Remote Office       Remote Office 123         Node Name
Station             Extension      1234567    Switch-end IP Address
Station             Extension      1234567    Set-end IP Address
LSP                 LSP            10         Node Name
```

The following example shows the output for **list usage ip-address** for a server node.

```
list usage ip-address 135.9.76.72

                                LIST USAGE REPORT

Used By
IP Route           Route Number  2           Destination Node
Node Name          IP Name       inde-372   IP Address
Processor Channel  Channel Number 4           Destination Node
IP Service         Service Type  SAT        Local Node
TFTP Server
Remote Office      Remote Office 123        Server Node Name
Station           Extension  1234567    Node Name
Station           Extension  1234567    Switch-end IP Address
Station           Extension  1234567    Set-end IP Address
LSP               LSP        10         Node Name
TTI Station       Port Number S00074     Station IP Addr
```

The following two examples show the output for **list usage ip-address** for endpoints when an IP telephone and IP Softphone are in service on the same extension simultaneously.

```
list usage ip-address 254.254.254.0

                                LIST USAGE REPORT

Used By
Station           Extension  57407      Station IP Addr
Station           Extension  59002      Station IP Addr
Station           Extension  60000      Station IP Addr
```

```
list usage ip-address 253.253.253.33

                                LIST USAGE REPORT

Used By
Station           Extension  59001      Gatekeeper IP Addr
Station           Extension  59003      Gatekeeper IP Addr
Station           Extension  60001      Gatekeeper IP Addr
```

list usage ip-address field descriptions

list usage ip-address field descriptions

Field	Description
Used By	The forms on which the specified address is used. Station Extension appears when a station using the ip-address is registered. This includes the IP Telephone or IP Softphone's IP address when an IP telephone and IP Softphone are in service on the same extension simultaneously.

user-profile

See

[add user-profile](#) on page 645

[change user-profile](#) on page 654

[display user-profile](#) on page 655

[duplicate user-profile](#) on page 655

[export user-profile](#) on page 655

[import user-profile](#) on page 657

[list user-profiles](#) on page 658

[remove user-profile](#) on page 659

See also [user-profile-by-category](#) on page 660 to display SAT forms in order by category and alphabetical within category.

add user-profile

add user-profile [*n* |next]

Use **add user-profile** *n* to add a new SAT profile and administer permissions, where *n* is the profile number 20-69. SAT command objects are listed in alphabetical order beginning on page 2, along with their assigned category and the type of access granted to or denied this profile.

Each category is associated with a unique set of SAT forms. A given object (SAT form) appears in one category.

Consider permission entries as read/write for administration and yes/no for maintenance.

Maintenance SAT Commands

The screen name is **User Profile**.

Action/Object	Qualifier	Qualifier Description
add user-profile	<i>n</i> next	Profile number (20-69) Next number in sequence

add user-profile screen display page 1

add user-profile n

Page 1 of X

User Profile N

User Profile Name: Example Profile

This profile is disabled? n

Shell Access?n

Facility Test Call Notification? n

Acknowledgement required?n

Grant un-owned permissions? n

Extended Profile?n

Name	Cat	Enbl	Name	Cat	Enbl
Adjuncts	A	n	Routing and Dial Plan	J	n
Call Center	B	n	Security	K	n
Features	C	n	Servers	L	n
Hardware	D	n	Stations	M	n
Hospitality	E	n	System Parameters	N	n
IP	F	n	Translations	O	n
Maintenance	G	n	Trunking	P	n
Measurements and Performance	H	n	Usage	Q	n
Remote Access	I	n	User Access	R	n

add user-profile screen field descriptions page 1

add user-profile field descriptions page 1 1 of 2

Field	Description
User Profile Name	The user-defined profile name, up to 40 characters.
Shell Access	y/n y = users assigned this profile are able to execute go shell from the SAT. This does not affect the user's default login shell in Linux.
Facility Test Call Notification	y/n y = users assigned this profile receive notification at logoff if Facility Test if Notification is still administered. For security, set to y for all profiles.
1 of 2	

add user-profile field descriptions page 1 2 of 2

Field	Description
Acknowledgement Required	y/n y = users assigned this profile must acknowledge that they want to logoff while Facility Test if Notification is still administered.
This profile is disabled	y/n n = the profile is active y = the profile is disabled If changed to y , an existing active login using this profile is unaffected, but any new attempted session using this profile fails. - A login via CLAN receives access denied. - A login via Linux receives an error return code with the message access denied displayed via stderr.
Grant un-owned permissions	y/n y = If this profile has write access to the user-profile form, users with this profile can grant any permission allowed for profile 18 (customer super user) to other profiles even when this profile does not itself have those permissions. n = users may not grant permissions they themselves do not have.
Extended profile	y/n , default is n y = extended profile is enabled. If y , the profile has additional access restrictions to the station and vector forms.
Name	Category name. Each category is associated with a unique set of SAT forms. A given object (SAT form) appears in one category.
Cat	Category.
Enbl	y/n y = enable the category for this user-profile. Category displays y when any object in a category has permissions other than "- -". n = disable the category for this user-profile. Category displays n only when all objects in the category have permissions "- -". - If the field is changed from n to y, permissions for all objects assigned to the category are set to w--. - If the field is changed from y to n, permissions for all objects assigned to the category are set to --. This field also reflects the settings on pages 2-X of this form.
2 of 2	

add user-profile screen display page 2

add user-profile n			Page 2 of X		
			User Profile N		
Set Permissions for Category:_ to_			Set All Permissions to:_		
	Name	Cat	Perm		
	aar	K	wm		
	abbreviated-dialing	C	wm		
	aca-parameters	P	wm		
	access endpoint	P	wm		
	adjunct-names	A	wm		
	administered-connections	C	wm		
	aesvcs cti-link	A	wm		
	aesvcs interface	A	wm		
	aesvcs link	A	wm		
	aesvcs-link	A	wm		
	aesvcs-server	A	wm		
	agent-login ID	B	wm		
	alarms	I	wm		
	alias	M	wm		
	alphanumeric-dial-table	K	wm		
	alternate-frl	C	wm		
	amw all	G	wm		

add user-profile screen field descriptions page 2-X

add user-profile field descriptions page 2-X 1 of 2

Field	Description
Set Permissions for Category_ to _	Set permissions for only the objects assigned to this specific category. 1. Enter a letter to specify the category to set. 2. Enter the permission. - Consider permission entries as read/write for administration and yes/no for maintenance. - A blank character indicates no-change. For example, if the permissions field is set to blank "-", all affected objects are set to deny maintenance access but the current access for administration for each object in this category remains unchanged. See the field description for Perm (permissions) on page 650 for more details.
Set All Permissions to	Set permissions for all objects in all categories.
Cat (category)	Display only. Letter that corresponds to the category, used for sorting alphabetically by category, as opposed to alphabetically by SAT form command object.
1 of 2	

add user-profile field descriptions page 2-X 2 of 2

Field	Description
Perm (permissions)	Enter a 2-character value, including blank. Consider permission entries as deny, read/write for administration and deny, yes/no for maintenance. - The first character specifies access for administration. - (dash) = deny. No access. r = view without change via commands shown in table Table 40: SAT Command Object Access and Permissions on page 651. w = change via commands shown in Table 40: SAT Command Object Access and Permissions on page 651. w implies r. - The second character specifies access for maintenance. - (dash) = deny. No access to maintenance commands. m = access to maintenance commands via commands shown in Table 40: SAT Command Object Access and Permissions on page 651. Setting this field to m requires at least read access for administration. For example: r- = a user with this profile can use the commands read, display, export, status, and list for the object assigned the r- permission, and no others. wm grants full access for all commands to the object assigned this permission A blank character indicates no-change. For example, if the permissions field is set to blank-(dash), all affected objects are set to deny maintenance access but the current access for administration for each object in this category remains unchanged. All permission fields on the User Profile page 2-x accept the full range of values (r, w, d) or (w,m) Independent of whether all values apply to the field or not. Settings on these pages are reflected on the Enbl field on page 1 of this form.
Name	Name of the SAT form by command object. Display only.
2 of 2	

Table 40: SAT Command Object Access and Permissions 1 of 2

SAT Command	Administration		Maintenance (m)
	r	w	
add		x	
busyout			x
campon-busyout			x
cancel			x
change		x	
clear		x	x
disable			x
display	x	x	
duplicate		x	
enable			x
erase		x	
get	x	x	x
go			x
list	x	x	
mark			x
monitor	x	x	
netstat			x
notify	x	x	
ping			x
recycle			x
refresh		x	
release			x
remove		x	
reset			x
1 of 2			

Table 40: SAT Command Object Access and Permissions 2 of 2

SAT Command	Administration		Maintenance (m)
	r	w	
resume			x
rp			x
save		x	
set		x	x
status	x	x	
test			x
trace-route			x
upload	x		
wp			x
2 of 2			

Table 41: SAT command permissions and object permissions 1 of 3

Object Name	Administration commands						Maintenance Commands								Communication Manager 5.0 Object Permissions admin maintenance					
	add	change	display	list	remove	status	busyout	campon-busyout	clear	disable	enable	release	set	status	test	--	r-	w-	rm	wm
aca-parameters				x												x	x			
access-endpoint	x					x	x					x			x	x	x		x	x
call-screening		x	x													x	x	x		
cpc-ii-conversion (special application SA8122)																				
inc-call-handling-trunk-group		x	x													x	x	x		
1 of 3																				

Table 41: SAT command permissions and object permissions 2 of 3

Object Name	Administration commands						Maintenance Commands								Communication Manager 5.0 Object Permissions admin maintenance					
	add	change	display	list	remove	status	busyout	campon-busyout	clear	disable	enable	release	set	status	test	--	r-	w-	rm	wm
isdn dcs-qsig-tsc-gateway		x	x													x	x	x		
isdn mwi-prefixes		x	x													x	x	x		
isdn network facilities		x	x													x	x	x		
isdn private-numbering		x	x													x	x	x		
isdn public-unknown-numbering		x	x													x	x	x		
isdn qsig-dcs-tsc-gateway		x	x													x	x	x		
isdn tsc-gateway		x	x													x	x	x		
isdnpri-testcall				x					x					x	x	x	x		x	x
multifrequency-signaling		x	x													x	x	x		
pri-endpoint	x	x	x	x			x					x		x	x	x	x	x	x	x
private-numbering		x	x													x	x	x		
public-unknown-numbering		x	x													x	x	x		
signaling-group	x	x	x	x	x		x					x	x	x	x	x	x	x	x	x
synchronization atm		x	x	x												x	x	x		
synchronization css		x	x	x												x	x	x		
synchronization port-network		x	x													x	x	x		
telecommuting-access	x	x	x													x	x	x		
synchronization port-network ip		x	x													x	x	x		
synchronization port-network ip		x	x													x	x	x		

2 of 3

2 of 3

Table 41: SAT command permissions and object permissions 3 of 3

Object Name	Administration commands						Maintenance Commands								Communication Manager 5.0 Object Permissions admin maintenance					
	add	change	display	list	remove	status	busyout	campon-busyout	clear	disable	enable	release	set	status	test	-	r-	w-	rm	wm
synchronization-switch										X	X								X	X
tandem-calling-party-num		X	X													X	X			
trunk						X	X	X				X		X	X	X	X		X	X
trunk-group	X	X	X	X	X											X	X	X		
tsc-administered		X	X											X	X				X	X
3 of 3																				

change user-profile

change user-profile *n*

Use **change user-profile** *n* to change the access permissions of an existing SAT profile. Changes do not affect active SAT sessions, but become effective on new sessions.

The screen name is **User Profile**.

Use **change user-profile-by-category**.

Action/Object	Qualifier	Qualifier Description
change user-profile	<i>n</i>	Profile number (20-69)

See [add user-profile](#) on page 645 for screen and field descriptions.

display user-profile

Use `display user-profile n` to display the permissions of an existing SAT profile.

The screen name is **User Profile**.

Also use `display user-profile-by-category`.

Action/Object	Qualifier	Qualifier Description
<code>display user-profile</code>	<i>n</i>	Profile number (20-69)

See [add user-profile](#) on page 645 for screen and field descriptions.

duplicate user-profile

`duplicate user-profile x`

Use `duplicate user-profile` to duplicate an existing SAT profile.

`Duplicate user-profile x` copies the permissions from profile X to a new profile.

Action/Object	Qualifier	Qualifier Description
<code>duplicate user-profile</code>	<i>X Y</i>	X is the number of an existing SAT profile greater than 17

export user-profile

`export user-profile`

Use `export user-profile` to export SAT profile files for editing in a program such as Microsoft Excel.

When `export user-profile` is entered, SAT profiles in Communication Manager numbered 20-69 are written to `/var/home/ftp/pub/cmprofiles.txt`. If the file already exists, it is deleted and replaced.

export user-profile file

```

release: R015x.00.0.824.0
Number of Profiles: 10
20: snmpSV
21: roger
22: asa
23: bcmsvu
24: test1
25: avaya2
26: vam
27: fpm
28: cmuser
29: msa
Profile Number          20 21 22 23 24 25 26 27 28 29
This Profile is Disabled?    n  n  n  n  n  n  n  n  n  n
Facility Test Call Notification? y  y  y  y  y  y  y  y  y  y
Grant Un-owned Permissions?   n  n  n  n  n  n  n  n  n  n

```

export user-profile file field descriptions**export user-profile file field descriptions**

Field	Description
Fields from User Profile form, page 1	
first line	Current release
second line	Number of profiles being exported
next lines - x	Profile number and name of the profile, for as many profiles as exist
next line	"profile number" and a list of existing SAT profile numbers in ascending order starting with the first existing number after profile 19.
Fields from User Profile form, pages 2 - x	
remaining lines	Two columns: - category and feature names as they appear on the user-profile forms - object permissions for each profile number

Use **status logins** to see SAT profile assignments.

Export user-profile error messages

export user-profile error messages

Error message	Description
<i>/var/home/ftp/pub/cmprofiles.txt create error</i> (the actual file name from the ecs.conf variable cm_profile_export_file)	The file cannot be created.
<i>/var/home/ftp/pub/cmprofiles.txt write error</i> (the actual file name from the ecs.conf variable cm_profile_export_file)	The file cannot be written.

import user-profile

import user-profile

Use **import user-profile** to import SAT profiles numbered 20-69 from the **/var/home/ftp/pub/cmprofiles.txt** file to Communication Manager. You can edit SAT profile information in Microsoft Excel and import the information back into Communication Manager.

- ┆ If a profile in the file does not exist in Communication Manager, it is created.
- ┆ If a profile in the file already exists in Communication Manager, the profile in Communication Manager is overwritten.
- ┆ If profiles exist in Communication Manager that do not exist in the file, they remain in Communication Manager unmodified.

Use **status logins** to see SAT profile assignments.

Import user-profile error messages

import user-profile error messages 1 of 2

Error message	Description	Result
Note: In the following text, the file <i>/var/home/ftp/pub/cmprofiles.txt</i> shall be replaced by the actual file name from the ecs.conf variable cm_profile_export_file.		
<i>/var/home/ftp/pub/cmprofiles.txt does not exist and the import aborted.</i>	The file does not exist.	The import is aborted.
1 of 2		

import user-profile error messages 2 of 2

Error message	Description	Result
<i>var/home/ftp/pub/cmprofiles.txt not readable</i>	The file is not readable.	The import is aborted.
<i>release mis-match</i>	The first line of the file does not contain a release number that exactly matches the release number of Communication Manager.	The user is prompted as to whether or not to continue. Additional checks will prevent corruption and cannot be overridden.
<i>invalid profile identifier in file var/home/ftp/pub/cmprofiles.txt</i>	The file contains a profile number lower than 20.	The import is aborted.
<i>invalid feature name at line xxx in var/home/ftp/pub/cmprofiles.txt</i> xxx = the file line number where the first error is found.	The feature names do not exactly match in spelling, order and number the existing profile forms in Communication Manager.	The import is aborted.
<i>invalid permissions at line xxx in var/home/ftp/pub/cmprofiles.txt</i>	The feature permissions characters are not valid.	The import is aborted.
2 of 2		

list user-profiles**list user-profiles**

Use **list user-profiles** to see existing SAT profile numbers and profile names in numerical order.

Use **status logins** to see SAT profile assignments.

list user-profiles screen display

list user-profiles			Page 1 of 1
			User Profiles
	Extended		
Profile	Profile	User Profile Name	
0	n	Services Super-user	
1	n	Services manager	
2	n	Business parnter	
3	n	Services	
1	n	Call Center Manager	
17	n	SNMP	
18	n	Customer Super User	
19	n	Customer Non-Super User	
20	n	Station Administrator	
21	n	Station Auditor	
22	y	Vector Administrator	

list user-profiles screen field descriptions

list user-profile field descriptions page 1

Field	Description
Profile	Profile number
Extended Profile	y/n y= The Extended Profile field is y on the User Profile (add user-profile) screen.
User Profile Name	Avaya-defined name for Profile numbers 0-19. Customer-defined name for Profile numbers 20-69.

remove user-profile

remove user-profile n

Use **remove user-profile** to remove an existing SAT profile and its extended profile, if one exists.

When **remove user-profile n** is executed, the selected profile appears. Submit the form to remove the profile.

When a profile is removed, SAT sessions using the profile are automatically logged out.

user-profile-by-category

See

[add user-profile-by-category](#) on page 660

[change user-profile-by-category](#) on page 661

[display user-profile-by-category](#) on page 662

See also [user-profile](#) on page 645 to display SAT forms in alphabetical order regardless of category.

add user-profile-by-category

Use **add user-profile-by-category** to add a new SAT profile and administer permissions, where *n* is the profile number 20-69.

Pages 2 - X contain a list of SAT forms in order by category and alphabetically within category, and the type of access granted to or denied this profile.

The screen name is **User Profile**.

Consider permission entries as read/write for administration and yes/no for maintenance.

Also use **add user-profile**.

Action/Object	Qualifier	Qualifier Description
add user-profile-by-category		

For the page one screen and field descriptions, see [add user-profile screen display page 1](#) on page 646.

add user-profile-by-category screen display page 2

add user-profile-by-category			Page 2 of X
			User Profile N
Set Permissions for Category:_ to_		Set All Permissions to:_	
	Name	Cat	Perm
	adjunct-names	A	wm
	aesvcs cti-link	A	wm
	aesvcs interface	A	wm
	aesvcs link	A	wm
	aesvcs-link	A	wm
	aesvcs-server	A	wm
	communication-interface links	A	wm
	communication-interface processor-channels	A	wm
	Intra-switch-cdr	A	wm
	nis	A	wm
	processor channels	A	wm
	agent-login ID	B	wm
	announcements	B	wm
	bcms agent	B	wm
	bcms skill	B	wm
	bcms split	B	wm

add user-profile-by-category screen page 2 field descriptions

See [add user-profile screen field descriptions page 2-X](#) on page 649.

change user-profile-by-category

Use **change user-profile-by-category** to change the access permissions of an existing SAT profile. Changes do not affect active SAT sessions, but become effective on new sessions.

Pages 2 - X contain a list of SAT forms in order by category and alphabetically within category, and the type of access granted to or denied this profile.

The screen name is **User Profile**.

Also use **change user-profile**.

Action/Object	Qualifier	Qualifier Description
change user-profile-by-category	<i>n</i>	Profile number (20-69)

See [add user-profile](#) on page 645 for screen and field descriptions.

display user-profile-by-category

`display user-profile-by-category n`

Use `display user-profile-by-category` to display the permissions of an existing SAT profile.

Pages 2 - X contain a list of SAT forms in order by category and alphabetically within category, and the type of access granted to or denied this profile.

The screen name is **User Profile**.

Also use `display user-profile`.

Action/Object	Qualifier	Qualifier Description
<code>display user-profile-by-category</code>	<i>n</i>	Profile number 20-69

See [add user-profile](#) on page 645 for screen and field descriptions.

val

reset val

`reset val`

Use `reset val` to perform a software reset of every administered port on the circuit pack.

`Reset val` performs the same functions as `reset board`, but overrides querying the board to determine whether an announcement autosave is in process. This allows resetting the circuit pack if it is in the insane state.

Action/Object	Qualifier	Qualifier Description
<code>reset val</code>	<i>location</i>	Reset every administered port on the circuit pack.

val-ip

status val-ip

status val-ip *location*

Use **status val-ip** to generate an IP-related status report about the specified VAL circuit pack's LAN connection.

status val-ip 08C14				
IP STATUS				
Reset Time: 09/10 18:04				
Incoming Received:	Octets	Datagrams	Discards	Hdr Errors
Since reset	5597	62	0	0
Outgoing Transmitted:	Octets	Datagrams	Discards	No Routes
Since reset	4813	62	0	0
Datagrams w/o Routes	ICMP Dest Unreachables		ICMP Redirects	
Since Reset	0		0	

Chapter 2: Linux Bash Commands

Introduction

Linux platform commands are executed from the bash shell. These bash commands provide server information and help troubleshoot problems in the switch and other components.

Linux bash commands can be found in /opt/ecs/bin and /opt/ecs/sbin. The user must be logged into the switch as *root* to perform certain bash commands.

Use `-?` to see a description of command options for most Linux bash commands. For example, use `fasttop -?` to see a description of all `fasttop` command options.

Server information

Use these commands to see information about the server.

Linux commands for the server

almdisplay
ipsiversion
loginreport
productid
serialnumber
server
statapp
statuslicense
swversion
systat
uname

Linux Bash Commands

Use these commands on Communication Manager to see information about the SES server.

Linux commands on Communication Manager for SES

almdisplay
loginreport
productid
server
statapp
swversion
systat
uname

Troubleshooting the switch

Use these commands to troubleshoot the switch.

Linux commands for troubleshooting the switch

almclear
almdisplay
disp_dup_log
fasttop
filesync
ftpserv
modserv
restartcause
topsting
vilog

Troubleshooting the IPSI

Use these commands to help troubleshoot the IPSI circuit pack.

1 [ipsiversion](#)

1 [pingall](#)

Remote Maintenance Board administration

Use these commands to use and administer Remote Maintenance Boards, including the S8400-Maintenance Processor Complex (MPC). The commands can be run on the server, on the SAMP/MPC, or on both.

Remote Maintenance Board administration CLI commands

Server commands	SAMP/MPC commands	Server and MPC commands
almdisplay	serverctrl	almcall
almsuppress		almenable
environment		defsat
loadpwd		inventory
rmbpasswd		productid
rmbuseradd		sampupdate
rmbuserdel		testinads
rmbusermod		testmodem
sampcmd		
sampdiag		
sampupdate		

New Bash commands

The following are new Bash commands for Communication Manager 5.0:

- 1 [raid status](#)
- 1 [tlscertmanage](#)

Replaced commands

The following table lists the Bash commands that have been replaced:

Replaced Bash commands

Command	Replaced with
busyout	server -b (on standby)
patch_apply	update_activate
patch_info	update_info
patch_install	update_unpack
patch_remove	update_remove
patch_show	update_show
patch_uninstall	update_deactivate
release	server -r (if busied)
telnetable	ipsisession

Linux bash commands

acpfindvers

acpfindvers [-?] [-c] file(s)

Use **acpfindvers** to see the release string, date, and time for an object located in /opt/ws, and in which software base the object was built. More than one file can be specified on the command line.

acpfindvers options

command	option	description
acpfindvers	file1 [file2] ...	Display the release string, software base, date, and time the object file was built
	-c file1 [file2] ...	Display the CDA Vintage string for the file(s)
	-?	Display the help message

Example screen for acpfindvers command

