



Maintenance Commands for Avaya Communication Manager 3.1.x, 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 Media 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 3.1.x, (03-300430) (formerly 03-300190) (formerly 03-300190, 555-245-102)*
- *Maintenance Commands for Avaya Communication Manager 3.1.x, Media Gateways and Servers (03-300431) (formerly 03-300191) (formerly 03-300191, 555-245-101)*
- *Maintenance Procedures for Avaya Communication Manager 3.1.x, 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 S8700/S8710 Media Servers
- Avaya S8500 Media Servers
- Avaya S8300 Media Servers
- Avaya G700/G650/G600/MCC/SCC Media Gateways

It does not contain information about

- DEFINITY G3R (see 555-233-117: *Maintenance for DEFINITY R Servers* or 555-233-142: *Maintenance for Avaya S8700 Media Servers with G600 Media Gateway*)
- DEFINITY SI (see 555-233-119: *Maintenance for DEFINITY SI Servers* or 555-233-143: *Avaya S8700 Media Servers with MCC1/SCC1*)
- Avaya S8100 Media Server (see 555-233-123: *Maintenance for DEFINITY CSI Servers*)
- IBM eServer BladeCenter HS20 Type 8832
- G150/G250/G350 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 Media 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 SAT 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: G700 MGP CLI Commands](#) describes the command line interface for the Avaya G700 Media Gateway Processor (MGP). Media Gateway CLI commands are grouped into functional categories of Administration, Processor, Call Controller (CC), Quality of Service (QoS), Network, Maintenance, and E1/T1 CSU.
- [Chapter 4: 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 5: SAT Command Parameters](#), lists command parameters associated with 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	<ul style="list-style-type: none"> ● Avaya component model number ● Indented lines set apart extended information intended for a specific system component. 	<p>S8700 series: Ensure that the duplication link is securely connected.</p> <hr/> <p>G700</p> <p>Ensure that Media Module is securely seated and latched in the carrier.</p> <hr/>
SAT commands	<ul style="list-style-type: none"> ● 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	<ul style="list-style-type: none"> ● Bold for input ● Constant width for <code>output</code> (screens and messages) 	Set the Save Translation field to daily . The message Command successfully completed should appear.
Linux commands	<ul style="list-style-type: none"> ● 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	<ul style="list-style-type: none"> ● Bold for menu selections, tabs, buttons, and field names ● 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:

- 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.

- 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

Here is a list of terms used in this book and related former terminology.

Present Terminology	Former Terminology
Communication Manager	MultiVantage, Avaya Call Processing
S8300 Media Server	ICC, Internal Call Controller
S8700 Media 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</i> (03-300509)	03-300509
<i>Administration for Network Connectivity for Avaya Communication Manager</i> , (555-233-504)	555-233-504
<i>Avaya Communication Manager Call Center Software Basic Call Management System (BCMS) Operations</i> (07-300061)	07-300061
<i>Avaya Call Center Release 3.1 Call Vectoring and Expert Agent Selection (EAS) Guide</i> , 07-300477 (formerly 07-300186, 555-230-714)	07-300-477
<i>GuestWorks® and DEFINITY® Systems Technician Handbook for Hospitality Installations</i> (555-231-743)	555-231-743
<i>Hardware Description and Reference for Avaya Communication Manager</i> (555-245-207)	555-245-207
<i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x</i> , (03-300430) (formerly 03-300190)	03-300430
<i>Maintenance Commands for Avaya Communication Manager 3.1.x, Media Gateways and Servers</i> (03-300431) (formerly 03-300191)	03-300431
<i>Maintenance Procedures for Avaya Communication Manager 3.1.x, Media Gateways and Servers</i> (03-300432) (formerly 03-300192)	03-300432
<i>Installing and Upgrading the Avaya G700 Media Gateway and Avaya S8300 Media Server</i> (555-234-100)	555-234-100
<i>Reports for Avaya Communication Manager</i> (555-233-505)	555-233-505
<i>Avaya Extension to Cellular User's Guide, Avaya Communication Manager Release 3.1</i> (210-100-700)	210-100-700

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

International

For all international resources, contact your local Avaya authorized dealer for additional help.

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1-303-538-1741

Mention the name and number of this book, *Maintenance Commands for Avaya Communication Manager 3.1.x, 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:

- [Replaced and Removed Commands](#) on page 23
- [SAT Command-Line Syntax](#) on page 24
- [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 media server 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 Media Servers and Media Gateways, and it may produce different results depending on the configuration of your system. Some commands will apply to certain servers and not others.

SAT commands for the IPSI circuit pack

SAT Commands were added after DEFINITY R10 for the IP Server Interface (IPSI) circuit pack. The IPSI contains packet interface (PKT-INT) and Tone/Clock functionality, and controls inter-port-network signaling and links.

Maintenance SAT Commands

Since the IPSI is a part of the processor complex, executing IPSI commands requires logins with maintenance-level permission. Set **Process Circuit Packs** to **y** on the Command Permissions Categories screen to set permissions for a login. The logins that automatically have maintenance permission are init, inads, and craft.

Note:

Maintenance personnel may need to force Control Network (CN) traffic to either IPSI in high or critical configurations, or to CN “a” or “b.” This may happen when there is a need to service switch, hub, or subnet elements in one of the CNs. When there is an equal state of health in the IPSIs or CNs, forcing CN traffic should have no service impact.

The following SAT commands are for the IPSI circuit pack, and were not previously in DEFINITY:

- [add ipserver-interface](#) on page 348
- [busyout ipserver-interface](#) on page 350
- [change ipserver-interface](#) on page 351
- [change system-parameters maintenance](#) on page 590
- [display ipserver-interface](#) on page 353
- [display system-parameters ipserver-interface](#) on page 589
- [list ipserver-interface](#) on page 357
- [release ipserver-interface](#) on page 359
- [remove ipserver-interface](#) on page 359
- [reset ipserver-interface](#) on page 361
- [reset ssh-keys](#) on page 525
- [set ipserver-interface](#) on page 362
- [test ipserver-interface](#) on page 362

Server Commands

The following SAT commands were added to all configurations as of November, 2002:

- [go shell](#) on page 508
- [test license](#) on page 372

Replaced and Removed Commands

Previously removed and replaced commands include:

Table 3: Removed commands

Removed command	Notes
S8700 series <code>remove license</code>	Manually delete license files from the operating system
<code>emergency transfer</code>	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.

Table 4: Replaced commands

Previous command	Replaced with	Notes
<code>list configuration license</code>	<code>serialnumber shell</code>	See <i>Administrator Guide for Avaya Communication Manager (03-300509)</i>
<code>reset login-session</code>	<code>login-ID</code>	
<code>status clan-usage</code>	<code>status socket-usage</code>	

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 49, 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
<code>test</code>	<code>station</code>	<code>extension [short long]</code>
<code>bold</code>	<code>bold</code>	<i>bold italic</i> if a variable, <code>bold</code> 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 short clear` can be entered as
`t al st sh 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 5: Hardware Location Parameters](#) on page 25 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 5: Hardware Location Parameters

Parameter	Meaning
<i>UUCSSpp</i> <i>GGGVMpp</i>	The full address of a port: Universal cabinet, carrier, slot, port circuit 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 G700 media module or port on a G700 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:

- **display cabinet** requires a location entry of ***UU*** (**display cabinet 12**)
- **display media-gateway** requires a gateway number in the form ***GGG***
- **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 6: Common Command Parameters](#) on page 26 for other common input parameters.

Table 6: 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.
print	<p>The print modifier executes immediately if resources are available, and sends output to the screen and to a printer connected to the terminal where the command was entered. Print is available for the display, list, and status commands.</p> <p>S8700 series S8400 S8300 S8500</p> <ul style="list-style-type: none"> For Linux and Windows platforms: <p>The print modifier is supported on Linux and Windows platforms only with terminal type 4410. To provide printer support, administer a switch-to-printer TCP/IP connection on the customer's LAN. Administer:</p> <ul style="list-style-type: none"> Node names and IP addresses for the switch and the terminal server on the ip node names form Service types, local nodes, and remote nodes on the IP Services form (change ip-services) TCP "listen" port on the terminal server <p>For more information on providing print support, see <i>GuestWorks® and DEFINITY® Systems Technician Handbook for Hospitality Installations</i> (555-231-743).</p>
schedule	<p>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.</p> <p>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.</p>
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
1 of 2	

Table 6: Common Command Parameters 2 of 2

Parameter	Meaning
<i>extension</i>	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
<i>repeat#</i>	The number of times a test sequence is to be repeated. Use with test commands.
short long	<p>Type of test sequence run for this maintenance object. The test sequence that is run varies for each maintenance object. Use with test commands.</p> <p> CAUTION: For some maintenance objects, long is destructive to call service.</p> <p>The short sequence is always non-destructive.</p>
clear	<p>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.</p> <p>If no such alarms are active, the sequence is run once.</p> <p>Long clear clears every alarm against the maintenance object if no errors are encountered.</p> <p>Short clear clears only alarms pertinent to the tests in the short sequence.</p> <p> 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.</p>
2 of 2	

Common Command Output Screens

Common output can be any of the following information:

- 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.
- 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.
- 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 7: Field Descriptions for common output fields 1 of 2

Port	<p>Port location identifier. See Table 5: Hardware Location Parameters on page 25 for a description of the field.</p> <p>The port length differs for the various types of commands. For example:</p> <ul style="list-style-type: none"> • 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) <p>In critical-reliability systems, port network connectivity is duplicated as two independent sets of PNC components: A-PNC and B-PNC.</p>
Maintenance Name	The name of the MO as it appears in the alarm and error logs.
Alt. Name	<p>The alternate name depends upon the type of the object. For example:</p> <p>Station MO, Alternate Name = nnnnn (extension)</p> <p>Trunk MO, Alternate Name = nn/n (trunk-group#/member #)</p> <p>Personal CO line MO, Alternate Name = P/23 (P/ personal CO line group #)</p>
Test No.	<p>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 3.1.x, (03-300430) (formerly 03-300190)</i> for specific MO information.</p>
1 of 2	

Table 7: Field Descriptions for common output fields 2 of 2

Result	<p>One of the following results:</p> <ul style="list-style-type: none"> ● PASS: The command successfully completed. For a <code>test</code> command, no errors were detected by the test. ● ABORT: The command was prevented from completing. See Table 8: Common Error Codes for busyout, release, test, and reset commands on page 34. ● FAIL: A serious error was detected by the test. See Table 8: 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 <code>disable</code> command. ● NOT ASSIGNED: The location specified does not have a circuit pack administered to it. ● EXTRA BOARD: This can appear for these circuit packs: <ul style="list-style-type: none"> - Maintenance/Test - Announcement - Call Classifier - Tone Detector - Speech Synthesis <p>Each of these circuit packs has restrictions on how many can be in the system or a port network, depending on the system configuration.</p> <p>Remove the extra circuit pack(s).</p>
Error Code	<p>Indicates the reason for a FAIL or ABORT result. For <code>test</code> 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 3.1.x, (03-300430) (formerly 03-300190)</i>. For <code>busyout</code>, <code>release</code>, and <code>reset</code> commands, see Common Error Codes for maintenance commands on page 34.</p>
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:

- The object is removed from active service and is not available for use by call processing.
- Services dependent on the busied out component are dropped. If the component supports a link, the link is dropped.
- 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.
- A warning alarm with error type 18 is logged against each busied out object, so that INADS can determine the state of the object.
- 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 248).

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. See [Field Descriptions for Common Output Fields](#) on page 29 for field descriptions.

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 8: 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 8: 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 8: 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 3.1.x, (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 61 and [display errors](#) on page 248 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, and [Alarm category field values](#) on page 36 lists the type of alarms included in each alarm category report. Other fields on the input screen help to further customize the alarm and error report.

Table 9: Alarm category field values 1 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
adm-conn	ADM-CONN		
announce	ANN-PT ANN-BD VAL-BD VAL-PT ANNOUNCE MG-ANN		
atm	ATM-INTF ATM-INTF	ATM-EI ATM-EI ATM-SYNC ATM-IMP ATM-NTWK	ATM-BCH ATM-DCH ATM-SGRP ATM-TRK ATM-TRK ATM-NTWK
1 of 14			

Table 9: Alarm category field values 2 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
bri/asai	BRI-BD LGATE-BD ASAI-BD ASAI-BD ASAI-BD LGATE-BD BRI-BD TBRI-BD MG-BRI MG-BRI BRI-PORT ABRI-PORT ATT-PORT BRI-SET ASAI-ADJ ATT-ADJ LGATE-PT ATTE-PT LGATE-AJ ASAI-PT ASAI-PT ASAI-EPT ASAI-IP ADJ-IP MVAP-SESS MVAP-LNK TBRI-PT TBRI-TRK		
clan	CLAN-BD PPP-PT ETH-PT RSCL-PT PEI-PT		
cdr	CDR-LNK		
data-mod	PDMODULE TDMODULE ANL-LINE ANL-16-LINE AN-24-LN DT-LN-BD DAT-LINE BRI-DAT		
detector	DTMR-PT GPTD-PT CLSFY-PT ETR-PT DETR-BD CLSFY-BD DETR-BD TONE-BD TONE-BD		
di	DI-BD DI-PT		
2 of 14			

Table 9: Alarm category field values 3 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
dup-spe*	DUPINT SHDW-CIR SHDW-LNK SPE-SELEC STBY-SPE R-MEDIA PROCR PR-MEM SW-CTL CARR-POW PR-MAINT		
environ	POWER AC-POWER CARR-POW EMG-XFER CABINET RMC-ENV DC-POWER EXT-DEV RING-GEN		
ess	ESS IPSV-CTL		
exp-intf	TDM-CLK TONE-BD TONE-BD SYNC EXP-INTF EXP-INTF EXP-LINK CARR-POW AC-POWER DC-POWER MAINT EPN-SNTY ATM-WSP*	ATM-SYNC ATM-EI ATM-EI ATM-IMP ATM-NTWK	
ext-dev	CUST-ALM EXT-DEV EXT-DEV†		
generatr	TONE-PT TONE--BD TONE--BD TDM-CLK STRAT-3 SYNC	ATM-SYNC	
inads-link	INADS		
3 of 14			

Table 9: Alarm category field values 4 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
infc	CLAN-BD PPP-PT ETH-PT RSCL-PT VAL-BD VAL-PT MG-ANN ASAI-IP ADJ-IP MVAP-SESS MVAP-LNK PI-PT EXP-INTF EXP-INTF EXP-LINK ISDN-PLK ISDN-SGRP H323-SGRP SIP-SGRP ATM-WSP*	ATM-EI ATM-EI ATM-IMP ATM-NTWK	ATM-DCH ATM-SGRP
ip	MEDPRO IPMEDPRO IPMEDPRO MEDPROPT H323-SGRP H323-BCH H323-STN DIG-IP-STN RDIG-STA RANL-STA NR-CONN REM-OFF ASAI-IP ADJ-IP SIP-SGRP SIP-BCH		
lic-file	NO-LIC LIC-ERR		
maint	MAINT CAB-MTCE		
medpro	IPMEDPRO IPMEDPRO MEDPROPT		
memory*	PR-MEM		
misc	TIME-DAY LOG-A MIS-FAC PROC-SAN SYSTEM CONFIG FW-DWNLD		
4 of 14			

Table 9: Alarm category field values 5 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
mmi	MMI-BD MMI-PT MMI-LEV MMI-SYNC MEDPROPT		
mnt-test	M/T-DIG M/T-PKT M/T-BD M/T-ANL		
modem	MODEM-PT MODEM-BD		
mvap	MVAP-SESS MVAP-LNK		
netcon [*]	SW-CTL DATA-CHL DATA-BD DATA-CON CARD-MEM IO-PROCR		
page-lnk	PAGE-LNK		
pkt	PKT-BUS PKT-INT M/T-PKT [‡]		
pms/jrnl	PMS-LINK JRNL-LNK		
pnc	DS1C-BD DS1C-BD SNI-BD SNC-BD EXP-INTF SN-CONF FIBER-LK DS1-FAC SNC-LINK SNC-REF PNC-DUP SNI-PEER CSS-CONF EXP-PN ATM-WSP [*]	ATM-EI ATM-EI ATM-IMP ATM-NTWK	
5 of 14			