```
(root@sray3-srv2 ws)# pwd
/opt/ws
(root@sray3-srv2 ws)# acpfindvers pcd
pcd=>R015x.00.0.823.0:drint08:alawint=/usr/add-on/defty/cm5.0/ipd/CM5.pj
@09/28/07 09:50:06 AM
(root@sray3-srv2 ws)# acpfindvers -c pcd
pcd CDAVINT=17.3
(root@sray3-srv2 ws)#
```

almcall

almcall [-f first-number] [-a [y|n]] [-s second-number]
[-b [y|n]] [-t timer] [-i interval] [-?]

Use **almcall** to set the telephone numbers to services, enable or disable alarm abbreviation on those numbers, and set the interval between retries.

To run **almcall** directly on the remote maintenance board, enter

```
sudo /opt/alarming/bin/almcall.
```

almcall command options

command	option	description
almcall		Display the administered information
	-f <i>first-number</i>	Set the first number to dial out to <i>first-number</i> . The number can have up to 30 digits (0-9), and "," for pause. Dashes are allowed but are ignored.
	-a <i>y n</i>	Set alarm abbreviation on (y) or off (n) for the first telephone number.
	-s <i>second-number</i>	Set the second number to dial out to <i>second-number</i> . The number can have up to 30 digits (0-9), and "," for pause. Dashes are allowed but are ignored.
	-b <i>y n</i>	Set alarm abbreviation on (y) or off (n) for the second telephone number.
	-t <i>timer</i>	Set the alarm abbreviation timer between 1 and 24 hours. The default value is 4 (almcall -t)
	-i <i>interval</i>	Set the interval between retries in minutes. The interval can be between 1 and 20 minutes. The default value is 7 minutes (almcall -i). The value 0 is ignored.
	-?	Display the command usage.

almclear

```
almclear [ -a ] [ -n [ id | id1, ids1,...idn | idn1-idn ]] [ -? ]
```

Use **almclear** to clear specific server alarms, a list of server alarms, or all server alarms within a range. An alarm is referenced by a positive integer, called its Alarm ID, which can be found using the [almdisplay](#) command. **almclear** does not clear Communication Manger alarms.

almclear command options

command	option	description
almclear		Display the command usage
	-a	Clear all outstanding server alarms
	-n id	Clear a single server alarm with Alarm ID <i>id</i>
	-n id1, id2,...idn	Clear a set of server alarms with Alarm ID numbers <i>id1, id2,...idn</i> . almclear -n 1, 2, 3, is valid. almclear -n 1 2 3 is not.
	-n id1-idn	Clear a range of server alarms from id number <i>id1</i> to id number <i>idn</i> .
	-?	Display the command usage.

almdisplay

```
almdisplay [ -v ] [ -? ]
```

Use **almdisplay** to display the list of outstanding messaging, Communication Manager, and server alarms.

almdisplay with no options displays the outstanding alarms.

almdisplay -v displays the outstanding alarms with an additional Description field. The Description field displays the description contained in the original alarm string.

almdisplay -? displays the command usage.

The following is an example of the output for **almdisplay**:

```
[root@]# almdisplay

CommunicaMgr ALARMS
=====
```

ID	MO	Source	On Brd	Lvl	Ack	Date
1	H323-SGRP	627	n	MIN	Y	Wed Oct 31 08:18:49 MDT 2007
2	H323-SGRP	629	n	MIN	Y	Wed Oct 31 08:18:45 MDT 2007
3	H323-SGRP	631	n	MIN	Y	Wed Oct 31 08:18:39 MDT 2007
4	H323-SGRP	633	n	MIN	Y	Wed Oct 31 08:18:35 MDT 2007
5	H323-SGRP	662	n	MIN	Y	Wed Oct 31 08:18:29 MDT 2007
6	H323-SGRP	664	n	MIN	Y	Wed Oct 31 08:14:13 MDT 2007
7	H323-SGRP	291	n	MIN	Y	Wed Oct 31 08:14:09 MDT 2007
8	H323-SGRP	295	n	MIN	Y	Wed Oct 31 08:14:05 MDT 2007
9	USD1-BD	06E15	n	MIN	Y	Wed Oct 31 06:54:34 MDT 2007

```

SERVER ALARMS
=====
```

ID	Source	EvtID	Lvl	Ack	Date
1839	CMG	46	MIN	Y	Wed Oct 31 08:35:58 MDT 2007
1838	CMG	46	MIN	Y	Wed Oct 31 08:28:51 MDT 2007
1837	CMG	46	MIN	Y	Wed Oct 31 08:05:11 MDT 2007
1836	CMG	46	MIN	Y	Wed Oct 31 07:58:04 MDT 2007
1835	CMG	46	MIN	Y	Wed Oct 31 07:34:24 MDT 2007
1834	CMG	46	MIN	Y	Wed Oct 31 07:27:22 MDT 2007
1834	CMG	46	MIN	Y	Wed Oct 31 07:25:50 MDT 2007

The following is an example of the output for **almdisplay** on an SES server:

```
[root@]# almdisplay

MESSAGING ALARMS
=====

No MESSAGING Alarms

CommunicaMgr ALARMS
=====

No CommunicaMgr Alarms

SERVER ALARMS
=====

ID      Source   EvtID  Lvl   Ack   Date
5       SES       68     MIN   Y     Tue Nov 20 03:27:50 MST 2007
4       SES       68     MIN   Y     Mon Nov 19 03:27:49 MST 2007
3       SES       72     WRN   Y     Sun Nov 18 08:12:11 MST 2007
2       SES       68     MIN   Y     Sun Nov 18 03:27:49 MST 2007
1       SES       68     MIN   Y     Sat Nov 17 03:27:49 MST 2007
0       SES       68     MIN   Y     Fri Nov 16 03:27:50 MST 2007
```

almdisplay field descriptions

Field	Description
ID	Lists the unique Alarm ID assigned to each alarm
MO	Name of the Maintenance Object that was alarmed
Source	Displays the abbreviated name of the source which generated the alarm
On Bd	Displays y if the problem is on-board, n if the problem is off-board
EvtID	Displays the Event ID of the alarm. The Event ID identifies a particular event that occurred on a given source that generated the alarm.
Lvl	The severity level of the alarm: Warning (WRN), Minor (MIN), or Major (MAJ)
Ack	Displays Y or N, indicating if the alarm has been acknowledged by INADS or not.
Date	The time stamp assigned when the alarm was created.

almenable

```
almenable [-d [ n | f | b ]] [ -s [y|n] ] [ -? ]
```

Use **almenable** to enable or disable dial-out and SNMP alarm origination.

To run **almenable** directly on the remote maintenance board (MPC), enter:

```
sudo /opt/alarming/bin/almenable.
```

almenable command options

command	option	description
almenable		Display the administered information
	-d n	Set dial out alarm origination to <i>neither</i> (default). Disable alarming dialout. Alarm origination does not occur, reports are not sent to either OSS number.
	-d f	First number only -use only the first dial out number for alarming.
	-d b	Both numbers - use both dial out phone numbers for alarming.
	-s y n	Enable (y) or disable (n) alarming through SNMP
	-?	Display the command usage.

almnotif

```
almnotif [-r [ y | n ] ] [-c [ y | n ] ] [-s threshold ] [-?]
```

Use **almnotif** to set the alarming strategy for dial-out and to administer the suspension threshold.

almnotif command options 1 of 2

command	option	description
almnotif		Display the administration for restart notification, clear alarm notification, and suspension threshold.
	-r y n	Enable (y) or disable (n) restart notification.
	-c y n	Enable (y) or disable (n) clear alarm notification.
1 of 2		

almnotif command options 2 of 2

command	option	description
	-s <i>threshold</i>	Set the suspension threshold to <i>threshold</i> . The threshold value must be a value between 1-15 to avoid a problem being generated and resolved repeatedly. The default value is 5.
	-?	Display the command usage
2 of 2		

almsnmpconf

almsnmpconf [-d IP] [-c community] [-b [y|n]] [-e [y|n]] [-add] [-del] [-mod] [-?]

Use **almsnmpconf** to administer SNMP alarming to INADS.

almsnmpconf command options

command	option	description
almsnmpconf		Display the administered information for SNMP alarming to INADS.
	-d <i>IP</i>	Set IP address to send SNMP traps.
	-c <i>community</i>	Set the trap community name to use the SNMP traps. The community name is any string of characters and numbers, and may not contain a space or tab.
	-b <i>y n</i>	Enable (y) or disable (n) alarm abbreviation for SNMP
	-e <i>y n</i>	Enable (y) or disable (n) trap destination
	-add	Add this as a new trap destination
	-del	Delete this trap destination. The -d flag with a valid/existing IP address is required.
	-mod	Modify an existing trap destination. The -d flag with a valid/existing IP address is required. In order to modify the IP address, the trap destination must be deleted, then re-added.
	-?	Display the command usage

almsummary

almsummary [-?]

Use **almsummary** to see a summary of outstanding Minor and Major alarms against Communication Manger and the server, if any exist. **almsummary -?** displays the command usage.

almsuppress

almsuppress [-s [y | n]] [-t minutes] [-?]

Use **almsuppress** to suppress/unsuppress alarm origination or to check the state of alarm suppression. Used by the **craft** login to stop alarms during troubleshooting operations.

To run **almsuppress** directly on the remote maintenance board, enter

```
sudo /opt/alarming/bin/almsuppress.
```

almsuppress command options

command	option	description
almsuppress		Display the current status of current alarm suppression
	-s y	Suppress alarm origination for 30 minutes. The default is y.
	-s n	Unsuppress alarm origination
	-t minutes	Number of minutes to suppress alarm origination, where <i>minutes</i> is in the range of 30-120 . The default is 30 minutes.
	-?	Display command option descriptions.

authtype

Use **authtype** to see if a login is authenticated with a password or Access Security Gateway (ASG).

autosat

See [sat](#) on page 716.

cmpasswd

cmuserpasswd username

Use **cmuserpasswd** to create or change a login password.

cmuseradd

cmuseradd <type> [-C profile] [P[key] | p[password]] user name

Use **cmuseradd** to add a login.

Examples:

```
| cmuseradd super-user username
| cmuseradd craft2 username
| cmuseradd cm-only -C 20 username
```

cmuseradd command options

command	option	description
cmuseradd	type	The type of login being added. super-user nonsuper-user cm-only remote craft2
	-C profile	Profile for the login being added. Login of cm-only type requires a profile Login of remote type is never assigned a profile
	-P[key]	The login is asg authenticated. If no key is specified on the command line, one will be generated automatically. Not valid with -p .
	-p[pass]	The login is password authenticated. [pass] is the encrypted password. Not valid with -P . Because this option requires an encrypted password, Avaya recommended you use this option without a password, then use cmpasswd to set the password.

cmuserdel

Use **cmuserdel** to delete a login. This replaces the Communication Manager SAT command **remove login**.

cmusermod

cmusermod <type> [-C profile] [P[key] | p[password]] login

Use **cmusermod** to add a login.

Examples:

```
| cmusermod craft2 username
```

```
| cmusermod dadmin
```

cmusermod command options

command	option	description
cmusermod	-C profile	Profile for the login being added. Login of cm-only type requires a profile. Login of remote type is never assigned a profile.
	-P[key]	The login is asg authenticated. If no key is specified on the command line, one will be generated automatically. Not valid with -p .
	-p[pass]	The login is password authenticated. [pass] is the encrypted password. Not valid with -P . Because this option requires an encrypted password, Avaya recommended you use this option without a password, then use cmpasswd to set the password.
	-L	Lock the login. Not valid with -U .
	-U	Unlock the login. Not valid with -L .

cnc

cnc [on | off | status]

S8700 series

Use **cnc** to enable, disable, or status Control Network C on **S8700 series** servers.



CAUTION:

If Control Network C is enabled, executing **configure server** from the Maintenance Web Interface disables Control Network C. Execute the bash command **cnc on** to enable Control Network C.

Control Network C (cnc) uses the customer LAN for control signaling to TN2312 IPSI circuit packs on IP-PNCs. Use Control Network C when Control Networks A and B are administered as duplicated control networks to a Direct, CSS, or ATM-connected Port Network configuration.

cnc command options

command	option	description
cnc	on	Enables Control Network C on the S8700 series servers.
	off	Disables Control Network C on S8700 series servers.
	status	Determine whether Control Network C on S8700 series server is enabled or disabled.

corevector

corevector [-l] [-s [-f]] [-c arg] [-?]

corevector is used to request or clear coredump requests. The core dump files are generated prior to the execution of the restart requested. After the core files are taken, a reload of Communication Manager processes is executed. Specifying single process restart will also create a core file for terminal processes.

When the core files are to be taken, the state of health is lowered to force a server interchange. The core files are only taken on the ACTIVE server unless the -f (force) option is specified.

corevector -? displays the command option descriptions

corevector -l lists the current settings

corevector -s sets the core dump vector using the options noted below for option -c

corevector -f forces the core dump vector using the options noted below for option -c

corevector -c clears the core dump vector using the options noted as follows:

all - coredump files on all Communication Manager restarts

warm - coredump files on warm restart request

cold2 - coredump on cold2 restart request

reload - coredump on reload (reboot) restart request

insane - coredump on system insane condition

single - coredump on single process restart and killing of TERMINAL processes

trap - coredump of process that trapped

corevector accepts multiple arguments, e.g., **corevector -s warm cold2**

custalmopt

custalmopt [-?] [-h] [-d] [-m] [-a]

Use **custalmopt** to set or display the current customer alarm option. This command runs on the active server only , and Communication Manager must be running.

custalmopt command options

command	option	option description
custalmopt	-? or -h	Display command option descriptions.
	-d	Display current settings (default)
	-m	Set to report Major/Minor alarms only
	-a	Set to report all alarms

defsat

Use **defsat** to invoke a Communication Manager SAT session if the incoming TCP port is 5022 or 5023.

disp_dup_log

disp_dup_log [--hour | -h] [--day | -d] [--help | -?]
[# - # of entries to list]

Use **disp_dup_log** to show logs from the duplicate server.

disp_dup_log command options

command	option	description
disp_dup_log	--hour or -h	Display the hourly duplication measurements.
	--day or -d	Display the daily duplication measurements.
	--help or -?	Display command options.
	#	Number of entries to display.

dkill

dkill [-def | -ses | -a | -h | [<proc1> [<proc2>...]]

Use **dkill** to send a kill signal to processes in Communication Manager. Generally used with **-a** (all) when a system is caught in a state where **stop all** failed.

dkill command options

command	option	description
dkill	-def	All Communication Manager (defty) processes
	ses	All SES processes
	-a	All processes
	-h	Display command option descriptions.
	<proc1>	Only this process.

dsat

See [sat](#) on page 716.

environment

Use **environment** to see reports for environmental sensors such as temperature, fan speed, and voltage.

Use **environment -v** to turn on verbose output.

Use **environment -?** to display the help message.

fasttop

fasttop [-DLMh?] [-o filename] [-d delay] [-c #] [-n lines]

Use **fasttop** to see occupancy results for Communication Manager processes running on the server. Default screen refresh is 5 seconds.

fasttop command options

command	option	description
fasttop	-D	Query for HMM overload information.
	-L	Do not track threads.
	-M	Display memory leak detection instead of occupancy.
	-h or -?	Display command option descriptions.
	-o filename	Put the output in the specified filename.
	-d delay	Display the results every delay seconds. Default is 5.
	-c #	Number of ticks between looking at /proc
	-n lines	Display the number of lines specified by lines .

Example screen for fasttop command