Table 9: Alarm category field values 6 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
pncmaint	DS1C-BD DS1C-BD SNI-BD SNC-BD EXP-INTF SN-CONF FIBER-LK DS1-FAC SNC-LINK SNC-REF PNC-DUP EXP-PN ATM-WSP*	ATM-EI ATM-EI ATM-IMP ATM-NTWK	
pnc-peer	SNI-PEER		
procr*	PROCR		
6 of 14			

Table 9: Alarm category field values 7 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
quick-st	ABRI-PT ADXDP-PT ANL-16-LINE ANL-LINE ANBL-NE-LINE ANN-PT ANNOUNCE ASAI-ADJ AUDIX-PT AUX-TRK BRI-PT BRI-SET CDR-LINK CLSFY-PT CO-DS1 CO-TRK CONFIG DAT-LINE DID-DS1 DID-TRK DIG-LINE DIOD-TRK DISK DS1-FAC DS1C-BD DTMR-PT EPT-SANITY EXP-INTF EXP-PN FIBER-LNK GPTD-PT HYB-LINE ISDN-LNK ISDN-TRK NJL-PRNT NMAINT MEM-BD MET-LINE MODEM-PT OPS-LINE PDATA-PT PDMODULE PGATE-PT PKT-BUS PKT-INT PMS-LINK PMS-PRNT PNC-DUP PRI-CDR PROCR R-MEDIA S-SYN-PT SEC-CDR SN-CONF SNC-BD more follows...		
7 of 14			

Table 9: Alarm category field values 8 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
quick-st (continued)	SNI-PEER SW-CNTL SYS-PRNT SYSAM SYSLINK SYSTEM TDM-BUS TDM-CLK TDMODULE TIE-DS1 TIE-TRK TONE-BD TTR-LEV		
removable-media	R-MEDIA PR-MAINT		
s-syn	S-SYN-PT S-SYN-BD S-SYN-BD S-SYN-BD		
sch-adj	SCH-ADJ		
spe	DISK DUP-CHL DUPINT H-ADAPTR MEM-BD PKT-INT PROCR R-MEDIA SPE-SELEC STBY-SPE STO-DATA SW-CTL SYSAM SYSTEM		
8 of 14			

Table 9: Alarm category field values 9 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
stabd	ANL-LINE ANL-NE-LINE DIG-LINE E-DIG-ST ADX8D-PT ADX16D-PT HYB-LINE MET-LINE ANL-16-LINE AN-LN-PT ALARM-PT ADX16A-PT BRI-PORT ABRI-PORT ATT-PORT BRI-SET ASAI-ADJ ATT-ADJ LGATE-PT ATTE-PT LGATE-AJ ASAI-PT ASAI-PT ASAI-EPT PR-ADX(S8100) H323-STN DIG-IP-STN RDIG-STA RANL-STA ANL-BD ANL-BD ANL-BD DIG-BD ADX8D-BD ADX8D-BD ADX16D-BD AXD12-BD DIG-BD DIG-BD DIG-BD DIG-BD DIG-BD MG-DCP MG-DCP MG-DCP MG-ANA MG-VAMM MG-VAMM MG-ANA MG-ANA E-DIG-BD E-DIG-BD E-DIG-BD HYB-BD MET-BD more follows...		
9 of 14			

Table 9: Alarm category field values 10 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
stabd (continued)	ANL-BD ANL-BD ANL-BD ANL-BD TR-LN-BD LGATE-BD BRI-BD ASAI-BD ASAI-BD DIG-BD ANL-BD BRI-BD LGATE-BD ASAI-BD ANL-BD ADX16A-BD AXA12-BD ANL-BD ANL-BD ANL-BD ANL-BD ANL-BD ANL-BD		
stacrk	ANL-LINE ANL-NE-LINE DIG-LINE E-DIG-ST ADX8D-PT ADX16D-PT HYB-LINE MET-LINE ANL-16-LINE AN-LN-PT ADX16A-PT OPS-LINE PR-ADX(S8100) H323-STN DIG-IP-STN RDIG-STA RANL-STA		
10 of 14			

Table 9: Alarm category field values 11 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
stations	ANL-LINE ANL-NE-LINE DIG-LINE E-DIG-ST ADX8D-PT ADX16D-PT HYB-LINE MET-LINE ANL-16-LINE AN-LN-PT ADX16A-PT OPS-LINE BRI-PORT ABRI-PORT ATT-PORT BRI-SET ASAI-ADJ ATT-ADJ LGATE-PT ATTE-PT LGATE-AJ ASAI-PT ASAI-PT ASAI-EPT PR-ADX(S8100) H323-STN DIG-IP-STN RDIG-STA RANL-STA		
sys-link	SYS-LINK		
sys-prnt	SYS-PRINT		
tdm	SW-CTL TDM-BUS		
tone	TONE-PT TONE-BD TDM-CLK ETR-PT SYNC STRAT-3 TONE-BD DTMR-PT GPTD-PT DETR-BD TTR-LEV DETR-BD CLSFY-BD CLSFY-PT	ATM-SYNC	
11 of 14			

Table 9: Alarm category field values 12 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
trkbd	CO-TRK CO-TRK CO-TRK CO-TRK CO-TRK CO-TRK CO-TRK DIOD-TRK DIOD-TRK DID-TRK AUX-TRK TIE-TRK TIE-TRK TIE-TRK TIE-DS1 WAE-PORT WAE-PORT CO-DS1 DIOD-DS1 DID-DS1 ISDN-TRK H323-BCH PE-BCHL CO-BD CO-BD CO-BD CO-BD CO-BD TR-LN-BD MG-ANA MG-VAMM MG-VAMM MG-ANA MG-ANA DIOD-BD DIOD-BD DID-BD DID-BD DID-BD AUX-BD AUX-BD TIE-BD TIE-BD DS1-BD DS1-BD DS1-BD DS1-BD UDS1-BD MG-DS1 UDS1-BD UDS1-BD MAPD-BD UDS1-BD ATM-TRK ATM-TRK DID-BD DID-BD more follows...		ATM-BCH
12 of 14			

Table 9: Alarm category field values 13 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
trkbd (continued)	CO-BD CO-BD TIE-BD TIE-BD DID-BD TIE-BD BRI-BD MG-BRI MG-BRI TBRI-PT TBRI-TRK		ATM-BCH
trkerk	CO-TRK CO-TRK CO-TRK CO-TRK CO-TRK CO-TRK CO-TRK DIOD-TRK DIOD-TRK DID-TRK AUX-TRK TIE-TRK TIE-TRK TIE-TRK TIE-DS1 CO-DS1 DIOD-DS1 DID-DS1 ISDN-TRK H323-BCH ISDN-PLK ISDN-LNK [†]		ATM-BCH ATM-DCH
vc	VC-BD VC-SUMPT VD-DSPPT VC-LEV		
vp [*]	VP-BD VP-PT VPP-BD VPP-PT		
13 of 14			

Table 9: Alarm category field values 14 of 14

Alarm Category	Display MO	If ATM-PNC enabled	If ATM-CES enabled
vsp	MMI-BD MMI-PT MMI-LEV MMI-SYNC VC-LEV VC-BD VC-SUMPT VD-DSPPT VP-BD VP-PT VPP-BD VPP-PT DI-BD DI-PT MEDPROPT		
wideband	WAE-PT WAE-PORT PE-BCHL		
wireless	RC-BD RFP-SYNC WFB CAU WT-STA		
14 of 14			

*. For G3r, G3si, or G3csi platforms; Linux-based servers do not display this category.

†. Linux-based platforms only.

‡. G3si platform only.

List of SAT Commands

The following information lists SAT commands commonly used to perform tests and maintenance on Avaya Media Servers and Gateways.

access-endpoint

S8700 series | S8500 | S8400 | S8300

See:

[busyout access-endpoint](#) on page 50

[release access-endpoint](#) on page 50

[status access-endpoint](#) on page 51

[test access-endpoint](#) on page 52

busyout access-endpoint

S8700 series | S8500 | S8400 | S8300

`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
<code>busyout access-endpoint</code>	<code>extension</code>	Extension of endpoint to busyout. Example: <code>busyout access-endpoint 2501</code>	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

S8700 series | S8500 | S8400 | S8300

`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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

status access-endpoint extension [print]

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

S8700 series | S8500 | S8400 | S8300

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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[disable administered-connection](#) on page 53

[enable administered-connection](#) on page 54

[status administered-connection](#) on page 54

disable administered-connection

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`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
<code>disable administered-connection</code>	<code>a-c #</code> <code>all</code>	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

S8700 series | S8500 | S8400 | S8300

```
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
<code>enable administered-connection</code>	<code>a-c #</code> <code>all</code>	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

S8700 series | S8500 | S8400 | S8300

```
status administered-connection a-c # [print]
```

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
<code>status administered-connection</code>	<code>a-c #</code> <code>print</code>	The number of the administered connection, assigned during administration. See Common Input Parameters on page 25.	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

Field	Description
Connection Number	The number assigned to the administered connection.
Enabled	Whether the administered connection is enabled.
Originator	The extension of the access or data endpoint that originates the connection.
Destination	The destination address used to route the administered connection.

aesvcs

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[reset aesvcs-link](#)

[status aesvcs cti-link](#)

[status aesvcs interface](#)

[status aesvcs link](#)

[test aesvcs-server](#)

reset aesvcs-link

S8700 series | S8500 | S8400 | S8300

`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 374 for more details on links.

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

status aesvcs cti-link

S8700 series | S8500 | S8400 | S8300

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

See [status link](#) on page 374 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>status aesvcs cti-link</code>			init inads craft cust	

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

status aevcs 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 aevcs cti-link field descriptions

status aevcs cti-link field descriptions

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
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.

status aesvcs interface

S8700 series | S8500 | S8400 | S8300

status aesvcs interface

Use **status aesvcs 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 aesvcs interface			init inads craft cust	

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

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

status aesvcs interface field descriptions

status aesvcs 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 aevcs link

S8700 series | S8500 | S8400 | S8300

status aevcs link

Use **status aevcs 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 374 for more details on links.

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

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

status aevcs 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 aevcs link field descriptions

status aevcs 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.
1 of 2	

status aesvcs interface field descriptions 2 of 2

Field	Description
Remote Port	The TCP/ IP port of the AESVCS Link connection on the AESVCS Server.
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

S8700 series | S8500 | S8400 | S8300

```
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
<code>test aesvcs-server</code>	1-16 short long repeat n clear schedule	aesvcs server # 1-16 See Common Input Parameters on page xx.	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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[display alarms](#) on page 61

[test alarms](#) on page 67

display alarms

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`display alarms [print | 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
<code>display alarms</code>	<code>print</code> <code>schedule</code>	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 66

Maintenance SAT Commands

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.

- 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.
- Minor alarm — A problem that could disable a local area of the system and so noticeably degrade the system.
- 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	<p>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:</p> <ul style="list-style-type: none"> • active or inactive alarms • major, minor, or warning alarms • resolved or unresolved alarms
Interval	<p>Enter m, h, d, w or a to display alarm records for the last month, last hour, last day, last week, or all.</p> <ul style="list-style-type: none"> • 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	<p>Identify the equipment type that you want on the report. If there is no input to these fields, the system defaults to every type.</p> <ul style="list-style-type: none"> ● 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, and Alarm category field values on page 36 lists the type of alarms included in each alarm category report. ● 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	<p>The location of the alarmed object.</p> <ul style="list-style-type: none"> For installed circuit packs, the location appears as cabinet-carrier-[slot]-[circuit]. For port network-related objects, the location appears as PN UU B, where UU is the port network number and B is the bus (A or B). 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	<p>y indicates that the fault was on the associated circuit pack</p> <p>n indicates that the fault is not connected to the circuit pack, but was on an off-board element connected to the circuit pack.</p>
Alt. Name	<p>The alternate name depends upon the type of the object. For example:</p> <ul style="list-style-type: none"> 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 #)
1 of 2	

display alarms report field descriptions 2 of 2

Field	Description
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: <ul style="list-style-type: none"> ● RDY = ready for service ● OUT = out of service ● IN = in service ● [Blank] = No associated service state
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: <ul style="list-style-type: none"> ● y = alarm has been acknowledged ● n = alarm has not been acknowledged ● c (cleared) = alarm was first acknowledged, then resolved and cleared ● [Blank] = no attempt was made to report the alarm <p>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.</p>
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

S8700 series | S8500 | S8400 | S8300

```
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
<code>test alarms</code>	<code>auto-page</code> <code>failures</code> <code>step</code> <code>short</code> <code>long</code> <code>repeat #</code> <code>clear</code>	See test alarms command parameters on page 67. Examples: <code>test alarms</code> <code>test alarms step failures</code> <code>test alarms long clear</code> <code>auto-page</code> <code>test alarms long failures</code>	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
<code>auto-page</code>	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.
<code>failures</code>	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	<p>Step to the next or previous alarm without testing the current alarm. Alarm information appears with a prompt for a keypress. Enter:</p> <ul style="list-style-type: none"> • 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. <p>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.</p>
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	<p>Repeat the test sequence until the alarm is cleared, or until a single test in the sequence fails.</p> <p>long clear forces a clear of all alarms if no errors are encountered during testing</p> <p>short clear clears alarms pertinent to tests in the short sequence</p> <p> WARNING: Executing a clear with short option, may not clear all alarms even if all tests pass.</p> <p> 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.</p>
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	<p>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.</p> <ul style="list-style-type: none"> ● Media Gateway: Enter the media gateway number. ● Cabinet: Enter the cabinet number. ● Port Network; Enter the port network number. ● 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. ● 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. ● Category: Enter a category to restrict the report to maintenance objects in a specific category. The HELP key displays a list of categories, and Alarm category field values on page 36 lists the type of alarms included in each alarm category report. ● Extension: Enter the extension number of a port. ● 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					
Testing completed for this object.									

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				
Testing completed for this object.									

analog-testcall

S8700 series

See:

[test analog-testcall](#) on page 73

test analog-testcall

S8700 series

```
test analog-testcall trunk-group# / member# | port UUCSSpp | board
UUCSS 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 3.1.x, Media Gateways and Servers (03-300432) (formerly 03-300192)*.

announcement-board

S8700 series | S8400 | S8300 | G700

See:

[disable announcement-board](#) on page 74

[enable announcement-board](#) on page 74

[announcements](#) on page 74.

disable announcement-board

S8700 series | S8400 | S8300 | G700

`disable announcement-board x`

See [enable announcement-board](#) on page 74.

enable announcement-board

S8700 series | S8400 | S8300 | G700

`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>			

announcements

S8700 series | S8400 | S8300 | G700

See:

[restore announcements](#) on page 75.

restore announcements

S8700 series | S8400 | S8300 | G700

Use **restore announcements** to copy announcement data from the active MSS devices to announcement boards.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
restore announcements	print schedule	See Common Input Parameters on page 25.	init inads craft cust rcust		see Feature Interactions for restore announcements on page 75

Depending on system configuration, the announcement is copied from the active processor's tape to the announcement board, or announcement data is copied from active processor card to the announcement board.

Feature Interactions for restore announcements



WARNING:

Manager I is blocked for other activities until the command completes (up to 45 minutes).

- If no announcement data module and no NETCON data module are administered, the system denies the command.
- If the announcement data module port is out of service or active (for example, performing an announcement playback), the system denies the command.
- If users are in integrated announcements sessions, the system denies the command.
- If the board is currently uploading or downloading, the system denies the command. Users cannot save or restore announcement after **restore announcements** commences.
- If no tape is in the tape drive when users attempt a copy, the command aborts.
- If the MSS is in use by another user or maintenance, **restore announcements** is not allowed.
- Unsaved or corrupted announcement files on the MSS, disallow **restore announcements**.
- To prepare for a failure, users should copy announcement files to announcement boards. If errors result from hardware or firmware failures, MSS software logs hardware errors with maintenance. When errors occur, the system continually attempts to download boards in 10-minute intervals until a download succeeds, announcements record, or downloads initiate from the SAT. Then, error messages display indicating corrective action. If errors

result from hardware or firmware failure, MSS software logs a hardware error with maintenance. Maintenance software invokes tests to diagnose and attempt to correct the problem. If maintenance software fails to correct problems, alarms raise indicating additional corrective action.