```

C:\WINNT\System32\telnet.exe
Thu Jan  9 13:47:09.367
processor at 851941 khz 4.99 seconds  7.52 % used  4.12 % prio
Summary 4.99 seconds  7.52 % used  4.12 % prio
  PID  PPID  %occ  name      pol  prio  memory
  9406  9375  3.47  capro     FIFO  17  101167104
  9413  9375  3.26  audit     FIFO  3   1847296
  9389  9375  0.27  pcd       FIFO  22  5578752
 28314 27937 0.10  arbiter   RR    55  1474560
  9391  9390  0.09  pcd       FIFO  22  5578752
  9386  9375  0.08  tim       FIFO  24  1642496
  9460  9375  0.07  fac_st    FIFO  5   3248128
  9387  9375  0.07  tmr_mgr   FIFO  23  2043904
 15004 14992 0.04  fasttop   OTHR  0   1679360
  9401  9375  0.03  hmm       FIFO  21  5738496
  4165  9375  0.02  map       FIFO  4   2646016
  9464  9375  0.01  mdm       FIFO  5   2080768

[root@sray3-srv2 defty]#

```

filesync

```
filesync [-w] [-s | -f | -t | -i | -d | -e | -v ]
[-r <TYPE>] [ -a <TYPE> <ipaddr> ] [-q | -H <TYPE>]
[ -Q <TYPE> [ NUM ] ] [ filegroup ]
```

Use **filesync** to request synchronization of files from active to standby server(s). Specify all files, or sets of files; define the type of synchronization; enable, disable, or temporarily inhibit file synchronization; report synchronization status and history.

File synchronization sends translations to a duplicate, standby server, or to an LSP. File synchronization may take place because of LSP registration, or with the commands:

- | **filesync trans** (sends translations to the standby server or the LSPs)
- | **loaddisplang** (sends unicode files to the standby server and the LSPs)
- | **loadlicense** (sends the license file to the standby server)
- | **loadpwd** (in this instance, sends the password files to the standby server and the LSPs)
- | **save_trans** (sends translations to the standby server)
- | **save_trans lsp** (sends translations to the standby server and the LSPs)
- | **server -i** (sends all synchronized files to the standby server before the interchange)

filesync command options 1 of 3

command	option	option description
filesync	-w filegroup	Wait for a response before returning. Specify filegroup, or a11 for all groups.
	-s filegroup	Run the file synchronization silently. The exit status is the only indication of success or failure. Specify filegroup, or a11 for all groups.
	-f filegroup	Force a file synchronization for the specified filegroup. Contact the duplicate standby server(s) and ensure that the files in the specified sets are in agreement. Default. Specify filegroup, or a11 for all groups.
1 of 3		

filesync command options 2 of 3

command	option	option description
filesync	-t filegroup	Timestamp-based synchronization for the specified filegroup to the duplicate server. Verify the timestamps on all files in the specified sets, and synchronize the file/remote server when: - the file's timestamp is more recent than the last synchronization - the last synchronization attempt for the set failed Specify filegroup, or all for all groups. filesync -t is more efficient on the active server, and it ensures that if the file is changed locally it will be synchronized to the other server(s). filesync -t will not correct a corrupted file on the other server.
	-q filegroup	Query the status and receive a summary of the most recent synchronization, and synchronize the requested filegroup. Implies -w , wait for a response before returning. Specify filegroup, or all for all groups.
	-d	Disable file synchronization. No files will be synchronized to or from this server until an enable is given. The disable state persists across Communicator Manager restarts and Linux reloads.
	-e	Enable. Re-enable file synchronization.
	-i	Inhibit file synchronization temporarily. This command will not exit if given this option, so it should be run in the background as follows: <pre>filesync -i& fs=\$! ***other processing *** kill-HUP \$fs</pre>
	-v	Verbose output, use with -Q queries.
	-a <TYPE> <ipaddr> filegroup	Send files to a server of <TYPE> ESS or LSP at the specified IP address. Specify filegroup, or all for all groups.
	-Q <TYPE> [NUM]	Query the status of the translation synchronization number [NUM] to specified servers <TYPE>. Shows status for save trans , filesync trans , or nightly maintenance. Synchronization number [NUM]: 1 - 25. Default synchronization number is the most recent synchronization. Server type <TYPE>: dup , ess , lsp , all

2 of 3

filesync command options 3 of 3

command	option	option description
	-H <TYPE>	Show the history of the last 25 translation synchronizations to specified server types <TYPE>. Shows history for save trans , filesync trans , or nightly maintenance. Server type: dup, ess, lsp, all
	-r <TYPE>	Send files to the duplicate server and remote servers of a specified type <TYPE>. Server type: dup, ess, lsp, all
3 of 3		

filesync status description

On errors, an explanation of the error is sent to stdout. If the command is successfully sent to the daemon, and any response is received, a description of the status is printed to stdout. The exit code is:

Filesync status code descriptions

Code	Explanation
0	Successful
2	Synchronization is in progress.
3	Synchronization is currently inhibited or disabled.
4	Pre-script execution returned non-zero status.
5	Post-script execution returned non-zero status.
6	Request was bad (such as bad set name).
7	An error occurred during file synchronization.
8	A local error occurred.

ftpserv

ftpserv [-? | -h] [-f | -q | -w] on|off

Use **ftpserv** to configure ftp access and service. Use **-f on|off** to enable or disable ftp service. Use **-a on|off** to enable or disable anonymous ftp. This command works when the user is logged in as root, or with **sudo**, for example **sudo ftpserv -a on**.

ftpserv command options

command	option	description
ftpserv		Display the status of ftp service and anonymous logins
	-?	Display command option descriptions
	-h	Display command option descriptions
	-f	Display the firewall state for this port
	-f [on off]	Change the state of the firewall (on or off)
	-w	web option
	-q	Query option for the state of ftpd or the firewall associated with this service.

fwdlreason

fwdlreason [-a] [-c code] [-?]

Use **fwdlreason** to see reason codes for firmware download failures.

fwdlreason command options

command	option	description
fwdlreason		Display the list of all reason codes
	-a	Display the list of all reason codes
	-c code	Display the reason for a specific code
	-?	Display command option descriptions.

inventory

inventory [-v]

Use **inventory** to

- ┆ see the rmb (MPC) manufacturing information
- ┆ verify that the rmb (MPC) is connected and working correctly

Use **inventory -v** to see the detailed (verbose) information.

ipsisession

ipsisession [-d] [-k] -c cab#carrier | -p IP_address | -?

Use **ipsisession** to enable:

- ┆ Secure Shell (SSH) remote access protocols through login/password authentication on IPSI circuit packs that support SSH
- ┆ Telnet on IPSI circuit packs that do not support SSH

Use **ipsisession -k** to remove the known hosts file in Communication Manager and enable an SSH session on the circuit pack. For more information on dynamic host keys, see [reset ssh-keys](#) on page 514 and [ssh-keygen](#) on page 748.

Once the session is established, the user is prompted to accept the new keys. First, verify that

- ┆ A new host key has been generated.
- ┆ The IP address or hostname of the IPSI has changed. Use **list history** at the SAT to see whether **reset ssh-keys** has been executed on the CLAN or VAL circuit packs.

If neither of these conditions has occurred, then it is likely that another server is posing as the IPSI (rogue server, aka man-in-the-middle attack).

ipsisession command options 1 of 2

Action/Object	Qualifier	Qualifier Description
ipsisession	-k	Remove known hosts file and enable SSH on IPSI circuit packs that have changed dynamic host keys. (reset the ssh host public key).
	-d	Disable the telnet server. Default is enable the telnet server.
	-c cab#carrier	The target IPSI board with the specified cabinet number and carrier ID.
1 of 2		

ipsession command options 2 of 2

Action/Object	Qualifier	Qualifier Description
	-p <i>IP_address</i>	The IP address of the target IPSI board.
	-?	Display the help message.
2 of 2		

ipsiversion

ipsiversion [-a | -c cab#[carrier]] [-?]

Use **ipsiversion** to query each IPSI to determine its IP address, name, TN code, and hardware and firmware vintages.

ipsiversion -a shows all IPSIs in the system

ipsiversion -c cab#[carrier] shows information for a specific IPSI

ipsiversion -? displays the help message.

Example screen for ipsiversion command

```

C:\WINNT\System32\telnet.exe
[root@sray3-srv1 defty]# ipsiversion -a
This may take 1 seconds ...
      IPAddress      IPSI Name      IPSIBoard      HW#      FW#
198.152.255.3      ipsi-A02d      TN2312         2         3
198.152.254.3      ipsi-A02e      TN2312         2         3
198.152.255.2      ipsi-A02b      TN2312         2         3
198.152.254.2      ipsi-A02a      TN2312         2         3
198.152.255.1      ipsi-A01b      TN2312         2         3
198.152.254.1      ipsi-A01a      TN2312         2         3
[root@sray3-srv1 defty]#

```

listhistory

```
listhistory [ -l ] [ -f filename ] [ -?]
```

Use **listhistory** to list the Communication Manager shell commands which alter system administration or environment.

listhistory displays the most recent command history log file.

listhistory -l lists the names of the existing command history log files.

listhistory -f filename specifies which command history log file (*filename*) to view.

listhistory -? displays the command usage.

loaddisplang

```
loaddisplang [-? | -v]
```

```
loaddisplang -q[c|C|s|S] [d] [f] [filename]
```

```
loaddisplang -i[c|s [d]] [filename]
```

Use **loaddisplang** to query (-q) or install (-i) Unicode/user-defined phone message files. There is no "uninstall" option for this command. If the installed files are not satisfactory, the user is expected to either overwrite them by re-running **loaddisplang** or to manually delete the installed files across all servers on which they reside.

On Linux platforms, the ftp directory is /var/home/ftp/pub. The installation directory is /etc/opt/defty/i18n/

loaddisplang command options 1 of 2

Action/Object	Qualifier	Qualifier Description
loaddisplang		Display the help message.
	-c	Operate on all custom non-installed phone message files.
	-C	Operate on all custom installed phone message files.
	-s	Operate on all standard non-installed phone message files.
	-S	Operate on all standard installed phone message files.
	-d	Indicates the file in question is user-defined (omission implies default of unicode file).
	-f	Indicates the file in question is non-installed phone message files.
	-i	Install a unicode or user-defined file. With no file specifiers, will install all valid unicode files in the ftp directory.
1 of 2		

loaddisplang command options 2 of 2

Action/Object	Qualifier	Qualifier Description
	-q	Perform a query of the language tag. With no file specifiers, will query among the installed set of unicode files. With the -d option, will query among the installed set of user-defined files. Precedence is given to the custom file in either case.
	-v	Display the version number.
	-?	Display the help message.
2 of 2		

loadipsi

```
loadipsi [-a board-code] [-l] [-c cab#[carrier]] [-b] [-r]
[-f file] [-s time] [-d] [-e] [-i ip-addr -u user] [-w pwd] [-?]
```

Use **loadipsi** to load IPSI application firmware or boot code to all or specific IPSI boards in the system. The firmware or boot code is then burned into flash memory. Prior to a download, **loadipsi** checks the current firmware and boot code versions on all target IPSI boards against the version ready for download. If the version on the boards is equal to or greater than the version on the server, **loadipsi** will stop the process. The command option **-r** will override the version check and allow the download.

loadipsi command options 1 of 2

command	option	description
loadipsi		Display instructions and command options.
	-a board-code	Download the application firmware or boot code file to all IPSI boards with the specified board code.
	-l	Download the application firmware or boot code file to all standby IPSIs.
	-c cab#[carrier]	-c cab# - Download the application firmware or boot code file to all IPSIs in a specified cabinet. -c cab#carrier - Download the application firmware or boot code file to all IPSIs in a specified carrier.
	-b	Specifies the download of the boot code.
	-r	Activates a download without checking the current application firmware or boot code on the target IPSI board(s).

loadipsi command options 2 of 2

command	option	description
	-f file	Identifies and displays the application firmware or boot code file ready for download.
	-s time	Start time for a download in mmddyyyyhh:ii format, where m = month, d = day, y = year, h = hour, i = minute.
	-d	Display all scheduled loadipsi jobs in the system
	-e	Remove all scheduled loadipsi jobs from the system
	-i ip-addr	Download the firmware image from the specified server before downloading it to the IPSI board(s).
	-u user	Use this user name to obtain the file from the remote server specified by the -i option.
	-p pwd	Use this password for the user name specified by the -u option.
	-?	Display a description of command options.

loadlicense

loadlicense [-i input-file] [-?] [-h] [-u] [-v]

Use **loadlicense** to run a command-line version of the utility to load the license file.

loadlicense command options

Action/Object	Qualifier	Qualifier Description
loadlicense		Load the license file in /var/home/ftp/pub with the latest timestamp.
	-i	Use this input file
	-u	Uninstall one level
	-v	Display version and build information
	-? or -h	Display this help message.

loadstbyipsis

loadstbyipsis [-r] [-?] -f file

This command loads all standby IPSI boards in the system with the IPSI firmware image. This command is especially useful to load firmware on all standby IPSIs in a duplicated IPSI system, then using the **resetstbyipsis** command to activate the firmware (non-service affecting).

This command will do nothing if the system is not running or there are no standby IPSIs administered.

This command only works on the active server.

loadstbyipsis command options

command	option	description
loadstbyipsis		Display instructions and command options.
	-r	Activates a download without checking the current application firmware or boot code on the target standby IPSI board(s).
	-f file	The application firmware or boot code file to download.
	-?	Display instructions and command options.

loadpwd

Use **loadpwd** to run a command-line version of the utility to load the Avaya authentication file (password file) onto the

- ┆ host server
- ┆ standby server
- ┆ LSP
- ┆ remote maintenance board/ Maintenance Processor Complex (MPC)

This command has no options.

locktrans

Use **locktrans** to lock translations so that no save translations can be performed until you use the **unlocktrans** command. See [unlocktrans](#) on page 732. This command has no options.

logc

See [logv logc logw](#) on page 696.

logclear

Use **logclear** to remove logmanager output files from the `/var/log/ecs` directory.

logecho

```
logecho -p procname -s[c|h|m|l] -l level -t type -|message
```

```
logecho -x procname
```

```
logecho -?
```

Use **logecho** to make an entry in the logmanager log. Only the first non-option argument is placed in the log as the message body. Shell quoting can be used to put messages which contain white space. If the argument value is "-", then the standard input is read, and each line becomes an entry in the log.

logecho command options

command	option	description
logecho	-p procname	the process name the user wants to appear in the log
	-s severity	Severity: c = critical, h = high, m = medium, l = low
	-l level	The level mask. The level can be entered in decimal, octal (preceded by '0'), or hex (preceded by '0x').
	-t type	The type mask. The type can be entered in decimal, octal (preceded by '0'), or hex (preceded by '0x').
	-	Log each stdin line
	message	The message to log
	x	Do a <code>gstTrace_exit</code> for this process.
	-?	Display command option descriptions

logfilter

```
logfilter [-o] [-a] [-l level] [-t type] processname | all
```

```
logecho [ -? | -h ]
```

Use **logfilter** to selectively turn on/off the logging specific types of messages as well as specific levels of messages for a specific process or all processes.

If either the level or type mask is not specified, then its value is left the same. If neither are specified, then the current value of each for each specified process is displayed.

logfilter command options

command	option	description
logfilter	-? -h	Display command option descriptions
	-o	OR in the mask for which levels and types of messages will be logged. The mask can be entered in decimal, octal (preceded by '0'), or hex (preceded by '0x').
	-a	AND in the mask for which levels and types of messages will be logged. The mask can be entered in decimal, octal (preceded by '0'), or hex (preceded by '0x').
	-l level	Sets the mask for which levels of messages will be logged. The mask can be entered in decimal, octal (preceded by '0'), or hex (preceded by '0x').
	-t type	Sets the mask for which types of messages will be logged. The mask can be entered in decimal, octal (preceded by '0'), or hex (preceded by '0x').

loginreport

```
loginreport [-afhrsv] [-l (login | all)] [-b "mm/dd hh:mm" (begin time)] [-e "mm/dd hh:mm" (end time)] [-n (line limit)]
```

Use **loginreport** search for a specific set of log events. This command is intended to display normal user activity and is a starting point only for debugging analysis. At least one report type [-sfv] must be specified.

loginreport command options

command	option	description
loginreport	-a	Report only active sessions. Only useful with -s or -v
	-b	Include activity starting after this time. Double quotes are required. This parameter is optional. If not provided, events from the beginning of the file(s) to the stop time are included.
	-n N	Limit the output to the first N events.
	-e	Include activity in the report starting at or before this time. Double quotes are required. This parameter is optional. If not provided, all events from the begin time to the current time are included.
	-h	Display the command option descriptions
	-r	Display specified report with most recent events listed first.
	-s	Produce a report of successful logins
	-f	Produce a report of failed logins
	-v	Produce a detailed report of user activity of successful logins. BASH indicates activity was from a shell. SAT indicates activity in a Communication Manager SAT.
	-l	Enter a specific user name or "all". If a specific user name is entered, activity for that single user is included in the report. If no "-l" option is specified, "all" is assumed.

logv logc logw