- When the system crashes and/or a spontaneous processor interchange occurs, the restore operation fails. Valid announcement files do not appear on the announcement board. To copy the announcements from the active processor's MSS device to the announcement board, restart the command on the newly- active processor. When announcements completely copy to announcement boards, calls do not connect to announcements on the ANN board.
- When announcement boards are plugged in or reset, maintenance performs a series of tests, including a DRAM Checksum test. Tests fail due to power losses to boards, resulting in an automatic download of announcement files.

arp

S8700 series

See:
[netstat arp](#) on page 76

netstat arp

S8700 series

`netstat arp [unsorted | ip-sorted | mac-sort | ck-dup]`

Use `netstat arp` to:

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

The output of `netstat arp` shows as many pages as are required to display all of the data received from the CLAN boards.

Action/Object	Qualifier	Qualifier Description	Login
<code>netstat arp</code>	<code>unsorted</code> <code>ip-sorted</code> <code>mac-sort</code> <code>ck-dup</code>	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 the display for `netstat arp unsorted`.

netstat arp unsorted					Page 1 of 3
Net to Media Table					
Seq	C-LAN	IP Address	Phys Addr	Type	
01	11B15	130.240.060.250	02:e0:3b:db:c8:0a		
02	11B14	190.010.130.250	00:30:6d:19:5c:0f		
03	11B13	130.000.190.250	00:60:2f:a9:45:05		
04	11B12	130.000.000.090	08:00:20:81:cc:b8		
05	11B11	130.000.160.240	00:00:81:5a:27:05		
06	11B10	130.000.160.220	08:00:20:1d:a7:0a		
07	12B15	130.000.160.221	08:00:20:7d:ff:6a		
08	12B14	130.000.190.200	00:00:81:7f:5d:e8		
09	12B13	130.000.190.201	08:00:20:81:cc:b8		
10	12B12	220.000.000.000	01:00:5e:00:00:00		
11	12B11	220.000.000.000	01:00:5e:00:00:00		
12	12B10	220.000.000.000	01:00:5e:00:00:00		
13	13B15	220.000.000.000	01:00:5e:00:00:00		
14	12B14	220.000.000.000	01:00:5e:00:00:00		
15	12B13	130.000.000.140	01:50:da:bf:ae:2a		

Use [netstat arp field descriptions](#) on page 79 to interpret this report.

The following screen shows the display for `netstat arp ip-sort`.

netstat arp unsorted					Page 1 of 3
Net to Media Table					
Seq	C-LAN	Device	IP Address	Phys Addr	Type
01	12D15		130.001.002.001	00:20:fc:1e:13:f9	
02	15D14		130.001.002.002	08:00:20:87:f0:87	
03	13D15		130.001.002.003	00:80:c7:ac:f0:dc	
04	05A10		130.001.002.004	00:50:04:d9:b2:b0	
05	11E09		130.001.002.005	00:a0:c9:a4:76:4d	
06	12E14		130.001.002.006	00:50:da:ba:c7:93	
07	11D10		130.001.002.007	00:50:04:d9:b1:4f	
08	11D11		130.001.002.008	08:00:20:75:e3:86	
09	03C09		135.003.004.001	08:00:20:7a:ff:b2	
10	10E10		135.003.004.002	08:00:20:7a:ff:b2	
11	05A15		135.003.004.003	08:00:20:81:cc:b8	
12	07B05		135.003.004.004	08:00:20:83:21:d0	
13	11B12		135.009.004.130	00:01:02:60:a5:43	
14	10C09		135.009.004.131	00:a0:c9:b2:89:d7	
15	03D15		135.009.004.132	00:50:da:bf:ae:2a	

The characters shown in bold type indicate duplicate IP addresses found in ARP data. Use [netstat arp field descriptions](#) on page 79 to further interpret this report.

Maintenance SAT Commands

The following screen shows the display for `netstat arp mac-sort`.

netstat arp mac-sort				Page 1 of 3
Net to Media Table				
Seq	C-LAN	IP Address	Phys Addr	Type
01	03E09	135.240.060.000	00:00:3c:04:2d:55	
02	02A15	135.240.060.001	00:00:3c:04:7b:b1	
03	10B12	135.000.190.010	00:00:77:01:ab:91	
04	09C13	135.000.190.011	00:00:81:5a:27:05	
05	11D15	135.000.190.012	00:00:81:7f:5c:e8	
06	DUP12B08	135.000.190.013	00:00:a2:c3:82:0a	
07	14C06	135.009.160.110	00:00:a5:14:39:00	
08	15C11	135.009.160.111	00:00:a5:f5:38:00	
09	02A15	135.009.160.112	00:00:a5:f7:38:00	
10	16D11	135.009.004.240	00:01:02:36:7c:c1	
11	04A08	135.009.004.241	00:01:02:60:a5:43	
12	09B15	135.009.004.242	00:01:02:60:a5:6b	
13	15D13	135.009.004.243	00:01:02:60:a5:72	
14	13A14	135.009.004.244	00:01:02:60:a5:82	
15	07B09	135.009.004.245	00:01:02:60:a5:df	

The entries shown in bold type with “**DUP**” by the **Net Seq** field indicate duplicate IP addresses found in the ARP data. In this example, the other duplicate address is on another page of the report. Use the [netstat arp field descriptions](#) on page 79 to further interpret this report.

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

netstat arp ck-dup				Page 1 of 3
Net to Media Table				
Seq	C-LAN	IP Address	Phys Addr	Type
01	03A12	135.000.160.110	08:00:6a:19:04:c3	
00	07#10	135.000.160.110	08:00:6a:19:04:e3	

Use [netstat arp field descriptions](#) on page 79 to interpret this report:

- The example in bold type indicates duplicate IP addresses found in the ARP data.
- If the system finds no duplicate IP address, it displays NO DUPLICATE IP ADDRESSES FOUND.

netstat arp field descriptions

netstat arp field descriptions

Field	Description
Net Seq	A switch-generated, sequential reference number
C-LAN	Location of the TN799DP (CLAN) circuit pack
IP Address	IP address
Phys Addr	The MAC address
Type	<p>other — The IP address and the MAC address for the entry are dissociated. You can ignore this.</p> <p>invalid — The IP and MAC address for this entry are disassociated. You can ignore this.</p> <p>dynamic — needs further investigation.</p> <p>static — needs further investigation.</p>

attendant

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[status attendant](#) on page 79.

status attendant

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`status attendant console# [print]`

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

status atm board

status atm board #

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

The following example shows the output from `status atm board #`.

```

status atm board 02A01                                     Page 1 of 1   SPE A

      Location:  02A01                                     Personality: ATM-EI

      ATM Address:                                           Mismatch: No
Last Board Insertion: mm/dd/yyyy hh:mm
      Board sysUpTime:                                       Network sysUpTime:

UNI   State: up: Last Down: mm/dd/yyyy hh:mm Last Up: mm/dd/yyyy/hh:mm
ILMI  State: up: Last Down: mm/dd/yyyy hh:mm Last Up: mm/dd/yyyy/hh:mm

```

status atm board field descriptions

Note:

Note: only circuit packs administered as ATM-EI or ATM-TRK personalities display **Location**, **Last Board Insertion**, and **Board sysUpTime** fields. All other fields are turned off.

status atm board field descriptions

Field	Description
Location	physical port location of the ATM circuit pack
Personality	ATM-EI, ATM-TRK
ATM Address	administered ATM address
Mismatch	compares the administered ATM address with the network address
Last Board Insertion	month, day, year, hour and minute of last board insertion
Board sysUpTime	value of the sysUpTime for the circuit pack
Network sysUpTime	value of the sysUpTime for the corresponding network end of the ILMI link
UNI State, Last Down, Last Up	UNI state, and the last time the link went up and down.
ILMI State, Last Down, Last Up	ILMI state, and the last time the link went up and down.