```
logv [OPTIONS]...[LOGS...] [-t time]...[[-a]FILTERS]...[-?]
```

```
logc [OPTIONS]...[LOGS...] [-t time]...[[-a]FILTERS]... [-?]
```

```
logw [OPTIONS]...[LOGS] [[-a]FILTERS]...[-?]
```

Use **logv** to merge and edit (vi) the various log files in the system, including SES log reports.

Use **logc** to merge and output (cat) various log files to standard output.

Use **logw** to watch the requested log file for changes applying the specified filters.

Multiple logs can be specified. The logs are merged and sorted by time. Multiple time patterns and time ranges can also be specified.

The log file names are:

all	Display all possible logs.
lm	Logmanager debug trace log (default).
lxboot	Linux boot messages.
lxsys	Linux syslog.
lxsec	Linux access security log.
lxwtmp	Linux login/logout/reboot log.
lxxfer	Linux file transfer log.
wd	Watchdog logs.
cmds	Platform command history log
httperr	HTTP/web server error log
httpssl	HTTP/web secure sockets layer (SSL) request log
httpaccess	HTTP/web access log
cmrestart	Communication Manager restart log (last 16 restarts).
filesync	Communication Manager file synchronization log
update	System updates/patches
ccsppm	SES PPM log
siptrace	SES SIP trace log
ccsmaws	SES Core Router trace log

logv, logc, logw command options 1 of 3

command	option	description
logv logc logw	-?	Display command option descriptions
	-b	Remove blank lines.
1 of 3		

logv, logc, logw command options 2 of 3

command	option	description
	-c	Display the contents of the log. Automatically set if called with logc.
	-d	Augment timestamps with time delta between entries displayed.
	-desp [N]	Output a separator line when the delta between entries is greater than N seconds. The default is one second.
	-ls	List the names and sizes of log files.
	-r	Reverse the order to show the latest entry first.
	-s	Strip off the timestamp and header of each line.
	-st	Leave the timestamp and strip off the rest of the header on each line.
	-sd	Format the timestamp as yyyy/mm/dd HH:MM:SS and strip off the rest of the header on each line.
	-w	Watch the log (automatically set if called with logw).
	-v	Show the version of the command.
	-l	Search only the latest file in the log. (Default is all files.)
	-lf file	Assume that file is a log file and read input from it. Multiple -lf arguments may be entered.
	-ld dir	Look for log files in the directory dir instead of the default.
	-clear	Clear the log files (only logmanager files).
	-t pattern	Filter events for a particular day/time pattern with the format of yyyy[mm[dd:[HH[MM[SS[mmm]]]]]]
	-t range	Filter events for a particular day/time range with the format of yyyy[mm[dd:[HH[MM[SS[mmm]]]]]]-yyyy[mm[dd:[HH[MM[SS[mm m]]]]]]
	-t today	Display today's log.
	-t yesterday	Display yesterday's log.
	app-pat	Filter events for a specific application or process (for example, capro). Multiple application patterns can be specified.
2 of 3		

logv, logc, logw command options 3 of 3

command	option	description
	-a	Application patterns following the -a are applied to the output of those preceding the -a. Application patterns following the -a are considered to be grep patterns.
	-g	Assume application filters are grep patterns instead of application names.
	-i	Assume application pattern filters are grep patterns and ignore the case of letters.
	--views	Lists the predefined log views. A view is a shorthand for a log type as well as a pattern to match in the logs.
	--view VIEWNAME	Display the log using the log types and grep patterns associated with the view VIEWNAME. The built-in views are: ipevt - List IP events (interfaces up/down, telephone/endpoint registration/deregistration). bashhist - Platform command history log. mst - If enabled via a SAT command, entries to the Communication Manager's message sequence trace (MST) log can be echoed into the debug trace log as well. The fields are the raw hex bytes of the MST log entry. hwerr - The events that go into the Communication Manager's hardware error and alarm logs. This needs special deciphering by an external tool. sat - The System Administration and Maintenance activities performed on Communication Manager's System Access Terminal (SAT). swerr - The events that go into the Communication Manager's software error log. This needs special deciphering by an external tool. kernel - Linux kernel debug messages. cron - Linux scheduled task log.
3 of 3		

logw

See [logv logc logw](#) on page 696.

modserv

modserv [-T] [-v] [-stat | -off | -once | -respawn | -outcall | -test | -restore | -?]

Use **modserv** to turn modem access on or off for one or more calls.

modserv command options

command	option	description
modserv	-T	Turn on verbose mode
	-stat	Return the access status: 0 - access off 1 - access on for one call 2 - access on for multiple calls
	-v	Display current status if -stat option is set.
	-off	Turn modem access off
	-once	Turn modem access on for one call
	-respawn	Turn modem access on for multiple calls
	-test	Turn modem off for testing
	-outcall	Turn modem off for outcall
	-restore	Restore modem state to administered settings
	-?	Display command option descriptions

Example screen for modserv command

```
[root@pilsner1 ecssw-02.0.519.0]# modserv -v
Modem access is administered for incoming calls.
The modem is active for an outgoing call.
[root@pilsner1 ecssw-02.0.519.0]# _
```

mv_lastlog

Use **mv_lastlog** to run the Communication Manager modified version of the Linux lastlog utility.

mv_status

Use `mv_status` to generate a report on Communication Manager run status.

pingall

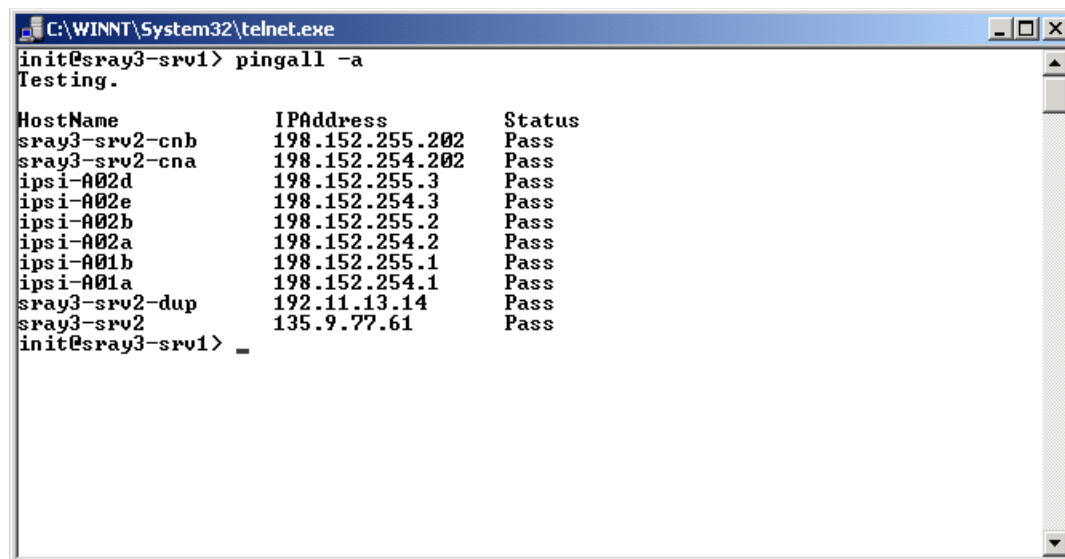
```
pingall [ [-s [ServerID]] [-d [ServerID]] [-i [cab#][carrier]]
         [-n [ServerID[a|b]]] [-u [upsID]] [-h [hubID]] [-c count] [-v]
```

Use `pingall` to verify basic connectivity.

pingall command options

command	option	description
<code>pingall</code>		Ping all IPSI circuit packs
	<code>-a</code>	Ping all network entities on the remote sides, including servers, routers, and IPSI circuit packs.
	<code>-s ServerID</code>	Ping a specific customer LAN
	<code>-d ServerID</code>	Ping a specific duplink
	<code>-i cab#[carrier]</code>	Ping a specific IPSI
	<code>-n ServerID</code>	Ping a specific control network
	<code>-u upsID</code>	Ping a specific ups
	<code>-h hubID</code>	Ping a specific hub
	<code>-c count</code>	The number of test messages for each network entity
	<code>-v</code>	Turn on verbose mode
	<code>-?</code>	Display a description of command options

Example screen for pingall command



```

C:\WINNT\System32\telnet.exe
init@rray3-srv1> pingall -a
Testing.

HostName                IPAddress                Status
rray3-srv2-cnb           198.152.255.202          Pass
rray3-srv2-cna           198.152.254.202          Pass
ipsi-A02d                198.152.255.3            Pass
ipsi-A02e                198.152.254.3            Pass
ipsi-A02b                198.152.255.2            Pass
ipsi-A02a                198.152.254.2            Pass
ipsi-A01b                198.152.255.1            Pass
ipsi-A01a                198.152.254.1            Pass
rray3-srv2-dup           192.11.13.14             Pass
rray3-srv2               135.9.77.61              Pass
init@rray3-srv1> _

```

productid

productid [-p | -m | -r productID] [-?]

Use **productid** to view or set the Product ID for Communication Manager, Messaging products, or the Remote Maintenance Board for alarms.

To run **productid** directly on the remote maintenance board, enter
sudo /opt/alarming/bin/productid.

productid command options

command	option	description
productid		Display Product ID of this server
	-p productid	Set this server's Product ID to productid . The productid is a 10-digit number that starts with "1".
	-m productid	Set the Messaging identification number to productid . The productid is a 10-digit number that starts with "2".
	-r productid	Set the Remote Maintenance Board identification number to productid . The productid is a 10-digit number that starts with "5".
	-?	Display the command option descriptions.

raid_status

S8730

```
raid_status -c
raid_status -h
raid_status [-s | -v]
raid_status [-s | -v] -p
raid_status [-s | -v] -n
```

Use **raid_status** to display the server RAID (Redundant Array of Independent Disks) controller status on an S8730 server. The status displayed depends on the following command options and the server type.

Specifying the following options together is INVALID:

```
raid_status -v -s
raid_status -p -n
```

raid_status command options

command	option	description
raid_status	-c	Check for a possible HDD failure and log the failure in syslog.
	-h	Display the help message.
	-v	Verbose output, display all RAID Controller Data.
	-n	Display the number of disk drives.
	-s	(Default). Display short physical disk drive data.
	-p	Display physical disk drive data - use with -v or -s.
	-p -s	(Default). Display short physical disk drive data.
	-p -v	Display verbose physical disk drive data.
	-n -s	(Default). Display short drive data 1, 2, or -1 (not sure).
	-n -v	Display verbose (slot number) number drive data

raid_status output

raid_status -n displays the number of HDD's detected. The values returned are 1, 2, and -1. -1 indicates that it is not clear if both hard drives are plugged in, or there may have been an error when obtaining the data. Refer to [raid_status diagnostics](#) for more information.

The following example shows that **one** HDD was detected:

```
craft@s8730server2>raid_status -n
1
craft@s8730server2>
```

The following is an example of the verbose output for the RAID HDD physical data on an S8730 server equipped with **one** HDD:

```
craft@s8730server2>raid_status -p -v

Smart Array E200 in Slot 3

array A

    physicaldrive 1:1
        Port: 11
        Box: 1
        Bay: 1
        Status: OK
        Drive Type: Data Drive
        Interface Type: SAS
        Size: 72 GB
        Rotational Speed: 10000
        Firmware Revision: HPD7
        Serial Number: 3LB1J0260000009731H792
        Model: HP      DG072A8B54
    physicaldrive 1:2
        Port: 11
        Box: 1
        Bay: 2
        Status: Failed
        Drive Type: Data Drive
        Interface Type: SAS
        Size: 0 MB
```

S8730 servers are usually shipped with **one** HDD. In the above example, **raid_status** reports that this server has **one** HDD. The second physical HDD is shown since the server was staged with two HDD's, but it was only shipped with one. The physical data for the second HDD is not displayed since the second HDD does not exist. To verify that the second HDD is not present, run **raid_status -n -v**:

```
craft@s8730server2>raid_status -n -v
Drive in slot 1 is present
Drive in slot 2 is NOT present
craft@s8730server2>
```


The following is an example of the output for the RAID HDD physical data on an S8730 server equipped with **two** HDDs:

```
craft@dlws8730>raid_status -p -v

Smart Array E200 in Slot 3

    array A (Failed)

        physicaldrive 1:1
            Port: 11
            Box: 1
            Bay: 1
            Status: OK
            Drive Type: Data Drive
            Interface Type: SAS
            Size: 72 GB
            Rotational Speed: 10000
            Firmware Revision: HPD7
            Serial Number: 3LB1J8BM000009731KUXM
            Model: HP      DG072A8B54
        physicaldrive 1:2
            Port: 11
            Box: 1
            Bay: 2
            Status: Failed
            Drive Type: Data Drive
            Interface Type: SAS
            Size: 72 MB
            Rotational Speed: 10000
            Firmware Revision: HPD0
            Serial Number: B365P720FCBB0707
            Model: HP      DG072A9BB7
```

raid_status diagnostics

-1 - raid_status -n will return **-1** when it is not clear if both hard drives are plugged in. If this occurs, enter **raid_status -n -v** or **raid_status -p** which displays if both hard drives are present or if one is marked as **Failed**

Failed - If a hard drive is shown as **Failed**, the amber LED on the associated failed hard drive will either be flashing on a regular basis or solidly on. A hard drive may also be marked as **Failed** if it was pulled live.

Interim Recovery Mode - It is possible that a disk is bad or the server only has one HDD plugged into the server. To determine the server HDD state, enter **raid_status -p -v** or **raid_status -n -v**

Linux Bash Commands

If `raid_status -c` is executed and a disk failure exists, the output will indicate the failed disk. The following is an example of the output that would be displayed to show that the disk in bay 2 failed:

```
craft@s8730server2>raid_status -c

Drive in slot 1 is present
Drive in slot 2 NOT sure if present
Log HDD 2 failure
craft@s8730server2>
```

Note:

An unplugged HDD appears as a failed HDD to the RAID controller.

resetipsi

```
resetipsi [-a | -b | -c cab#[carrier] | -d | -r | -i interval |
-s start time |-t stop time | -F | -S suffix] [-?]
```

Use **resetipsi** to reset one or more IPSI boards.

resetipsi command options

command	option	description
resetipsi	-a	Reset all IPSI circuit packs.
	-b	Reset all standby ipsi boards.
	-c cab#[carrier]	Reset a specific IPSI circuit pack.
	-d	Display all scheduled resets.
	-r	Remove all scheduled resets.
	-i interval	Interval in minutes between two resets. Default = 10. Max = 15.
	-s start time	Start time for reset in mmddyyyyhh:ii format.
	-t stop time	Stop time for reset in mmddyyyyhh:ii format.
	-F	Fork background process to do resets.
	-S suffix	Suffix of ipsi boards to reset.
	-?	Display a description of command options.

resetstbyipsis

Use **resetstbyipsis** to reset all standby IPSI boards in the system. This command is especially useful to activate the firmware on all standby IPSIs in a duplicated IPSI system. This command will do nothing if the system is not running or if there are no standby IPSI boards administered.

This command only works on the active server.



CAUTION:

This command has no options. It is executed when the command is entered.

restartcause

Use **restartcause** to see a list of Communication Manager restarts, their causes, and whether or not each restart escalated into a higher initialization. Use **restartcause** to help determine when an interchange or reload took place. Restarts are listed in ascending order of time.

See also [display initcauses](#) on page 315.

Example screen for restartcause command

```
init@pilsner1> restartcause
                        RESTART CAUSES for sv-oddie1
```

Cause	Action	Escalated	Mode	Time
Interchange-Craft	4 (RELOAD)	yes	Active	06/17 9:17
Initialized	4 (RELOAD)	no	Active	06/21 8:46
Interchange-Craft	4 (RELOAD)	no	Standby	06/27 15:14
Internal Request	1 (WARM)	no	Standby	06/27 15:16
Internal Request	1 (WARM)	no	Standby	06/27 15:16
Interchange-Craft	1 (WARM)	no	Active	06/27 15:34
Interchange-Craft	4 (RELOAD)	no	Standby	06/29 13:20
Internal Request	1 (WARM)	no	Standby	06/29 13:22
Internal Request	1 (WARM)	no	Standby	06/29 13:23
Initialized	4 (RELOAD)	no	Standby	07/01 10:08
Internal Request	1 (WARM)	no	Standby	07/01 10:09
Internal Request	1 (WARM)	no	Standby	07/01 10:10
Initialized	4 (RELOAD)	no	BUSY OUT	07/01 10:35
Internal Request	1 (WARM)	no	Standby	07/01 10:37
Internal Request	1 (WARM)	no	Standby	07/01 10:37
Interchange-Craft	4 (RELOAD)	yes	Active	07/01 10:43

restartcause field descriptions

restartcause field descriptions

Field	Description
Cause	The reason for the restart. Initialized = System initialization. Craft request = A user logged in as craft requested the restart and selected the level through an administration session on the server. Interchange = A State of Health change caused the arbiter process to initiate the restart. Interchange-Craft = An administrative session (session -i command, on-demand interchange) caused the arbiter process to initiate the restart. Internal request = Software requested the restart, usually in response to a server interchange. Internal request restarts are not initiated in direct response to an error and are non-escalating. Software request = Typically, software detected an error and automatically requested a restart.
Action	The level of the restart. 1 (Warm) = Communication Manager is restarted, and active calls remain up. 2 (Cold) = Communication Manager is restarted, translations are preserved, and all calls are dropped. 4 (Reload) = Communication Manager software is completely reloaded. All calls are dropped, the translations are reloaded, and the hardware is reinitialized.
Escalated	Escalated indicates whether the current restart has been escalated (increased in level) from a previous level. Restarts can be automatically or manually escalated to a higher level. For example, if the software detected an error and could not resolve the error by doing a level 1 restart, it would automatically initiate a level 2 restart. In this case, the Restart Causes page shows a 2 in the Action column and a yes in the Escalated column.
Mode	State of the server immediately after the interchange, at the time of the restart. Look for a change of mode to help determine when an interchange occurred. 1 Active = Mode of a simplex server and for a duplex server that is the active server. 1 Standby = Mode of a standby server in a duplex configuration 1 BUSY OUT = Mode of a standby server that has been placed out-of-service with a busyout command.
Time	The date and time the restart occurred. The restarts display according to when they occur, with the most recent restart appearing at the end of the list.

restartcause error messages

restartcause error messages

error message	description
invalid argument: <argument>	More than one argument was entered on the command line.
No initfile at ./initcause.log or /var/log/defty/initcause.log	The data file is either missing or unreadable (for example, there is no read permission).
restartcause: Error reading initcausefile, error = <error>	The command encountered a problem reading the data file. The file is either ./initcause.log or /var/log/defty/initcause.log.

remaster

remaster [-? -u -y]

Use **remaster** to recover from an aborted data restore after remastering a hard drive.

Use **remaster -?** for help.

Use **remaster -u** to undo a remaster command.

Use **remaster -y** to answer yes to all prompts.

Before you use **remaster**, you must have:

- 1 an Avaya Communication Manager installation CD to be loaded in a CD-ROM drive at bootup
- 1 on [S8300](#), a USB CD-ROM drive attached and an Avaya Communication Manager installation CD

See *Installing and Upgrading the Avaya G700 Media Gateway and Avaya S8300 Media Server (555-234-100)* for information on setting up your connections.



WARNING:

Running **remaster** causes the entire hard disk to be re-imaged after the next server reboot. All data will be lost. Backup your data before running **remaster**, and use the maintenance web interface “Shutdown Server” link afterward to perform the reboot. The remaster process will begin at the reboot, the hard disk will be reimaged, and there will be no service until a second reboot is performed.

Example screen for remaster command

```

root@tsochawk> remaster

      ==== WARNING =====

Running this command causes the entire hard disk to be re-imaged after the
next server reboot. All data will be lost. Please backup your data before
proceeding, and use the maintenance web interface "Shutdown Server" link
afterward to perform the reboot.

You must have the Avaya CM Installation CD to complete the re-imaging.

Do you want to continue and reimage this hard disk [N/y]? y
Added a6
Added a1
Added RAMa6
Added RAMa1
Added Rebuild

      *****Success *****

      Insert the ACM Installation CD in the
      CDROM drive, and reboot the server to
      reimage the server.

      You can undo this operation by running this
      command with the "-u" option

```

To run remaster:

1. Type **remaster** at the command prompt.
The remaster screen appears.
2. Type **y** and Enter after the prompt **"Do you want to continue and reimage this hard disk [N/y]?"**
3. Wait for the message: **"You can undo this operation by running this command with the "-u" option"**.

Note: Use **remaster -u** now to stop the remaster process. If you do not use **remaster -u**, the next time the server is re-booted the remaster process begins, the hard disk is reimaged, and there is no service until a second re-boot is performed.

4. Open a DOS command window.
5. Perform a "ping -t 192.11.13.6" and leave the session running.
6. Perform a reboot of the server.
Wait to receive valid ping replies.
7. Telnet back into the services port and follow installation procedures.

rm_download_files

```
rm_download_files [file-to-delete]
```

```
sudo rm_download_files [file-to-delete]
```

Use `rm_download_files` to add remove files from the `/var/home/ftp/pub` directory.

`rm_download_files file-to-delete` attempts to delete the specified file from `/var/home/ftp/pub`. The file must be present in the directory (or a subdirectory) and must also be a regular file. The file must also be owned by the `ftp` user in order to prevent others from deleting files saved by other logins.

The `susers` group logins must use `sudo` in order to have access to this command since the command requires root permission to run.

rmbpasswd

Use `rmbpasswd` to change passwords for remote maintenance board (MPC) logins.

rmbuseradd

rmbuseradd [-d *home*] [-o [-p *passwd* [-P *y/n*] [-s *shell*] [-u *uid*]

Use **rmbuseradd** to add remote and local modem and user logins on the remote maintenance board.

rmbuseradd command options

command	option	description
rmbuseradd	-d <i>home</i>	Identify a home directory for a particular login on the remote maintenance board. Default is <i>home/login</i> where <i>login</i> is the unique user name.
	-o	Create a duplicate User ID.
	-s <i>shell</i>	Identify the login shell to use. If not used, the system uses the /bin/sh default.
	-p <i>passwd</i>	Set the login password to <i>passwd</i> . Use this only on automated scripts. This must be an encrypted password as returned by the crypt system call. To manually add or change a password, use rmbpasswd .
	-P <i>y/n</i>	Specify that the login is used for establishing a PPP session through the modem. Default is n (non-modem access).
	-u <i>uid</i>	Specify a unique User login ID. If not used, the system assigns the next available User ID.

rmbuserdel

Use **rmbuserdel** to delete existing customer-created logins on the remote maintenance board. Craft and rasaccess logins cannot be deleted with **rmbuserdel**.

rmbusermod

```
rmbusermod [-d home] [-o] [-p passwd] [-P y/n] [-s shell]
[-u uid]
```

Use **rmbusermod** to modify existing logins on the remote maintenance board.

rmbusermod command options

command	option	description
rmbusermod	-d home	Identify a home directory for a particular login on the remote maintenance board. Default is home/login where <i>login</i> is the unique user name.
	-o	Create a duplicate User ID.
	-s shell	Identify the login shell to use. If not used, the system uses the /bin/sh default.
	-p passwd	Set the login password to passwd . Use this only on automated scripts. This must be an encrypted password as returned by the crypt system call. To manually add or change a password, use rmbpasswd .
	-P y/n	Specify that the login is used for establishing a PPP session through the modem. Default is n (non-modem access).
	-u uid	Specify a unique User login ID. If not used, the system assigns the next available User ID.

rtrenice

Use **rtrenice** to change the current login's priority. Useful, but dangerous on a high occupancy customer switch. Example:

```
rtrenice -r 99 $$ (as root)
```

sampcmd

Use **sampcmd** to

- ┆ log into the remote maintenance board
- ┆ run a command on the remote maintenance board from the host

To run a command on the remote maintenance board from the host, on the host type **sampcmd** and another command. For example, enter **sampcmd date** to see the date reported by the remote maintenance board.

sampdiag

Use **sampdiag** to:

- 1 test the communication path to the remote maintenance board (MPC)
- 1 perform simple repairs on the server-to-rmb internal connection.

Example screen for sampdiag command

```
chintan-8500: sampdiag -v
The SAMP is using the Avaya IP address.
SAMP HW address: 00:0F:29:00:01:5C
SAMP IPAddress: 192.11.13.2
HOST IPAddress: 192.11.13.1
SSH port: 10022
SSH OK
HPI OK
SAMP OK
```

The following fields appear on the **test alarms** screen.

sampdiag field descriptions

Field	Description
SAMP HWaddress	Shows if a remote maintenance board (rmb) was detected. If not HWaddress was detected, either the ecs.conf file is incorrect or the rmb is not working.
SAMP IP address	1 If the IP address cannot be determined, check for problems with the remote maintenance board. 1 If the IP address is similar to 10.221.248.1(or .2), then an administration step was skipped or failed when the host software was installed. Verify that the remote maintenance board software is the most current.
HOST IP address	If the IP addresses are similar to 10.221.248.1(or .2), then an administration step was skipped or failed when the host software was installed. Verify that the remote maintenance board software is the most current.
SSH HPI	Shows the configuration of HPI and SSH. If both fail and the IP address is reported, the host software may have been administered incorrectly.

sampupdate

Use **sampupdate <filename>** to update the firmware on the remote maintenance board (SAMP, MPC). The filename is the firmware image located in the /var/home/ftp/pub directory. No filename is needed If there is only one file in the directory.

sat

sat [-? | h] [path]

Use **sat** to run a Communication Manager SAT (system access terminal) session. Also use **autosat** and **dsat**.

Use **sat -h** or **sat -?** to display the help message.

Use **sat path** to use an alternate SAT executable, where **path** is the path to the directory containing the SAT executable.

save_trans

Use **save_trans** to save translations to the active and standby servers. Equivalent to **save translations** on the SAT. This command has no options.

serialnumber

serialnumber [-l | -q | -h | -?]

Use **serialnumber** to see the serial number in the license file, or the serial number detected in the network by the server.

serialnumber command options

command	option	description
serialnumber		Display all serial numbers.
	-l	Report the serial number from the license file.
	-q	Force a direct query of the IPSIs.
	-h or -?	Display command option descriptions.

server

server [-i | -if | -c | -b | -r | -q | -o | -?]

Use **server** to display or change server status on a server, and to see the status and health of each server, including information on:

- ┆ duplication
- ┆ connectivity status
- ┆ shadowing

- 1 status of outstanding major and minor alarms
- 1 how long the servers have been up since the last restart.
- 1 state of health (hardware health, process health, control network health)

server command options

command	option	description
server		Display status of active and standby servers
	-i	Perform an interchange between active and standby servers.
	-if	Perform an interchange immediately with a forced health-override (potentially dangerous).
	-c	Continuously display status updates at 1-second intervals.
	-b	Busyout this server if it is in standby mode.
	-r	Release this server if it is busied-out.
	-q	Query the state of this server.
	-o	Query the state of the other server.
	-?	Display command option descriptions.

Example screen for server command

```
0;init@sv-st2-2:~0;init@sv-st2-2: ~> server
SERVER STATUS

Cluster ID: 001
Duplication: hw
Standby Busied? no
Standby Refreshed? yes
Standby Shadowing: on
Duplication Link: up
Elapsed Time since Init/Interchange: 5d 02:21:30

sv-st2-2                                sv-st2-1

ID: 002 (2)                             ID: 001 (1)
Mode: Active                             Mode: Standby
Major Alarms: yes                         Major Alarms: yes
Minor Alarms: yes                         Minor Alarms: yes
Control Network: 15 /15 /15               Control Network: 15 /15 /15
Server Hardware: okay                     Server Hardware: okay
Processes: okay                           Processes: okay
```

Example screen for server command on SES:

```
craft> server

                                SERVER STATUS

                                myservername

                                Mode: Active (In service Primary)
                                SIP Role: Home
                                Major Alarms: no
                                Minor Alarms: yes
                                Server Hardware: okay
                                Processes: okay
```

serverctrl

serverctrl [disable boot timer]

Use **serverctrl** on the MPC to see the status of the boot timer on the MPC.

Use **serverctrl disable boot timer** on the MPC to disable the boot timer on the MPC when the server is shut down. Disable the boot timer to prevent the MPC from rebooting the server during server installation or remastering the hard drive.

To access the MPC CLI to use the commands, plug the services laptop into the MPC services port, which is the same port as the server services port, and perform necessary steps to access the MPC CLI. See [Disabling the boot timeout using Linux commands](#) on page 68 of the *Maintenance Procedures for Avaya Communication Manager, Media Gateways and Servers (03-300432) (formerly 03-300192)*.

Example screen for serverctrl

```

      .
     .M
    .MM
   .MM M  _ _
  .MM M  | ( )
 .MM M  | | _ _ _ _ _
MMM MMMMMM | | | ' _ \ | | | \ \ / /
MMM M      | | | | | | | _ | | > <
MMM M      | _ | _ | | _ | \ _ , _ / _ \ \

```

BusyBox v1.00-pre10 (2005.07.26-18:42+0000) Built-in shell (ash)
 Enter 'help' for a list of built-in commands.

craft@STA04310083:~\$ serverctrl
 Power On
 Server Operational
 Reset Deasserted
 Boot Timer Disabled
 craft@STA04310083:~\$

Example screen for serverctrl boot timer disable

```

      .
     .M
    .MM
   .MM M  _ _
  .MM M  | ( )
 .MM M  | |
MMM MMMMMM | | | ' _ \ | | \ \ / /
MMM M      | | | | | | | _ | > <
MMM M      | _ | _ | | _ \ _ / \ _ \
BusyBox v1.00-pre10 (2005.07.26-18:42+0000) Built-in shell (ash)
Enter 'help' for a list of built-in commands.

craft@STA04310083:~$ serverctrl boot timer disable
OK
```

setnic

```
setnic -h
setnic [-d] -B <interface>
setnic [-d] -m <10H|10F|100H|100F|1000H|1000F|AUTO> <interface>
setnic [-d] -q <interface>
```

Use **setnic** to configure Ethernet interface speed, duplex, and autonegotiaion settings on the NIC of a specific server running Communication Manager.



CAUTION:

If you use **setnic** to query/set the interface Speed/Duplex settings of an interface, that interface will be reset. Be careful about doing this on an active server.

setnic command options 1 of 2

command	option	description
setnic	-h	Display the help message
	-B	Boot mode. Invoked from network scripts like ifup
	-d	Turn on debug mode

setnic command options 2 of 2

command	option	description
	-m	Set <interface> to specified speed/duplex
	-q	Query the configured and current speed/duplex setting for <interface>
	-w	Web option (only update speed settings in config file)

start

```
start -a [ -c ]
```

```
start -s application [-c]
```

```
start -?
```

Use **start** to start server applications. A single application or several applications can be specified. Most common usage is **start -ac**

start command options

command	option	description
start	-a	Start all applications.
	-c	Continuously display status of the application(s) until it is fully running.
	-s application	Start a specific application.
	-?	Display command options and a list of valid applications.

statapp

```
statapp [-c# [-D | -U]] [-d] [-l [#]] [-p] [-w] [-b]
[-s app1 [,app2,...]] [-v] [-?]
```

Use **statapp** to see the status of server applications.

statapp command options 1 of 2

command	option	description
statapp		List all server applications and their status (UP, DOWN, WATCHED)
	-c#	Continuous update of output every # (1-9) seconds.
	-D	Exit continuous update when all processes are DOWN.
	-U	Exit continuous update when all processes are UP.
	-d	List applications that are down but expected to be up.
	-l	List all possible names of applications and services.
	-l#	List the status of all possible applications and services. Show applications at level # (0-9) and below. Default is 0.
1 of 2		

statapp command options 2 of 2

command	option	description
	-p	List the names and status of processes associated with applications.
	-w	Also list applications with status WATCHED by watchdog.
	-b	Brief output status - application name and UP/DOWN status
	-s app#	List the status of the named applications. -1 lists all possible names.
	-v	Show command version.
	-?	See a description of command options.
2 of 2		

Example screen for statapp command

```

craft@sv-st2-1> statapp
Watchdog      19/19 UP
TraceLogger   0/ 0 UP
ENV           1/ 1 UP
LicenseServer 3/ 3 UP
SME           7/ 7 UP
MasterAgent   4/ 4 UP
MIB2Agent     1/ 1 UP
MVSubAgent    1/ 1 UP
LoadAgent     1/ 1 UP
FPAgent       1/ 1 UP
INADSAAlarmAgen 1/ 1 UP
GMM           4/ 4 UP
SNMPManager   1/ 1 UP
arbiter       2/ 2 UP
filesyncd     8/ 8 UP
dupmgr        1/ 1 UP
MCD           1/ 1 UP
CommunicaMgr  85/85 UP

```

Example screen for statapp command on SES:

```
craft> statapp
Watchdog      13/13 UP
ModemMtty     1/ 1 UP
TraceLogger   3/ 3 UP
SME           7/ 7 UP
INADSAAlarmAgen 1/ 1 UP
GMM           4/ 4 UP
SNMPManager   1/ 1 UP
ImLogger      3/ 3 UP
SipServer     46/46 UP
CCSTrapAgent  1/ 1 UP
mon           1/ 1 UP
MtceMgr       3/ 3 UP
drbdEventSvc  1/ 1 UP
```

statuslicense

statuslicense [-e] [-a application] [-f [# | field]] [-?hv]

Use **statuslicense** to see license information.

statuslicense command options

command	option	description
statuslicense		Display the license status.
	-e	Display Allocation License Status and Expiration Date if EWL is enabled
	-a application	Display the License information for Communication Manager (CommunicaMgr), AUDIX, CORNERSTONE, or SNMP. Default is CommunicaMgr.
	-f [# name]	See license information a feature field number or name. 0=false, 1=true. Other values = error.
	-v	See more detailed (verbose) license file information, including the serial number and location of the IPSI
	-h or -?	Display command option descriptions.

Example screen for statuslicense command

```
craft> statuslicense -v
CommunicaMgr License Mode: Normal
checking application CommunicaMgr version R015x.00.0.824.0
Network used for License: Carrier 02a
License Serial Number is 03J204718661 on Carrier 02a
RFA Module ID is 3
RFA System ID is 65100
craft>
```

stop

stop [**-a** | **-b** | **-c** | **-f** | **-h** | **-i** | **-n** | **-r** | **-S** | **-s**]

Use **stop** to stop applications. The most common use is **stop -acfn**.

stop command options

command	option	description
stop	-a	Stop all applications.
	-b	Tell CMO to stop monitoring this virtual machine. Only applicable for vm_blade.
	-c	Continually display system status until all applications are DOWN.
	-f	Override any warnings or errors encountered with the -a , -h , -r and -s options.
	-h	Stop all applications and execute a processor halt.
	-i	Immediately stop all applications without allowing them to clean up.
	-n	Do not prompt before executing this command
	-r	Stop all applications and execute a processor reboot.
	-S	Wait until all applications are stopped. Normally, the stop command returns when the stop request has been received by the system.
	-s app	Stop a specific application. Use stop -? for a full list.
	-?	Display a description of command options.

swversion

swversion [-r [root-dir] [-v | -l | -R | -a]] [-?]

Use **swversion** to see the current software version of Communication Manager running on the switch, including patches, and the last time that translations were saved. You must be sroot to run portions of **swversion**.

swversion command options

command	option	description
swversion		Display a subset of the software version values.
	-r	Use root2 as the base path.
	-r root-dir	Use the specified directory as the base path.
	-v	Display the software version string of Communication Manager only.
	-l	Display the load string of Communication Manager only.
	-R	Display the release string only.
	-a	Display all fields on the swversion screen.
	-?	Display a description of command options.

Example screen for swversion command

```
swversion
Operating system:      Linux 2.6.11-AV20 i686 i686
Built:                Jul 3 10:44 2007

        Contains:      00.0.824.0
        CM Reports as:  R015x.00.0.824.0
        CM Release String: S8720-015-00.0.824.0

UPDATES:
        There are no updates on the system

CM Translation saved:    2007-10-29  12:11:02

CM License Installed:    2007-10-24  15:48:53

        CM Memory Config: Extra Large
```

Example screen for swversion command on SES:

```
craft> swversion
Operating system:      Linux 2.6.11-AV20 i686 i686
Built:                Oct 4 15:37 2007

Release String:       SES-5.0.0.0-825.11
Software Load:       SES05.0-00.0.825.11
Server BIOS Build ID: KEEH24AUS
SAMP Version ID:     AVAYA_S8500_2_1_SP0

UPDATES:
                        There are no updates on the system
```

sudo

Use **sudo**, from a login that is not root, to temporarily run some commands as root.

systat

```
systat [ -b ] [-c# [ -D | -U ] ] [-d ] [ -l#] [-p ] [-w]
[-s app1 [,app2, . . . ] ] [-v]
```

Use **systat** to see an update of the processes that are running on Communication Manager.

systat command options 1 of 2

command	option	description
systat	-b	Brief output status, show application name and UP/DOWN/OFF status
	-c#	Continuous update of output every # (1-9) seconds.
	-D	Exit continuous update when all processes are DOWN.
	-U	Exit continuous update when all processes are UP.
	-d	List applications that are down but expected to be up.
	-l	List all possible names of applications and services.
	-l#	List the status of all possible applications and services. Show applications at level # (0-9) and below. Default is 0.
	-p	List the names and status of processes associated with applications.
1 of 2		

systat command options 2 of 2

command	option	description
	-w	Also list applications with status WATCHED by watchdog.
	-s app	List the status of the named applications. -1 gives all possible names.
	-v	Show command version
	-?	See a description of command options.
2 of 2		

testcustalm

Use **testcustalm** to generate a customer alarming test SNMP trap. No arguments are required. This command tests the health of alarm processing between the system and the receiver.

testdupboard

testdupboard [-s | -1 | -t arg][-?]

Use **testdupboard** to perform maintenance on the duplication memory card (DAJ1/DAL1/DAL2) on the **S8700 series** servers.

testdupboard command options

command	option	option description
testdupboard		Run the Read Error Register test (read_err_reg)
	-s	Run the Read Error Register test (read_err_reg) (default).
	-1	Run the Read Error Register test and the Duplication Memory Board Local Loop test (localloop).
	-t arg	Specify which test to perform: read_err_reg localloop
	-?	Display command option descriptions.

testinads

Use **testinads** to test the connectivity between the system and INADS. **testinads** generates a test alarm, sends it to INADS, and for a response. No command options are required.

To run **testinads** directly on the remote maintenance board, type