atm pnc

S8700 series

See:

[add atm pnc](#) on page 82

[change atm pnc](#) on page 83

[display atm pnc](#) on page 84

[list atm pnc](#) on page 86

add atm pnc

S8700 series

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
add atm pnc	n next	The number to assign to the ATM PNC Next available number Examples: add atm pnc 23 add atm pnc next	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	<i>UUCCSS</i> : cabinet, carrier, slot
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

S8700 series

`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>	<i>n</i>	Number assigned to the ATM PNC Example: <code>change atm pnc 23</code>		

See [add atm pnc](#) on page 82 for example screen and field descriptions.

display atm pnc

S8700 series

display atm pnc n [print | 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
display atm pnc	n print schedule	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 (UUCSS) 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: <ul style="list-style-type: none"> ● DCC ATM (Data Country Code) ● ICD ATM (International Code Designator) ● E.164 ATM private.
AFI	Address Format Identifier. Valid values are: <ul style="list-style-type: none"> ● 39 for DCC ● 47 for ICD ● 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

S8700 series

```
list atm pnc [print | schedule]
```

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

Action/Object	Qualifier	Qualifier Description	Login	Default
list atm pnc	print schedule	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

S8700 series | S8500 | S8400 | S8300 | G250 | G350 | G700

See:

[list audio-group](#)

[list usage audio-group](#)

list audio-group

S8700 series | S8500 | S8400 | S8300 | G250 | G350 | G700

```
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
list audio-group	1-Max	audio group number to list
	number n	range of audio group numbers to list
	to-number n	range of audio group numbers to list
	count n	number of audio groups to see on the page
	schedule	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

S8700 series | S8500 | S8400 | S8300 | G250 | G350 | G700

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
list usage audio-group	n schedule	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

S8700 series | S8500 | S8400 | S8300

See:

[clear audits](#) on page 89

[status audits](#) on page 89

clear audits

S8700 series | S8500 | S8400 | S8300

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 110.

Action/ Object	Qualifier	Qualifier Description	Login	Feature Interaction
<code>clear audits</code>	<i>cumulative</i> <i>peak-hour</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

S8700 series | S8500 | S8400 | S8300

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:

- The name of the audit
- 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 10: Time-available Maintenance Audits](#) on page 93. 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 93

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

```
status audits cumulative
```

AUDIT STATUS INFORMATION					
Start Date: 13:00 MON MAR 19 1997			# of Audit Cycles Completed: 67532		
Audit Name	# Cycles Fixed Data	# Cycles Could Not Fix Data	# Cycles Audit Aborted	First Error	Most Recent Error
HTLK	0	*****	0	03/22/10:14	06/24/16:03
CR-AUDIT	135	0	0	03/22/10:12	06/10/19:17
HU-CALLS	2	0	0	03/22/10:12	03/22/10:20
SE-CALLS	1	0	1	03/22/10:13	03/22/19:14
TTR-SID	1	0	0	05/01/02:17	05/01/02:17
CO-CALLS	1	0	0	05/01/02:16	05/01/02:16
DE-CALLS	1	0	0	03/22/10:12	03/22/10:12
TR-QUE	1	0	0	04/05/13:05	04/05/13:05
CTRK	0	1	0	03/22/10:12	03/22/10:12
AT-ADM	1	0	0	03/22/10:12	03/22/10:12
CO-ADM	1	0	0	03/22/10:13	03/22/10:13
PC-ADM	1	0	0	04/05/15:05	04/05/15:05
PRI					

```
status audits peak-hour
```

AUDIT STATUS INFORMATION			
Start Date: 10:00 MON MAR 22 1997		# 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 for 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 10: Time-available Maintenance Audits](#) on page 93 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 10: 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 10: 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
B2B-TAB	618	Board-to-Board Link 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
2 of 6		

Table 10: Time-available Maintenance Audits 3 of 6

Audit name	Audit number	Description
DE-CALLS	517	Data extension group calls audit
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
3 of 6		

Table 10: Time-available Maintenance Audits 4 of 6

Audit name	Audit number	Description
IP-EPT-TAB	651	IP EPT table audit
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
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 10: 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
SDSBUFF	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 10: 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
X25	617	X.25 Link/Channel Status Audit
XMOBILE-UPGRADE	649	XMOBILE type upgrade audit
6 of 6		

[Table 11: Scheduled Maintenance Audits](#) on page 99 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 / 8193 p 556 t 0* executes the Message Waiting Lamp Audit audit).

Table 11: Scheduled Maintenance Audits

Audit name	Audit number	Description
BRG-REC	647	bridge record audit
BUTC	609	Button memory compaction audit
MWL	556	Message Waiting Lamp Audit
NUMBER-MAPPING	648	XMOBILE mapping tables audit
PRI-USR	597	PRI user record audit
SUR-FREE	624	Station User Record Free List Audit

bcms

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[monitor bcms](#) on page 99

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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`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`.

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 17 1991					
			AVG	AVG			AVG		
SPLIT	CALLS	OLDEST	ANSW	AVAIL	#	ABAND	#	AVG	AFTER
	WAIT	CALL	SPEED	AGENT	ABAND	TIME	ACD	TALK	CALL
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.
OLDEST CALL	The amount of time that the oldest call has waited in queue. Real-time status data.
1 of 2	

monitor bcms system field descriptions 2 of 2

Field	Description
AVG ANSW SPEED	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	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	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	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.
2 of 2	

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 22 1991		
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 EXTN IN EXTN OUT						
CALLS CALLS 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.
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.
1 of 2	

monitor bcms split field descriptions 2 of 2

Field	Description
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 May 15, 1995											
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 <code>EXT ##</code> 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	<p>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:</p> $\frac{\text{Total Answer Time}}{\text{Total ACD Calls} + \text{Total CONNECT CALLS}}$ <p>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.</p>
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	<p>The average time abandoned calls waited before abandoning during the current period. The calculation is:</p> $\frac{\text{Total Abandon Time}}{\text{Total Calls Abandoned}}$
1 of 2	

monitor bcms vdn field descriptions 2 of 2

Field	Description
AVG TALK/ HOLD	<p>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:</p> $\frac{\text{Total Talk Time}}{\text{ACD Calls}}$
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	<p>The number of calls that were forced busy or forced disconnect during the current interval. This value includes:</p> <ul style="list-style-type: none"> 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 <p>This value does not include abandoned calls.</p>
% IN SERV LEVL	<p>The percent of calls offered that completed and were answered within the acceptable service level defined on the VDN screen. The calculation is:</p> $\frac{\text{accepted} * 100}{\text{calls offered}}$ <p><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.</p>
2 of 2	

board

S8700 series | S8500 | S8400 | S8300

See:

[busyout board](#) on page 106[release board](#) on page 106[reset board](#) on page 107[test board](#) on page 107

busyout board

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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 busied out.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
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

S8700 series | S8500 | S8400 | S8300

release board location

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

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release board	<i>location</i>	Board location: <i>PCSS</i>	init inads craft nms	none	none

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

S8700 series | S8500 | S8300

```
reset board UUCSS [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 3.1.x, (03-300430) (formerly 03-300190)* on the relevant maintenance object for details.

When a port circuit pack is specified, **reset board** performs a software reset of every administered port on the circuit pack. Every port must be busied out before the port circuit pack 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. Standby components must first be busied out 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	Feature Interaction
reset board	<i>UUCSS</i> <i>PCSS</i> <i>repeat#</i>	Reset every administered port on the circuit pack.		1 1	

test board

S8700 series

```
test board UUCSS [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>	<code>init</code> <code>inads</code> <code>craft</code> <code>nms</code>	<code>short</code> <code>1</code>

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

boot-image

S8700 series

See:

[get boot-image](#) on page 108

[set boot-image](#) on page 110

get boot-image

S8700 series

`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	Default	Feature Interaction
<code>get boot-image</code>	<code>location</code>	The physical location of the circuit pack (<i>UUCSS</i>).	<code>init</code> <code>inads</code> <code>craft</code> <code>cust</code>		

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 110.
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

S8700 series

```
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	Default	Feature Interaction
set boot-image	board location	The physical location of the circuit pack (UUCSS)	init inads craft cust		
	1 2	use the Image 1 firmware file use the Image 1 firmware file			
		Example: set boot-image board 1B08 image 1			

bri-port

S8700 series | S8500 | S8400 | S8300

See:

[status bri-port](#) on page 110

status bri-port

S8700 series | S8500 | S8400 | S8300

```
status bri-port UUCSSpp [print]
```

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 3.1.x, (03-300430) (formerly 03-300190)*.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status bri-port	<i>UUCSSpp print</i>	See Common Input Parameters on page 25.			