```
sudo /opt/alarming/bin/testinads
```

testled

```
testled [ -a | -d | -s | -? ]
```

Use **testled** to test the LEDs in the server.

testled command options

command	option	option description
testled	-a	Test the LEDs on the server and the duplication memory card.
	-d	Test the Trans LED on the duplication memory card.
	-s	Test the LEDs on the server.
	-?	Display command option descriptions.

testmodem

```
testmodem [ -s | -t | -l ] [ -?]
```

testmodem provides the ability to reset the modem and perform offhook, handshake, and looparound tests.

testmodem command options 1 of 2

command	option	option description
testmodem		Perform the handshake and offhook tests.
	-s	Perform the handshake and offhook tests.
	-l	Perform the handshake, offhook, and looparound test to INADS.
	-t reset_usb	Reset the modem
	-t handshake	Run the handshake test

testmodem command options 2 of 2

command	option	option description
	-t offhook	Run the offhook
	-?	Display command option descriptions

tlscertmanage

tlscertmanage [**-l**] [**-i file**] [**-r #**] [**-help**]

The **tlscertmanage** (transport layer security certificate management) command facilitates loading a third-party trusted certificate into the Communication Manager repository for use the next time Communication Manager restarts.

tlscertmanage command options

command	option	option description
tlscertmanage	-l	List all CA (Certificate Authority) certificates in all-ca.crt, along with their corresponding certificate files and hash links on the system.
	-i file	Install a Certificate Authority into Communication Manager's trusted certificate repository on disk. The command copies the certificate file from the allowed location to /etc/opt/ecs/certs/CA, concatenates the data in the certificate file into the all-ca.crt file, and creates a link to the newly-copied certificate filename with the certificate's hash. The full path to the file must be specified, e.g. tlscertmanage -i /var/home/ftp/pub/newCA.crt
	-r #	Remove a CA (specify # 1-8) from all-ca.crt, along with its corresponding file and hash link from the /etc/opt/ecs/certs/CA directory.  CAUTION: Applications that depend on certificates will not operate properly if the certificates are removed.
	-help	Display the help information for this command

CA certificates are now installed from the file system, rather than being embedded into the telephony application. When Communication Manager is upgraded to 5.0 from an earlier release, the four (4) original Avaya CA certificates are installed.

The administrator may then choose to modify the list of trusted CA certificates used by the Communication Manager telephony application in order to support third-party SES identity certificates.

To change the Communication Manager telephony application's CA certificates:

1. Use **tlscertmanage** to modify the list using the options described above
2. Restart the Communication Manager telephony application (**stop -afc, start -ac** from the root-level command line)

To identify the latest CA certificates installed in the telephony application, review the Communication Manager log and locate the last section of messages containing the phrase "gip/tls: Loaded trusted CA cert". Each CA certificate installed into the telephony application is recorded in the Communication Manager log, which is viewable using the command **vi log**.

If the telephony application fails to install any or all specified CA certificates, the Communication Manager log will contain one or more of the following error messages (where x is the Communication Manager release number):

CMx_proc_err: pro=7204, err=201, seq=22145,da1=<n>,da2=<max> - This indicates that the number of CA certificates specified exceeds the number supported by the telephony application. <n> is the overlimit value and <max> is the maximum number of certificates supported. To resolve, use **tlscertmanage** to edit the list, then restart the telephony application.

CMx_proc_err: pro=7204, err=201, seq=22146,da1=<n>,da2=0 - This indicates that a failure occurred when attempting to install the n'th CA certificate into the telephony application. <n> is the index of the CA certificate list item that failed to install. To resolve, use **tlscertmanage** to remove, then re-add the certificate. Once re-added, restart the telephony application.

CMx_proc_err: pro=7204, err=201, seq=22147,da1=0,da2=0 - This indicates that the CA certificate list file, /etc/opt/ecs/certs/CA/all-ca.crt, cannot be opened. This may be due to a user privilege issue or a missing/corrupted file. Use **tlscertmanage** to reconstruct the CA certificate list, then restart the telephony application.

tlscertmanage informs the administrator upon successfully displaying, adding, or removing CA certificate list entries, and notes that a restart of the telephony application is required if the list has changed. It prompts for confirmation before deleting a CA entry and associated CA files from the file system. It returns a warning message if the CA certificate list is empty.

topsting

topsting [-e] [-C **procname**] [-p **pid**] [-d **directory**] **filename**

Use **topsting** to pull information from a specific mini-core dump, based on the mini-core dump filename. Mini-core dump files are located in /var/log/defty/dumps, and are created after traps or buffer exhaustion in the system.

topsting command options

command	option	option description
topsting	-e	Generate abbreviated core files for all process
	-C procname	Generate abbreviated core files for a specific procname. This option can be repeated for multiple processes.
	-P pid	Generate abbreviated core files for process id (PID). This option can be repeated for multiple processes.
	-d directory	The directory where abbreviated core files are to be placed. Default is the current directory.
	-p path	path contains a colon-separated list of directory paths used to locate the exec_file and any shared libraries. An example would be "-p \$MYPJ/_mips1x.O:\$BASEPJ/_mips1x.O"
	-?	See a description of command options.
	filename	Name of the mini-coredump file.

uname

uname [-a] [-help]

Use **uname -a** to display all system information, including the kernel and the node name.

Use **uname -a** to display all system information, including the kernel and the node name.

unlocktrans

Use **unlocktrans** to unlock the "locked" translations and allow successful translation saves.

unused_login_audit

Use **unused_login_audit** to lock logins after a period of non-use.

update_activate

Use `update_activate` to activate a previously unpacked update on the server. Use `update_activate -h` to see the command options.

update_deactivate

Use `update_deactivate` to deactivate a previously activated update on the server. Use `update_deactivate -h` to see the command options.

update_info

Use `update_info <update-id>` to see information about a specified software update that is already installed. Use `update_info -h` to see the command options.

update_remove

Use `update_remove <update-id>` to permanently remove a “deactivated” update from the server.

Use `update_remove -a` to remove all updates.

Use `update_remove -h` to see the command options and additional information.

Communication Manager must be stopped for `update_remove` to complete successfully.

update_show

Use `update_show` to see information about a specified software update.

Use `update_show -a` to see activated updates only.

Use `update_show -u` to see unpacked updates only.

Use `update_show -h` to see the help information.

update_unpack

Use `update_unpack` to unpack the software update. This command is the step prior to “activating” a software update.

userlock

```
userlock [-t tries] [-o lockout] enable
```

```
userlock disable
```

```
userlock settings
```

```
userlock [-u login] unlock
```

```
userlock [-u login] status
```

```
userlock -? | -h
```

Use **userlock** to configure the security software used to lock out login accounts where too many unsuccessful login attempts have occurred. This command also unlocks accounts that have been locked out by the security software.

userlock command options

command	option	description
userlock	-t tries	The number of sequential failed login attempts when the account becomes locked out. The default is 5.
	-o lockout	The number of seconds to lock out an account. The default is 600 seconds.
	enable	Enable the security software that locks out accounts.
	disable	Disable the security software that locks out accounts. The current settings of tries and lockout are preserved upon the next enable .
	settings	Display if the feature is enabled or not, the value for the number of unsuccessful login attempts, and for how long a login should be locked out.
	unlock	Unlock all locked-out accounts, or just the specified login if -u login is used.
	status	Display the lockout status of all accounts, or just the specified login if -u login is used.
	-u login	Unlock or display status on this login only.
	-? or -h	Display the help message.

vilog

Use **vilog** to run the vi editor and to open current Communication Manager log files.

Use **vilog -?** to see a description of all **vilog** command options.

webssl

webssl [-o] [-d [-r]] [-r] [-h]

webssl provides the ability to generate server certificates using Avaya certificate authority (CA) certificate, display the CA certificate, and reset to the default server certificate.

With no options, **webssl** creates the open ssl certificate using the hostname (if it contains the domain name) or its IP address.

webssl command options

command	option	option description
webssl		Create the open SSL certificate using the hostname (if it contains the domain name) or its IP address.
	-o	Display the root certificate
	-d	Set the openssl certificate to the default.
	-r	Restart the web server daemon.
	-h	Display the command option descriptions.

wlog

Use **wlog** to run the vi editor and to open current Communication Manager log files.

Use **wlog -?** to see a description of all **wlog** command options.

xlnrecovery

xlnrecovery [-d] [-i] [-?]

xlnrecovery provides the ability to display or set the translation recovery strategy stored in the system configuration files. There are currently two supported translation recovery strategies: immediate and deferred. The recovery strategy is applied during a system restart when Communication Manager detects that the restart has interrupted a translation transaction and has left the translation corrupted.

The "immediate" recovery strategy escalates the current system restart to a higher restart level that forces translation to be read from the disk to eliminate the corruption. This is the default strategy.

The "deferred" strategy just sets the translation corruption flag and continues execution of the current restart level. Setting the corruption flag prevents the corrupted translation from being saved to the disk file. At some later time, a system restart can be executed to force translation to be read from the disk to eliminate the corruption. This strategy allows the user to select a convenient time for the system restart.

xlnrecovery command options

command	option	option description
xlnrecovery		Display the current translation recovery strategy.
	-d	Set the translation recovery strategy to "deferred".
	-i	Set the translation recovery strategy to "immediate".
	-?	Display the command option descriptions.

Chapter 3: IPSI Commands

This chapter describes the command functionality available to users of the TN2312 IPSI (IP Server Interface) circuit pack. The IPSI provides an IP interface to S87xx servers and provide PKTINT, Archangel and Tone/Clock functionality in a port network.

Access IPSI functionality locally via a laptop PC connected to the IPSI's Ethernet services port, which connects to the IPSI via the Control Network. The IPSI hosts the ipadmin firmware application, which may be accessed from the laptop or the server. The ipadmin application permits IPSI IP operating parameters to be changed, grants remote access to the server from the laptop, and allows the execution of several IPSI and network diagnostics.

IPSI command firmware components

Command Interpreter

At the core of ipadmin is a command interpreter, which features a command-line interface (CLI), menus, and command help. See [Commands processed by the ipadmin command interpreter](#) on page 740.

The command interpreter initializes in an unprivileged mode ([IPSI]:) prompt when a user connects to the IPSI via telnet. The user may telnet to another host, including the active S87xx server, which has its own security, and determine the IPSI firmware version, or enter into privileged mode ([IPADMIN]:) prompt via the `ipsilogin` command.

In a privileged mode, the user must enter a valid login ID and password when prompted. In privileged mode, the user may query or set IPSI operating parameters, execute network diagnostics, and observe the IP addresses of the servers.

IPSI / Network Diagnostics

Authenticated IPSI users may execute diagnostics, including ping, telnet, show arp, show control route, traceroute, show internet stats and several others. Commands to reset the IPSI or to disable its IP interface are also available to authenticated users.

Query / Display Server IP Addresses

Server IP addresses are hidden from unprivileged users - even the IPSI telnet client suppresses the remote host IP address in its traditional “Trying <ipaddr>...” message, and other messages that reveal the IP address of the server. If the user authenticates, the server IP addresses, which are provided by the IPSI SIM (Server Interface Module) firmware, are displayed (if known) when the IPSI telnet command is issued without specifying an IP address.

IPSI Clock

The IPSI clock (a tick count-driven firmware data structure), which is used to timestamp debug messages, is synchronized with the Stingray server's clock via SNTP (Simple Network Time Protocol - the preferred method) or may be set manually via ipadmin commands. See [IPSI_CLOCK] for IPSI clock and clock synchronization details.

IPSI user access commands

Use access commands to connect to the IPSI ipadmin application:

- | [telnet](#) on page 749
- | [exit \(or quit\)](#) on page 740
- | [logout](#) on page 741

Basic IPSI ipadmin commands

Any ipadmin user may execute Basic IPSI ipadmin commands. All other commands require that the user authenticate.

- | [exit \(or quit\)](#) on page 740
- | [help \(or ?\)](#) on page 741
- | [ipsilogin](#) on page 741
- | [show firmware version](#) on page 745
- | [show servers](#) on page 747
- | [telnet](#) on page 749

Basic diagnostic commands

These are the most commonly used IPSI and network diagnostic commands.

- | [reset](#) on page 741
- | [show control interface](#) on page 745
- | [show control stats](#) on page 745
- | [ping](#) on page 741

Control Network Interface Configuration commands

Use Control Network Interface Configuration commands to manually configure an IPSI. These commands configure the IPSI's control network interface operating parameters. Typically, the S87xx server sets the IPSI's IP address, subnet mask, and default gateway via DHCP.



CAUTION:

Exercise caution when issuing this command, especially from a remote platform. If improper IP operating parameters are issued, the IPSI may need to be reset, or even removed and reinserted, to recover.

- | [set control interface](#) on page 742
- | [set control gateway](#) on page 742

Additional IPSI / network diagnostic commands

Most of the following diagnostic utilities were derived from VxWorks.

- | [show arp](#) on page 745
- | [show host](#) on page 745
- | [show network stats](#) on page 746
- | [show internet stats](#) on page 746
- | [show ip stats](#) on page 746
- | [show route](#) on page 747
- | [show route stats](#) on page 747
- | [show tcp stats](#) on page 748
- | [traceroute](#) on page 749

Ethernet services port configuration commands

Ethernet Services Port Configuration commands configure (or query) the Ethernet services port IP operating parameters. They appear in the authorized users' menu because they will be used by services. These commands are only for use in special circumstances.

**CAUTION:**

Exercise caution when issuing this command. If improper IP operating parameters are issued, the services interface may be rendered unusable with the standard services laptop PC configuration.

- | [set services interface](#) on page 744
- | [set services gateway](#) on page 744
- | [set port negotiation](#) on page 743
- | [set port speed](#) on page 744
- | [set port duplex](#) on page 743
- | [set port flowcontrol](#) on page 743
- | [show port](#) on page 746
- | [show services interface](#) on page 747
- | [show services stats](#) on page 747

Commands processed by the ipadmin command interpreter

The following information is an alphabetical list of command-line-interface commands that are processed by the ipadmin command interpreter on the IPSI circuit pack.

exit (or quit)

Exit ipadmin, end telnet session or return to shell.

help (or ?)

help (or ?)

Display a context-sensitive list of available commands at the current level if a command is not specified. If a command name accompanies 'help', the help for that command is printed with a brief description.

An ipadmin user may enter **help**, **help [<command> [<sub-command>]]** to get a list of available commands, or to get more detailed help for a command. For example, typing **show help** will instruct ipadmin to display all legal commands that pertain to the literal show. The help is context-sensitive; a user must authenticate to be able to gain access to the privileged commands.

ipsilogin

ipsilogin

Prompts for a login ID and password. If these are entered correctly, the user may access the IPSI administrative and diagnostic commands.

logout

logout

Disconnect from the IPSI ipadmin application.

ping

ping <ipaddr> [numpackets]

Gets the target host IP address from the user at the command line. The user may elect to send from 1 to 255 data packets to the specified host by indicating the number of packets at the command line. Verifies that a remote host is reachable by sending ICMP echo request packets and waiting for replies. If the number of packets to send is not indicated on the command line, this command will send five data packets to the target host. See the ping() description in [VXWREF] for more information.

reset

reset

Causes the IPSI to immediately reset.

set control gateway

```
set control gateway <gateway>
```



CAUTION:

Exercise caution when issuing **set control gateway**, especially from a remote platform. If improper IP operating parameters are issued, the IPSI may need to be reset, or even removed and reinserted, to recover.

Gets the control network default gateway value from the user at the command line. If the default gateway value format is valid, it is applied to the control network IP interface. Note: The default gateway is where datagrams are routed when there is no specific routing table entry available for the destination IP network or host. This control network interface setting will take effect upon exiting IPADMIN.

set control interface

```
set control interface <ipaddr><netmask>
```



CAUTION:

Exercise caution when issuing **set control interface**, especially from a remote platform. If improper IP operating parameters are issued, the IPSI may need to be reset, or even removed and reinserted, to recover.

Gets the IP address and subnetmask from the user at the command line. If the address is in valid format, it is applied to the control network IP interface. "IP<blank>" will be written to the faceplate LED display; this indicates at a glance that the IPSI IP address has been set manually. If the command fails, an error message is written to standard output, the control network IP interface will be disabled, and "A00" is written to the faceplate LED display; this indicates at a glance that the IPSI IP interface has been disabled. These control network interface settings will take effect upon exiting IPADMIN.

set diffserv

```
set diffserv <value>
```

Sets and stores the diffserv value in flash memory.

set port duplex

```
set port duplex < port number > {half | full}
```



CAUTION:

Exercise caution when issuing **set port duplex**. If improper IP operating parameters are issued, the services interface may be rendered unusable with the standard services laptop PC configuration.

Configures the duplex mode of a 10/100Base-T port. You can configure the 10/100Base-T port. You can configure the duplex mode to either Half or Full duplex. If auto negotiation is enabled for such ports, the port's duplex mode is determined by auto negotiation, overriding any value specified with this command. If auto negotiation is disabled, the speed configured with this command will take effect.

set port flowcontrol

```
set port flowcontrol < port number > {receive | transmit } {on | off}
```



CAUTION:

Exercise caution when issuing **set port flowcontrol**. If improper IP operating parameters are issued, the services interface may be rendered unusable with the standard services laptop PC configuration.

Enables/disables IEEE 802.3 flow control for a full duplex port. If auto negotiation is enabled, the flow control configured by this command will be advertised as during auto negotiation. After auto negotiation, flow control remains enabled only if it is negotiated between the link partners. If auto negotiation is disabled, flow control will only be enabled if the port is set to full duplex operation. Currently only receive flow control is available.

set port negotiation

```
set port negotiation <port number> {enable | disable}
```



CAUTION:

Exercise caution when issuing **set port negotiation**. If improper IP operating parameters are issued, the services interface may be rendered unusable with the standard services laptop PC configuration.

Enables or disables auto negotiation on a port. For 10/100Base-T ports auto negotiation determines the speed duplex mode. The set port flowcontrol command affects the advertisement of flow control during auto negotiation.

set port speed

```
set port speed < port number > {10MB | 100MB}
```



CAUTION:

Exercise caution when issuing **set port speed**. If improper IP operating parameters are issued, the services interface may be rendered unusable with the standard services laptop PC configuration.

Configures the speed of a 10/100Base-T port. You can configure the speed to either 10 Mbps or 100 Mbps. If auto negotiation mode is enabled for such ports, the port's speed is determined by auto negotiation, overriding any value specified with this command. If auto negotiation is disabled, the speed configured with this command will take effect.

set services interface

```
set services interface <ipaddr> <netmask>
```



CAUTION:

Exercise caution when issuing **set services interface**. If improper IP operating parameters are issued, the services interface may be rendered unusable with the standard services laptop PC configuration.

Gets the services port IP interface address and subnet mask from the user at the command line. If the address format is valid, it is applied to the services port IP interface upon exiting IPADMIN. If the command fails, an error message is written to standard output.

set services gateway

```
set services gateway <gateway>
```



CAUTION:

Exercise caution when issuing **set services gateway**. If improper IP operating parameters are issued, the services interface may be rendered unusable with the standard services laptop PC configuration.

Gets the services port gateway value from the user at the command line. If the gateway value is valid, it is (at the time of this writing) written into FLASH memory, but is not applied to the services port IP interface; it is reserved for a possible future use. Note: The services port gateway is typically the same value as the IP address of the services laptop PC. This is not the same gateway described under the set gateway command description.

set vlan priority

```
set vlan priority <level>
```

Sets vlan priority level to specified level and stores it in flash memory.

set vlan tag

```
set vlan tag {on | off}
```

Sets vlan tagging on/off and stores the specified vlan tagging switch, on/off, in flash memory.

show arp

Displays the current Internet-to-Ethernet address mapping in the ARP table.

show control interface

Displays several IPSI control network interface status indicators, including the IP address, subnet mask, default gateway, and the IP addressing mode (DHCP or manual)

show control stats

Displays IP operating statistics associated with IPSI control network interface. Displayed data includes the IP and MAC addresses, number of packets sent and received, number of input and output errors, and flags (loopback, promiscuous, ARP, etc.).

show firmware version

Displays the IPSI application firmware version and related information, including the build time and workspace name.

show host