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 12: Interpreting BRI-Port Status Reports](#) on page 113 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.
1 of 2	

status bri-port field descriptions 2 of 2

Field	Description
Layer 1 State	<p>The operational state of the physical connection (Layer 1) of the ISDN link carried over the port:</p> <p>activated = Layer 1 frames are being passed between the port and BRI endpoints.</p> <p>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.</p> <p>deactivated = The layer 1 interface device on the BRI has been turned off due to the port being out of service.</p>
TEI Value	<p>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.</p>
Layer2 State	<p>The operational state of the point-to-point signaling link (Layer 2):</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>hyperactive = Traffic on this link has exceeded the threshold and the link has been suspended.</p>
Endpt Extension	<p>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.</p>
Endpt SPID	<p>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.</p>
Service SPID	<p>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.</p>
2 of 2	

Interpreting Results of status bri-port

[Table 12: Interpreting BRI-Port Status Reports](#) on page 113 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 12: 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	<p>This is a transitory state for BRI endpoints and ASAI adjuncts. The switch is attempting to establish the link.</p> <ol style="list-style-type: none"> 1. Check the endpoint and wiring by following the SPID Facility test's procedure described in BRI-SET, Various Adjuncts on page 723 in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x</i>, (03-300430) (formerly 03-300190). 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 12: 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	<p>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.</p> <ol style="list-style-type: none"> 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	<p>This is the normal state for non-MIM initializing, fixed, and automatic TEI BRI endpoints.</p>
BRI, ASAI	64-126	Established	blank	blank	<p>This is a transitory state for automatic TEI BRI endpoints that support MIM initialization.</p> <ol style="list-style-type: none"> 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	<p>This is the normal state for automatic TEI BRI endpoints that support MIM initialization.</p>
					2 of 6

Table 12: 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 723 in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (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 723 in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (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 <code>status bri-port</code> 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 12: 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	<p>This is a transitory state for BRI endpoints that support MIM initialization.</p> <ol style="list-style-type: none"> 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 <code>status bri-port</code> 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 <code>status bri-port</code> 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 12: 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	<p>This is a transitory state for BRI endpoints that support MIM initialization when a SPID Facility test has been used to initialize the station.</p> <ol style="list-style-type: none"> 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 12: 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	<p>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:</p> <ol style="list-style-type: none"> 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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[display bulletin board](#) on page 119

display bulletin board

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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 119

[change cabinet](#)

[display cabinet](#)

[list cabinet](#) on page 123

[status cabinet](#) on page 125

add cabinet

[S8700 series](#)

`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	Default	Feature Interaction
<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

Page1 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

Page1 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.
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 119 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 119 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 01	
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* [print]

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	<i>UU</i> print	Location number of cabinet See Common Input Parameters on page 25.		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	<p>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:</p> <p>up — EAL and INL are both available.</p> <p>down — EAL and INL are both unavailable.</p> <p>near-end — The EAL is available, and the INL is unavailable.</p> <p>far-end — The INL is available, and the EAL is unavailable.</p> <p>aa — Points to a problem with the archangel. The control is up, but the archangel is not functioning and is not available.</p> <p>blank — In the standby column, this means PNC is not duplicated.</p> <p>For SNs connectivity status indicates circuit pack insertion on the Switch Node as follows:</p> <p>up — At least one switch node interface circuit pack in the Switch Node is inserted.</p> <p>down — There are no switch node interface circuit packs inserted on the Switch Node.</p> <p>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).</p>
Emergency Transfer	The location of the circuit pack containing the emergency transfer select switch (PN maintenance).
Select Switch	<p>The current setting of the emergency transfer switch:</p> <p>on Emergency transfer has been manually activated.</p> <p>off Emergency transfer is being manually prevented.</p> <p>auto+ The cabinet is controlling emergency transfer and is activated.</p> <p>auto- The cabinet is controlling emergency transfer and is not activated.</p> <p>unavail The current setting of the emergency transfer switch is not available.</p>
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	

campon-busyout

[S8700 series](#) | [S8500](#)

campon-busyout

[S8700 series](#) | [S8500](#)

```
campon-busyout [ trunk | media-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 426 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**:

- Busied resources are returned to service. The command result is **PASS**.
- 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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[display capacity](#) on page 129

display capacity

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`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
<code>display capacity</code>	<code>schedule</code>	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, AAR/ARS, ABBREVIATED DIALING (AD), ADJUNCT SWITCH APPLICATION INTERFACE (ASAI), page 1

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

Field	Description
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.
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.
1 of 2	

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

Field	Description
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, ATTENDANT SERVICE, BASIC CALL MANAGEMENT SYSTEM (BCMS), page 2,

Table 13: display capacity field descriptions, ATTENDANT SERVICE, BASIC CALL MANAGEMENT SYSTEM (BCMS) page 2 1 of 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.
1 of 2	

Table 13: display capacity field descriptions, ATTENDANT SERVICE, BASIC CALL MANAGEMENT SYSTEM (BCMS) page 2 2 of 2

Queue/Call Status Buttons	The number of attendant queue status buttons administered on stations. There are two types of queue status buttons: <ul style="list-style-type: none"> • 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.
2 of 2	

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, CALL COVERAGE, CALL VECTORING/ CALL PROMPTING, page 3

Table 14: display capacity field descriptions, CALL COVERAGE, CALL VECTORING/CALL PROMPTING page 3

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 3.1 Call Vectoring and Expert Agent Selection (EAS) Guide, 07-300477 (formerly 07-300186, 555-230-714)</i> .
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 3.1 Call Vectoring and Expert Agent Selection (EAS) Guide, 07-300477 (formerly 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 3.1 Call Vectoring and Expert Agent Selection (EAS) Guide, 07-300477 (formerly 07-300186, 555-230-714)</i> .

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, DATA PARAMETERS, DIAL PLAN, page 4

Table 15: display capacity field descriptions, DATA PARAMETERS, DIAL PLAN, page 4 1 of 2

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.
1 of 2	

Table 15: display capacity field descriptions, DATA PARAMETERS, DIAL PLAN,
page 4 2 of 2

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> .
2 of 2	

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, HUNT GROUPS, SPLITS, OR SKILLS, page 5

Table 16: 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 Announcement Analog Queue Slots:	0	1256	1256
TN2501 VAL Boards:	2	8*	10
G700 VAL Sources:	0	250	250
TN2602 Boards with 80 VoIP Channels:	12	8	20
TN2602 Boards with 320 VoIP Channels:	3	1	4
TEMPORARY SIGNALING CONNECTIONS (TSC)			
Administered TSCs:	2	126	128
NCA-TSC Calls:	0	256	256

'*' Available VAL Boards limited by other inserted integ type annnc boards

display capacity field descriptions, TEMPORARY SIGNALING CONNECTIONS (TSC) page 6

Table 17: 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.
G700 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 17: 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 TRUNKS field descriptions, page 7

Table 18: 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 18: 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
Station Records:	5392	30565*	36000
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
ISDN-BRI Endpoint And Trunk Ports:	38	6962	7000

display capacity field descriptions, VOICE TERMINALS, page 8

Table 19: display capacity field descriptions, VOICE TERMINALS, page 8 1 of 2

VOICE TERMINALS	
Station Button Memory (units)	The percentage of memory being consumed by every administered button.
1 of 2	

Table 19: display capacity field descriptions, VOICE TERMINALS, page 8 2 of 2

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.
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.
2 of 2	

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

display capacity

Page 9 of x

SYSTEM CAPACITY

TOTAL LICENSED PORTS

	Used	Available	License Limit
	- - -	- - -	- - -
Station and Trunk Ports:	5297	38703	44000
Station Records:	0	200	36000
SBS Stations:	9	491	500
Radio Controllers:	0	0	0
Wireless Terminals:	0	0	0
XMOBILE Stations:	0	36000	36000
EC500:	0	0	0
DECT:	0	0	0
PHS:	0	0	0
Off-PBX Telephone - EC500:	0	0	0
Off-PBX Telephone - OPS:	0	0	0
Off-PBX Telephone - SSE:	0	0	0
Off-PBX Telephone Memory (units):	0	100%	450000

display capacity field descriptions, TOTAL LICENSED PORTS, page 9**Table 20: display capacity field descriptions, TOTAL LICENSED PORTS, page 9**

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
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

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, CONCURRENT REGISTRATION COUNTS page 10

Table 21: 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									
CURRENT REGISTRATION COUNTS BY PRODUCT ID									
System					System				
ID	Rel	Regist.	Avail.	Limit	ID	Rel	Regist.	Avail.	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, CURRENT REGISTRATION COUNTS BY PRODUCT ID, page 11

Table 22: display capacity field descriptions, CURRENT REGISTRATION COUNTS BY PRODUCT ID, page 11

ID	Product identifier from the license file <ul style="list-style-type: none"> ● 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: R011x.01.2.105.0 Memory Configuration: G3xV11 Offer Category: A	
LAST TRANSLATION LOADED INFORMATION:	
Software Load: R011x.01.2.105.0 Memory Configuration: G3x (large) Offer Category: A	

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

Table 23: 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.
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

[S8700 series](#) | [S8500](#) | [G650](#)

See:

[recycle carrier](#) on page 144

recycle carrier

[S8700 series](#) | [S8500](#) | [G650](#)

`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	cabinet carrier slot override	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:

- Reset all the boards in the carrier in an attempt to clear a problem when a board stops responding to control channel messages
- 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:

- Switch Node Carrier
- PN Control Carrier
- 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 tuc 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 3.1.x, (03-300430) (formerly 03-300190)*).

CAUTION:

`Recycle carrier` drops all calls within a carrier when:

- Do not specify a slot number
- 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:

- Do not specify a slot number
- 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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[busyout cdr-link](#) on page 147

[release cdr-link](#) on page 147]

[status cdr-link](#) on page 148

[test cdr-link](#) on page 149

busyout cdr-link

S8700 series | S8500 | S8400 | S8300

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 374 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

S8700 series | S8500 | S8400 | S8300

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 embedded on the TN2314
- 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 148. See [status link](#) on page 374 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release cdr-link			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

S8700 series | S8500 | S8400 | S8300

status cdr-link [print]

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 the physical link that the server uses to send call detail records to an output device such as a Call Detail Recording Utility (CDRU). A system may have up to two CDR links, a primary and a secondary. See [PRI-CDR \(Call Detail Recording Link\)](#) on page 1932 in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (03-300430) (formerly 03-300190)*.

See [status link](#) on page 374 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:
Maintenance Busy? no
```