```
show host
```

Prints a list of remote hosts, along with their Internet addresses and aliases.

show internet stats

`show internet stats`



CAUTION:

Exercise caution when issuing `show internet stats`. If improper IP operating parameters are issued, the services interface may be rendered unusable with the standard services laptop PC configuration.

Displays a list of all active Internet protocol sockets in a format similar to the Unix netstat command.

show ip stats

`show ip stats`

Displays detailed statistics for the IP protocol. See the ipstatShow() description in [VXWREF] for details.

show network stats

`show network stats`

Displays statistics for all three attached network interfaces. Unit number 1 is the control network interface, unit number 2 is the services port interface, and unit number 3 is the packet bus interface.

show port

`show port < port number >`



CAUTION:

Exercise caution when issuing `show port`. If improper IP operating parameters are issued, the services interface may be rendered unusable with the standard services laptop PC configuration.

Displays link indication, speed, duplex, and auto negotiation of a specified port.

show qos

`show qos`

Displays current and future vlan and diffserv parameters stored in flash memory. The future vlan and diffserv parameters, if applicable, is stored after the next reset.

show route

`show route`

Displays the current routing information contained in the routing table for all three interfaces (control network, services port, and packet bus).

show route stats

`show route stats`

Displays routing statistics. See the `routeStatShow()` description in [VXWREF] for more information.

show servers

`show servers`

Displays the IP addresses of the active and standby servers.

show services interface

`show services interface`



CAUTION:

Exercise caution when issuing `show services interface`. If improper IP operating parameters are issued, the services interface may be rendered unusable with the standard services laptop PC configuration.

Displays several IPSI services interface status indicators, including the IP address, subnet mask, and default gateway.

show services stats

`show services stats`



CAUTION:

Exercise caution when issuing `show services stats`. If improper IP operating parameters are issued, the services interface may be rendered unusable with the standard services laptop PC configuration.

Displays IP operating statistics associated with IPSI services interface. Displayed data includes the IP and MAC addresses, number of packets sent and received, number of input and output errors, and flags (loopback, promiscuous, ARP, etc.).

show tcp stats

`show tcp stats`

Displays detailed statistics for the TCP protocol.

ssh-keygen

[S8700 series](#) | [S8500](#)

`ssh-keygen`

Use `ssh-keygen` (IPSI-CLI command) to generate new SSH dynamic host keys on the IPSI circuit pack. Before you reset the dynamic host keys with `reset ssh-keygen`, use `busyout board` at the SAT to busyout the IPSI circuit pack.

Dynamic host keys

Dynamic keys are inherently more secure than static keys because:

- ┆ If static keys for one circuit pack are compromised, all circuit packs are compromised.
- ┆ The probability of compromise is reduced when each circuit pack has its own dynamic key.
- ┆ Users can change dynamic keys at any time.

Dynamic host keys include:

- IP address
- Host name
- Firmware

Public key exchange

TN circuit packs support dynamic host keys. Because clients have the server's public key information stored on them, when the server generates a new public/private key pair (which happens the first time the board initializes or when the user decides), the client prompts the user to accept the key when logging into the server. This is to make the client user aware that the server's public key is not what it used to be and this may, but not necessarily, imply a rogue server.

A technician encountering a situation where the server's public key is not what it used to be should determine if the server's keys were changed since the last servicing.

- ┆ If they were, the technician should continue login.
- ┆ If not, there is a security issue, and the technician should notify the appropriate personnel.

telnet

telnet <*ipaddr*>

Connects user to ipadmin, [IPSI]: prompt

Connects to the specified server via the telnet protocol on TCP port 23. User may access the server, or authenticate to run administrative and diagnostic commands. If the user authenticates, the prompt is changed to [IPADMIN].

If the user connects to the shell via telnet, he or she may launch ipadmin from the shell prompt. In this case, the ipadmin exit (or quit) command will return the user to the shell prompt. The user must then enter logout to disconnect.

Any ipadmin user may telnet to the active server via the telnet command. He or she will have to contend with the server's security. See [IPSIACCESS] for details regarding ipadmin, and server access via telnet.

traceroute

traceroute <*ipaddr*>



CAUTION:

Exercise caution when issuing this command. If improper IP operating parameters are issued, the services interface may be rendered unusable with the standard services laptop PC configuration.

Uses ICMP messages to verify each segment along a path to a remote host.

Chapter 4: SAT Command Parameters

This chapter lists Avaya Communication Manager SAT interface translation screen titles that are used primarily for administrative tasks. These screens are most often accessed by command actions such as **add**, **change**, and **remove**. The tables contains parameter descriptions of each command.

To access the screens, enter text exactly as shown at the SAT, or an abbreviated form of the word may be entered. MAX is the maximum number available in your system configuration. Enter the proper variable for your system when *variable font* appears. For detailed information on the screens listed, see the *Administrator Guide for Avaya Communication Manager (03-300509)*.

Brackets [] indicate that the qualifier is optional.

For additional command information, see *Reports for Avaya Communication Manager (555-233-505)*.

Administration Screen Reference

AAR and ARS Digit Analysis Table

Action/Object	Qualifier
change aar analysis	<i>digits 0 to 9</i> * x X [location (<i>n</i> all)] [min <i>n</i>]
change ars analysis	<i>digits 0 to 9</i> * x X [location (<i>n</i> all)] [min <i>n</i>]
display aar analysis	<i>digits 0 to 9</i> * x X [location (<i>n</i> all)] [min <i>n</i>] [schedule]
display ars analysis	<i>digits 0 to 9</i> * x X [location (<i>n</i> all)] [min <i>n</i>] [schedule]
list aar analysis	[start string] [route (<i>n</i> r1-r32 p1-p2000)] [location (<i>n</i> all)] [node <i>n</i>] [to-node <i>n</i>] [count <i>n</i>] [schedule]
list ars analysis	[start string] [route (<i>n</i> r1-r32 p1-p2000)] [location (<i>n</i> all)] [node <i>n</i>] [to-node <i>n</i>] [count <i>n</i>] [schedule]
list aar route-chosen	dialed number [partition <i>n</i>] [schedule]
list ars route-chosen	dialed number [location (<i>n</i> all)] [partition <i>n</i>] [schedule]

AAR and ARS Digit Conversion Table

Action/Object	Qualifier
change aar digit-conversion	<i>digits 0 to 9</i> * x X [location (<i>n</i> all)]
change ars digit-conversion	<i>digits 0 to 9</i> * x X [location (<i>n</i> all)]
display aar digit-conversion	<i>digits 0 to 9</i> * x X [schedule]
display ars digit-conversion	<i>digits 0 to 9</i> * x X [location (<i>n</i> all)] [schedule]
list aar digit-conversion	[start <i>matching pattern</i>] [count <i>n</i>] [location (<i>n</i> all)] [schedule]
list ars digit-conversion	[start <i>matching pattern</i>] [count <i>n</i>] [location (<i>n</i> all)] [schedule]

Abbreviated Dialing Lists

Action/Object	Qualifier
add abbreviated-dialing enhanced	<i>dial code first digit(s)</i> (3 digits 0-9 4 digits 00-99) [list 1 list 2]
change abbreviated-dialing enhanced	<i>dial code first digit(s)</i> (3 digits 0-9 4 digits 00-99) [list 1 list 2]
display abbreviated-dialing enhanced	<i>dial code first digit(s)</i> (3 digits 0-9 4 digits 00-99) [schedule]
remove abbreviated-dialing enhanced	<i>dial code first digit(s)</i> (3 digits 0-9 4 digits 00-99) [list 1 list 2]

Action/Object	Qualifier
add abbreviated-dialing group	<i>n</i> next
change abbreviated-dialing group	<i>n</i>
display abbreviated-dialing group	<i>n</i> [schedule]
list abbreviated-dialing group	[number <i>n</i>] [to - number <i>n</i>] [count <i>n</i>] [schedule]
remove abbreviated-dialing group	<i>n</i>

Action/Object	Qualifier
change abbreviated-dialing personal	<i>extension</i> with personal list and list (1-3)
display abbreviated-dialing personal	<i>extension</i> with personal list and list (1-3) [schedule]
list abbreviated-dialing personal	[ext <i>n</i>] [to-ext <i>n</i>] [count <i>n</i>] [schedule]

Action/Object	Qualifier
add abbreviated-dialing system	
change abbreviated-dialing system	
display abbreviated-dialing system	[schedule]
remove abbreviated-dialing system	

Action/Object	Qualifier
add abbreviated-dialing 7103A-buttons	
change abbreviated-dialing 7103A-buttons	
display abbreviated-dialing 7103A-buttons	[schedule]
remove abbreviated-dialing 7103A-buttons	

Access Endpoint

Action/Object	Qualifier
add access-endpoint	<i>extension</i> next
change access-endpoint	<i>extension</i>
display access-endpoint	<i>extension</i> [schedule]
duplicate access-endpoint	<i>extension</i>
remove access-endpoint	<i>extension</i>
list access-endpoint	<i>extension</i> (starting) [count <i>n</i>] [schedule]

Administered Connection

Action/Object	Qualifier
add administered-connection	<i>n</i> next
change administered-connection	<i>n</i>
display administered-connection	<i>n</i> all [schedule]
duplicate administered-connection	<i>administered-connection n</i> [count <i>n</i>]
remove administered-connection	<i>n</i>
list administered-connection	<i>starting number</i> [count <i>n</i>] [schedule]

Administration Change Notification

Action/Object	Qualifier
notify history	

Alias Station

Action/Object	Qualifier
change alias station	
display alias station	[schedule]

Alphanumeric Dialing Table

Action/Object	Qualifier
change alphanumeric-dial-table	[entry name] [next]
display alphanumeric-dial-table	[entry name] [schedule]

Announcement Group Board Usage

Action/Object	Qualifier	Purpose
list usage integ-annc-board	<i>board location</i> [schedule]	list the audio groups that have members resident on the board

Announcements/Audio Sources

Action/Object	Qualifier	Purpose
change announcements	<i>n</i>	
change integ-annc-brd-loc		
display announcements	<i>n</i> [schedule]	
1 of 2		

Action/Object	Qualifier	Purpose
display integrated-annnc-boards	[schedule]	
disable announcement-board	<i>n</i>	
erase announcements	board <i>location</i> gateway <i>location</i>	
list usage audio-group	<i>n</i> (1-max) [schedule]	list all extensions that refer to the audio group
list integrated-annnc-boards	board <i>location</i> gateway <i>location</i> [schedule]	
2 of 2		

ARS Toll Table

Action/Object	Qualifier
change ars toll	<i>n</i> :xxx (1 to MAX:office code) <i>n</i> :xyy:nn; : x (2-MAX); y (0-MAX); y (0-MAX)
display ars toll	<i>n</i> :xxx(1 to MAX:office code) <i>n</i> :xyy:nn; : x : x (2-MAX); y (0-MAX); y (0-MAX) [schedule]

ATM Board

Action/Object	Qualifier
status atm board	board <i>location</i>

Attendant Console

Action/Object	Qualifier
add attendant	<i>n</i>
change attendant	<i>n</i>
display attendant	<i>n</i> [schedule]
remove attendant	<i>n</i>

Audio Group

Action/Object	Qualifier	Purpose
add audio-group	<i>n</i> (1-max) next	add an audio group
change audio-group	<i>n</i> (1-max)	change an audio group
display audio-group	{ [<i>n</i> (1-max) [number <i>n</i> to-number <i>n</i>] [count <i>n</i>] } [schedule]	display an audio group
remove audio-group	<i>n</i> (1-max)	remove audio group
list audio-group	{ [<i>n</i> (1-max) [number <i>n</i> to-number <i>n</i>] [count <i>n</i>] } [schedule]	list all administered audio groups

Authorization Code COR Mapping

Action/Object	Qualifier
change authorization-code	<i>auth n</i>
display authorization-code	<i>auth n</i> [schedule]
list authorization-code	[start code] [count <i>n</i>] [cor <i>x</i>] [to-cor <i>x</i>] [schedule]

Best Service Routing

Action/Object	Qualifier
add best-service-routing	<i>n</i> next
change best-service-routing	<i>n</i>
display best-service-routing	<i>n</i> [schedule]
list best-service-routing	<i>starting number</i> [count <i>n</i>] [schedule]
remove best-service-routing	<i>n</i>

Boot Image

Action/Object	Qualifier
get boot-image	board <i>location</i>
set boot-image	board <i>location</i> [image 1 image 2]

Bulletin Board

Action/Object	Qualifier
change bulletin-board	
display bulletin-board	[schedule]

Button Type

Action/Object	Qualifier
list usage button-type	[schedule]
list usage button-type crss-alert	[schedule]
list usage button-type hunt-ns	[<i>hunt-grp n</i>] [schedule]
list usage button-type night-serv	[schedule]
list usage button-type trunk-ns	[<i>trunk-grp n</i>] [schedule]

Call Vector

Action/Object	Qualifier
change vector	<i>n</i>
display vector	<i>n</i> [schedule]

Calltype Digit Analysis

Action/Object	Qualifier
change calltype analysis	[1- <i>n</i> all]
display calltype analysis	[1- <i>n</i> all] [schedule]
list calltype route-chosen	<i>n</i> [location <i>n</i> all] [partition <i>n</i>] [schedule]

CAMA Numbering Format

Action/Object	Qualifier
change cama-numbering	
display cama-numbering	[schedule]

CDR System Parameters

Action/Object	Qualifier
change system-parameters cdr	
display system-parameters cdr	[schedule]

C-LAN

Action/Object	Qualifier
status clan-ip	<i>c-lan board location</i>
status clan-port	<i>c-lan board location</i>
status clan-usage	

Class of Restriction

Action/Object	Qualifier
change cor	0-MAX
display cor	0-MAX [schedule]
list cor	[cor n] [to-cor n] [schedule]

Class of Service

Action/Object	Qualifier
change cos	
display cos	[schedule]

Code Calling IDs

Action/Object	Qualifier
change paging code-calling-ids	
display paging code-calling-ids	[schedule]

Command Permission Categories

Action/Object	Qualifier
change permissions	<i>login-id</i>
display permissions	<i>login-id</i> [schedule]

Console-Parameters

Action/Object	Qualifier
change console-parameters	
display console-parameters	[schedule]

Coverage Answer Group

Action/Object	Qualifier
add coverage answer-group	<i>n</i> next
change coverage answer-group	<i>n</i>
display coverage answer-group	<i>n</i> [schedule]
list coverage answer-group	[number <i>n</i>] [to- number <i>n</i>] [name <i>x</i>] [count <i>n</i>] [schedule]
remove coverage answer-group	<i>n</i>

Coverage Path

Action/Object	Qualifier
add coverage path	<i>n</i> next
change coverage path	<i>n</i>
display coverage path	<i>n</i> [schedule]
list coverage path	[path <i>n</i>] [to-path <i>n</i>] [count <i>n</i>] [schedule]
remove coverage path	<i>n</i>

Coverage Time of Day

Action/Object	Qualifier
add coverage time-of-day	<i>n</i> next
change coverage time-of-day	<i>n</i>
display coverage time-of-day	<i>n</i> [schedule]
remove coverage time-of-day	<i>n</i>

Crm-Features

Action/Object	Qualifier
list crm-features	

CTI-Link

Action/Object	Qualifier
add cti-link	<i>link n</i> next
busyout cti-link	<i>link n</i>
change cti-link	<i>link n</i>
display cti-link	<i>link n</i> [schedule]
list cti-link	[<i>cti-link number n</i>] [count <i>n</i>] [schedule]
list usage cti-link	[<i>cti-link number n</i>] [schedule]
remove cti-link	<i>link n</i>
test cti-link	<i>link n</i> [long short] [repeat (1-100) clear]

Data Module

Action/Object	Qualifier
add data-module	<i>extension</i> next
change data-module	<i>extension</i>
display data-module	<i>extension</i> [schedule]
list data-module	[ext <i>n</i>] [to-ext <i>n</i>] [name <i>x</i>] [count <i>n</i>] [schedule]

Date and Time

Action/Object	Qualifier
set time	
display time	[schedule]

Daylight Savings Rules

Action/Object	Qualifier
change daylight-savings-rules	
display daylight-savings-rules	[schedule]

DCS to QSIG TSC Gateway

Action/Object	Qualifier
change isdn dcs-qsig-tsc-gateway	
display isdn dcs-qsig-tsc-gateway	[schedule]

Dial Plan Analysis Table

Action/Object	Qualifier
change dialplan analysis	
display dialplan analysis	[schedule]

Dial Plan Parameters

Action/Object	Qualifier
change dialplan parameters	
display dialplan parameters	[schedule]

Digit Absorption

Action/Object	Qualifier
change digit-absorption	0-4
display digit-absorption	0-4 [schedule]

Digit String

Action/Object	Qualifier
list usage digit-string	<i>string</i> (0-9, +?*#~prwWms) [schedule]

Display-Messages Button Labels

Action/Object	Qualifier
change display-message button-labels	
display display-message button-labels	[schedule]

DLG CTI Link

Action/Object	Qualifier
status dlg cti-link	

DLG Interface

Action/Object	Qualifier
status dlg interface	

DS1 Circuit Pack

Action/Object	Qualifier
add ds1	board <i>location</i>
change ds1	board <i>location</i> [schedule]
display ds1	board <i>location</i> [schedule]
list measurements ds1 summary	board <i>location</i> [local carrier-local remote] [schedule]
list measurements ds1 log	board <i>location</i> [local carrier-local remote] [schedule]
remove ds1	board <i>location</i>

Ethernet Option

Action/Object	Qualifier
get ethernet-option	[cabinet <i>n</i> carrier (A-E) slot <i>n</i>]
set boot-image	[cabinet <i>n</i> carrier (A-E) slot <i>n</i>] image 1 image 2

Extended Pickup Group

Action/Object	Qualifier
change extended-pickup-group	<i>n</i>
display extended-pickup-group	<i>n</i> [schedule]
list extended-pickup-group	[number <i>n</i>] [to- number <i>n</i>] [count <i>n</i>] [schedule]

Extension

Action/Object	Qualifier
list usage extension	<i>extension</i> [vector] [schedule]
change extension-station	<i>extension</i>

Extensions Administered to have an MCT-Control Button

Action/Object	Qualifier
change mct-group-extensions	

Extension Type

Action/Object	Qualifier
list extension-type	[<i>extension</i> (starting <i>n</i>)] [[type <i>x</i>] [cor <i>x</i>] [to-cor <i>x</i>] [cos <i>x</i>] [to-cos <i>x</i>] [count <i>n</i>] [schedule]

Feature Access Code

Action/Object	Qualifier
change feature-access-codes	
display feature-access-codes	[schedule]

Feature-Related System Parameters

Action/Object	Qualifier
change system-parameters features	
display system-parameters features	[schedule]

Filexfer

Action/Object	Qualifier
enable filexfer	board <i>location</i>
disable filexfer	board <i>location</i>

Firmware Station Download

Action/Object	Qualifier
change firmware station-download	
display firmware station-download	
status firmware station-download	last

Group Paging

Action/Object	Qualifier
add group-page	<i>n</i> next
change group-page	<i>n</i>
display group-page	<i>n</i> [schedule]

History

Action/Object	Qualifier
list history	[date <i>MM</i> date <i>MM/DD</i>] [time <i>HH</i> time <i>HH:MM</i>] [login <i>x</i>] [action <i>x</i>] [object <i>x</i>] [qualifier <i>x</i>] [schedule]

Holiday Table

Action/Object	Qualifier
change holiday-table	<i>n</i>
display holiday-table	<i>n</i> [schedule]
list usage holiday-table	<i>n</i> [schedule]

Hospitality

Action/Object	Qualifier
change system-parameters hospitality	
display system-parameters hospitality	[schedule]

Hunt Group

Action/Object	Qualifier
add hunt-group	<i>n</i> next
change hunt-group	<i>n</i>
display hunt-group	<i>n</i> [number <i>n</i>] [to- number <i>n</i>] [count <i>n</i>] [schedule]
list hunt-group	[number <i>n</i>] [to- number <i>n</i>] [name <i>x</i>] [type <i>x</i>] [ext <i>n</i>] [to-ext <i>n</i>] [count <i>n</i>] [schedule]
remove hunt-group	<i>n</i>
list usage hunt-group	group <i>n</i> [vector] [schedule]
list members hunt-group	hunt group <i>n</i> [ext <i>n</i>] [to-ext <i>n</i>] [name <i>x</i>] [loginid <i>n</i>] [to-loginid <i>n</i>] [logname <i>x</i>] [count <i>n</i>] [schedule]

Incoming Call Handling Treatment

Action/Object	Qualifier
change inc-call-handling-trmt	trunk-group <i>n</i>
display inc-call-handling-trmt	trunk-group <i>n</i>

Integrated Announcements

Action/Object	Qualifier
change integ-annnc-brd-loc	
display integrated-annnc-boards	[schedule]

Intercom Group

Action/Object	Qualifier
add intercom-group	<i>n</i> next
change intercom-group	<i>n</i>
display intercom-group	<i>n</i> [schedule]
list intercom-group	[number <i>n</i>] [to-number <i>n</i>] [count <i>n</i>] [schedule]
remove intercom-group	<i>n</i>

Inter-Exchange Carrier (IXC) codes

Action/Object	Qualifier
change ixc-codes	
display ixc-codes	[schedule]

Intra-Switch CDR

Action/Object	Qualifier
add intra-switch-cdr	
change intra-switch-cdr	<i>extension</i>
display intra-switch-cdr	<i>extension</i> [schedule]
list intra-switch-cdr	<i>extension</i> [count <i>n</i>] [schedule]

IP Address

Action/Object	Qualifier
list usage ip-address	<i>IP address</i> [schedule]

IP Codec Set

Action/Object	Qualifier
change ip-codec-set	<i>n</i>
display ip-codec-set	<i>n</i> [schedule]

IP Interface

Action/Object	Qualifier
list ip-interface	[clan medpro all]
add ip-interface	board <i>location</i>
change ip-interface	board <i>location</i>
display ip-interface	board <i>location</i> [schedule]
remove ip-interface	board <i>location</i>

IP Network Map

Action/Object	Qualifier
change ip-network-map	
display ip-network-map	[schedule]

IP Network Regions

Action/Object	Qualifier
change ip-network- region	region number n
display ip-network- region	<i>n</i> [schedule]
status ip-network- region	<i>n</i> [schedule]

IP Node Name

Action/Object	Qualifier
change node-name ip	<i>node name</i>
list-usage node-name	<i>node name</i> [schedule]

IP Options System Parameters

Action/Object	Qualifier
display system-parameters ip-options	<i>n</i> [schedule]

IP Route

Action/Object	Qualifier
add ip-route	<i>n</i> next
change ip-route	<i>n</i>
display ip-route	<i>n</i> [schedule]

IP Services

Action/Object	Qualifier
change ip-services	
display ip-services	[schedule]

IP Station

Action/Object	Qualifier
reset ip-station	[ip-phones all tti] [network-region <i>n</i> all-regions]

ISDN Network Facilities

Action/Object	Qualifier
change isdn network-facilities	
display isdn network-facilities	

ISDN Numbering Private

Action/Object	Qualifier
change isdn private-numbering	
display isdn private-numbering	[schedule]

ISDN Numbering Public/ Unknown

Action/Object	Qualifier
change isdn public-unknown-numbering	
display isdn public-unknown-numbering	[schedule]

ISDN Tandem Calling Party Number

Action/Object	Qualifier
change tandem-calling-party-number	

ISDN-BRI Trunk Circuit Pack

Action/Object	Qualifier
add bri-trunk-board	[board <i>location</i> gateway <i>location</i>]
change bri-trunk-board	[board <i>location</i> gateway <i>location</i>]
display bri-trunk-board	board <i>location</i> [schedule]
remove bri-trunk-board	[board <i>location</i> gateway <i>location</i>]

Language Translations (Display Messages)

Action/Object	Qualifier
change display-messages auto-wakeup-dn-dst	
display display-messages auto-wakeup-dn-dst	[schedule]
change display-messages call-identifiers	
display display-messages call-identifiers	[schedule]
change display-messages date-time	
display display-messages date-time	[schedule]
change display-messages leave-word-calling	
display display-messages leave-word-calling	[schedule]
change display-messages malicious-call-trace	
display display-messages malicious-call-trace	[schedule]
change display-messages miscellaneous-features	
display display-messages miscellaneous-features	[schedule]
1 of 2	

Action/Object	Qualifier
change display-messages property-management	
display display-messages property-management	[schedule]
change display-messages softkey-labels	
display display-messages softkey-labels	[schedule]
change display-messages time-of-day-routing	
display display-messages time-of-day-routing	[schedule]
change display-messages transfer-conference	
display display-messages transfer-conference	[schedule]
change display-messages view-buttons	
display display-messages view-buttons	[schedule]
2 of 2	

Listed Directory Numbers

Action/Object	Qualifier
change listed-directory-numbers	
display listed-directory-numbers	[schedule]

Locations

Action/Object	Qualifier
change locations	
display locations	[schedule]

Location Parameters

Action/Object	Qualifier
change location-parameters	<i>n</i>
display location-parameters	<i>n</i>

Local Survivable Processor

Action/Object	Qualifier
change lsp	
display lsp	

Loudspeaker Paging

Action/Object	Qualifier
change paging loudspeaker	
display paging loudspeaker	[schedule]

Measurements Announcements

Action/Object	Qualifier
list measurements announcements all	[yesterday-peak today-peak last-hour] [schedule]
list measurements announcements integ-all	[yesterday-peak today-peak last-hour] [schedule]
list measurements announcements board	[to cabinet <i>location</i> gateway <i>location</i>] V9 [yesterday-peak today-peak last-hour] [schedule]
list measurements announcements-board-loc	[to cabinet <i>location</i> disk gateway <i>location</i>] V9 [yesterday-peak today-peak last-hour] [schedule]

Media Gateway

Action/Object	Qualifier
add media-gateway	[<i>n</i> next]
change media-gateway	<i>n</i>
display media-gateway	<i>n</i>
list media-gateway	<i>n</i> [schedule]
remove media-gateway	<i>n</i>

Medpro

Action/Object	Qualifier
set medpro ucsc	[lock unlock override]

Mode Code Related System Parameters

Action/Object	Qualifier
change system-parameters mode-code	
display system-parameters mode-code	

Modem Pool Group

Action/Object	Qualifier
add modem-pool num	<i>n</i>
change modem-pool num	<i>n</i>
display modem-pool num	<i>n</i> [schedule]
list modem-pool num	[schedule]
remove modem-pool num	<i>n</i>

Multifrequency-Signaling

Action/Object	Qualifier
change multifrequency-signaling	<i>n</i>
display multifrequency-signaling	<i>n</i>

Multiple Level Precedence and Preemption (MLPP)

Action/Object	Qualifier
change system-parameters mlpp	
display system-parameters mlpp	

Music Sources

Action/Object	Qualifier
change music-sources	<i>n</i>
display music-sources	<i>n</i> [schedule]

Night Service

Action/Object	Qualifier
enable night-service	[attendant-group hunt group trunk-group] <i>group number</i>
disable night-service	[attendant-group hunt group trunk-group] <i>group number</i>

Packet Gateway Board

Action/Object	Qualifier
add pgate	board <i>location</i>
change pgate	board <i>location</i>
display pgate	board <i>location</i>
remove pgate	board <i>location</i>

Partition Route Table

Action/Object	Qualifier
change partition-route-table	[index <i>n</i>]
display partition-route-table	[index <i>n</i>] [schedule]

Pickup Group

Action/Object	Qualifier
add pickup-group	[<i>n</i> next]
change pickup-group	[<i>n</i>]
display pickup-group	[number <i>n</i>] [to- number <i>n</i>] [count <i>n</i>] [schedule]
remove pickup-group	[<i>n</i>]

Port

Action/Object	Qualifier
display port	port <i>n</i> [schedule]

Precedence Routing Digit Analysis

Action/Object	Qualifier
change precedence-routing analysis	[<i>location</i> (1 to 250 or all)] [<i>min</i> (1 to 28)]
display precedence-routing analysis	0 to 9, '*', 'x', 'X', [schedule]

Precedence Routing Digit Conversion

Action/Object	Qualifier
change precedence-routing digit-conversion	0 to 9, '*', 'x', 'X', [<i>location</i> (1 to 250 or all)]
display precedence-routing digit-conversion	0 to 9, '*', 'x', 'X', [<i>min</i> (1 to 28)] [schedule]

PRI Endpoint

Action/Object	Qualifier
add pri-endpoint	<i>extension</i> next
change pri-endpoint	<i>extension</i>
display pri-endpoint	<i>extension</i> [schedule]
list pri-endpoint	<i>extension</i> [count <i>n</i>] [schedule]
remove pri-endpoint	<i>extension</i>

QSIG to DCS TSC Gateway

Action/Object	Qualifier
change isdn qsig-dcs-tsc-gateway	
display isdn qsig-dcs-tsc-gateway	[schedule]

Remote Access

Action/Object	Qualifier
change remote-access	[<i>n</i>]
display remote-access	[schedule]
status remote-access	

Remote Call Coverage Table

Action/Object	Qualifier
change coverage remote	<i>n</i>
display coverage remote	<i>n</i>

Remote Office

Action/Object	Qualifier
add remote-office	[<i>n</i> next]
change remote-office	<i>n</i>
display remote-office	<i>n</i> [schedule]
list remote-office	[schedule]
remove remote-office	<i>n</i>
status remote-office	<i>n</i>

RHNPA Table

Action/Object	Qualifier
change rhnpa	RHNPA and code <i>n</i> :xxx <i>nn</i> x(0-MAX) x(0-MAX) x(0-MAX)
display rhnpa	RHNPA and code <i>n</i> :xxx <i>nn</i> x(0-MAX) x(0-MAX) x(0-9) [schedule]

Route Pattern

Action/Object	Qualifier
change route-pattern	<i>n</i>
display route-pattern	<i>n</i> [schedule]
list route-pattern	[trunk <i>n</i>] [<i>service /feature name-string</i>] [schedule]

Security-Related System Parameters

Action/Object	Qualifier
change system-parameters security	
display system-parameters security	[schedule]

Session

Action/Object	Qualifier	Purpose
enable session		
disable session		

Signaling Group

Action/Object	Qualifier
add signaling-group	<i>n</i> next
change signaling-group	<i>n</i>
display signaling-group	<i>n</i> [schedule]
list signaling-group	<i>n</i> [schedule]
remove signaling-group	<i>n</i>

Site Data

Action/Object	Qualifier
change site-data	
display site-data	[schedule]
list site-data	<i>extension</i>

Station

Action/Object	Qualifier
add station	<i>extension</i> next
change station	<i>extension</i>
display station	[ext <i>n</i>] [to-ext <i>n</i>] [count <i>n</i>] [schedule]
duplicate station	<i>extension</i> [start extension] [<i>board location</i> <i>x</i> <i>w</i> <i>i</i>] [count <i>n</i>] [one-ep]
list station	[ext <i>n</i>] [to-ext <i>n</i>] [port <i>x</i>] [[type <i>x</i>] [movable <i>x</i>] [count <i>n</i>] [schedule]
status station	<i>extension</i>

System Parameters Call Coverage/Call Forwarding

Action/Object	Qualifier
change system-parameters coverage-forwarding	
display system-parameters coverage-forwarding	[schedule]

System Parameters Country-Options

Action/Object	Qualifier
display system-parameters country-options	[schedule]

System Parameters Crisis Alert

Action/Object	Qualifier
change system-parameters crisis-alert	
display system-parameters crisis-alert	[schedule]

System Parameters Customer-Options

Action/Object	Qualifier
display system-parameters customer-options	[schedule]

System Parameters IP Options

Action/Object	Qualifier
change system-parameters ip-options	
display system-parameters ip-options	[schedule]

System Parameters Media Gateway Automatic Recovery Rule

Action/Object	Qualifier
change system-parameters mg-recovery-rule	<i>n</i>
display system-parameters mg-recovery-rule	<i>n</i>

Telecommuting Access

Action/Object	Qualifier
change telecommuting-access	
display telecommuting-access	[schedule]

Tenant

Action/Object	Qualifier
change tenant	<i>n</i>
display tenant	<i>n</i> [schedule]

Terminal Parameters

Action/Object	Qualifier
change terminal-parameters	<i>n</i>
display terminal-parameters	<i>n</i> [schedule]

Terminating extension Group

Action/Object	Qualifier
add term-ext-group	<i>n</i> next
change term-ext-group	<i>n</i>
display term-ext-group	<i>n</i> [schedule]
list term-ext-group	[number <i>n</i>] [to- number <i>n</i>] [name <i>x</i>] [ext <i>n</i>] [to-ext <i>n</i>] [count <i>n</i>] [schedule]
remove term-ext-group	<i>n</i>

TFTP Server

Action/Object	Qualifier
change tftp-server	[schedule]
display tftp-server	[schedule]

Time of Day Routing Plan

Action/Object	Qualifier
add coverage time-of-day	<i>n</i> next
change coverage time-of-day	<i>n</i>
display coverage time-of-day	<i>n</i> [schedule]
remove coverage time-of-day	<i>n</i>

Time of Day Routing Plan

Action/Object	Qualifier
change time-of-day	<i>routing plan number</i>
display time-of-day	<i>routing plan number</i> [schedule]

Toll Analysis

Action/Object	Qualifier
change toll	<i>n</i> 0-9 * x X [location (<i>n</i> all)] [min 1-28]
display toll	<i>n</i> 0-9 * x X [location (<i>n</i> all)] [min 1-28] [schedule]
list toll toll-list	[start <i>dialed-string</i>] [count <i>n</i>] [location (<i>n</i> all)] [schedule]
list toll all	[start <i>dialed-string</i>] [count <i>n</i>] [location (<i>n</i> all)][schedule]
list toll restricted-call	[start <i>dialed-string</i>] [count <i>n</i>] [location (<i>n</i> all)] [schedule]
list toll unrestricted-call	[<i>n</i>] [start <i>dialed-string</i>] [count <i>n</i>] [location (<i>n</i> all)] [schedule]

Tone Generation

Action/Object	Qualifier
change tone-generation	<i>n</i>
display tone-generation	<i>n</i>

Trace

Action/Object	Qualifier
list trace attendant	<i>n</i> [schedule]
list trace data-module	[ext <i>n</i>] [to-ext <i>n</i>] [name <i>x</i>] [count <i>n</i>] [schedule]
list trace ewt	
list trace ras	
list trace station	<i>extension</i> ext/a (atm) q (qsig) <i>ext 1-40</i> (button <i>n</i>)
list trace tac	<i>Trunk access code n</i> tac/a (atm) ac/d (digits) q (qsig)
list trace vdn	<i>extension</i> [schedule]
list trace vector	<i>n</i>

Trunk Groups

Action/Object	Qualifier
add trunk-group	1 to MAX next
change trunk-group	1 to MAX TAC X...
display trunk-group	1 to MAX [number <i>n</i>] [to- number <i>n</i>] [count <i>n</i>] [tac <i>n</i>] [schedule]
list trunk-group	[number <i>n</i>] [to- number <i>n</i>] [name <i>x</i>] [type <i>x</i>] [count <i>n</i>] [schedule]
remove trunk-group	1 to MAX TAC X...

TTI IP Station

Action/Object	Qualifier
list tti-ip-stations	

Uniform Dial Plan

Action/Object	Qualifier
change uniform-dialplan	<i>number 0-9</i>
display uniform-dialplan	<i>number 0-9</i> [schedule]
list uniform-dialplan	[start <i>matching-pattern</i>] [<i>len (3-7)</i>] [insert (0-MAX)] [net <i>x</i>] [node <i>n</i>] [to-node <i>n</i>] [count <i>n</i>] [schedule]

Usage CTI-Link

Action/Object	Qualifier
list usage cti-link	<i>link number</i> [schedule]

Usage extension

Action/Object	Qualifier
list usage <i>extension</i>	<i>extension</i> [vector] [schedule]

Vector

Action/Object	Qualifier
change vector	<i>n</i>
list usage vector	<i>n</i>

Vector Directory Numbers

Action/Object	Qualifier
add vdn	<i>extension</i> next
change vdn	<i>extension</i>
display vdn	<i>extension</i> [schedule]

Virtual MAC Address Table

Action/Object	Qualifier
display virtual-mac-addr	[table number]

XMOBILE Configuration Set

Action/Object	Qualifier
change xmobile configuration-set	digits 1 to 10
display xmobile configuration-set	digits 1 to 10

XMOBILE station to cell telephone mapping

Action/Object	Qualifier
list xmobile mapping	cell telephone number partial string* all [schedule]

*Partial string of a cell telephone number followed by the wildcard "**".

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