status cdr-link field descriptions

status cdr-link field descriptions

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. extension not administered An extension number for the 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.
Maintenance Busy	Whether the link is busied out for testing.

test cdr-link

S8700 series | S8500 | S8400 | S8300

```
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 148.

See [status link](#) on page 374 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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#) | [G650](#)

See:

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

[display circuit-packs](#) on page 154

change circuit-packs

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#) | [G650](#)

`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:

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

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>change circuit-packs</code>	<code>UU</code>	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 154.

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 154.

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 154.

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

CIRCUIT PACKS

Cabinet: 1	Carrier: C
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 4, on **S8700 MC**. See [change circuit-packs field descriptions](#) on page 154.

```
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 154.

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 154.

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. Prior to the introduction of Communication Manager 2.0, an expansion interface circuit pack was automatically populated when a cabinet was added. For Communication Manager 2.0 and later releases, this auto-administration is eliminated for all carrier/cabinet types.

display circuit-packs

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#) | [G650](#)

`display circuit-packs <cabinet>`

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-ip

S8700 series

See:

[status clan-port](#) on page 156

status clan-ip

S8700 series

status clan-ip location

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

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

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

status clan-ip 01A06				
IP STATUS				
Reset Time: 02/03 12:02				
Incoming Received:	Octets	Datagrams	Discards	Hdr Errors
Since Reset	13356608	17343	0	0
Outgoing Transmitted:	Octets	Datagrams	Discards	No Routes
Since Reset	1117700	17372	0	46
Datagrams w/o Routes	ICMP Dest Unreachables	ICMP Redirects		
Since Reset	0	0		

status clan-ip field descriptions

status clan-ip field descriptions 1 of 2

Field	Description
Reset Time	
Incoming Received	
Since Reset	
1 of 2	

status clan-ip field descriptions 2 of 2

Field	Description
Outgoing Transmitted	
Since Reset	
Datagrams w/o Routes	
Since Reset	
2 of 2	

clan-port

S8700 series

See:

[status clan-port](#) on page 156

status clan-port

S8700 series

`status clan-port 1 | 2`

Use `status clan-port` to see:

- static information about the clan-port
- the data extension and port used, connect speed, and protocol information
- a counter of CHAP failures
- time information, including the time of the last reset
- the type and number of active applications

The same information that is displayed by `status clan-port` can be invoked with:

- `status link n`
- `netstat link n` for CLAN links

See [status link](#) on page 374 for more information.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>status clan-port</code>	1	returns the status of Cleared Alarm Notification of the first OSS telephone number		1
	2	returns the status of Cleared Alarm Notification of the second OSS telephone number		

clan-usage

S8700 series

`status clan-usage` is replaced with `status socket-usage`.

See:

[status socket-usage](#) on page 521.

cleared-alarm-notif

S8700 series | S8500 | S8400 | S8300

See:

[status cleared-alarm-notif](#) on page 157

status cleared-alarm-notif

S8700 series | S8500 | S8400 | S8300

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>	1	First OSS telephone number status of Cleared Alarm Notification.	init inads craft cust rcust	First OSS telephone number for the Cleared Alarm Notification status.
	2	Second OSS telephone number status of Cleared Alarm Notification.		

communication-interface links

S8700 series

See:

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

[display communication-interface links](#) on page 158

change communication-interface links

S8700 series

`change communication-interface links`

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

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

See [status link](#) on page 374 for more details on links.

display communication-interface links

S8700 series

`display communication-interface links [print]`

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

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

See [status link](#) on page 374 for more details on links.

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

display communication-interface links							Page	1 of	2
INTERFACE LINKS									
Link	Enable	Est Conn	Ext	Type	Dest. Number	DTE Conn DCE Module	Name		
1:	y	n	2991	ETHERNET			ethernet on link 1		
2:	n	n							
3:	n	n							
4:	n	n							
5:	n	n							
6:	n	n							
7:	n	n							
8:	n	n							
9:	n	n							
10:	n	n							
11:	n	n							
12:	n	n							
13:	n	n							
14:	n	n							
15:	n	n							
16:	n	n							
17:	n	n							

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: <ul style="list-style-type: none"> • 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-channel**S8700 series**

See:

[change communication-interface processor-channel](#) on page 160[display communication-interface processor-channel](#) on page 163[list communication-interface processor-channel](#) on page 164

change communication-interface processor-channel**S8700 series****change communication-interface processor-channel *n***

Use **change communication-interface processor-channel *n*** 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-channel	<i>n</i>	Number of the processor channel Example: change communication-interface processor-channel 125	init inads craft	

The following example shows the output from **change communication-interface processor-channel**.

change communication-interface processor-channel										Page 1 of X
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-channel field descriptions

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

Field	Description
Enable	y/n The processor channel is enabled/disabled.
Appl	<p>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.</p> <p>Valid entries are</p> <ul style="list-style-type: none"> • 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 <p>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.</p>
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-channel 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 x.25 or procr-intf . 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 numbered 1 through (4 times the number of PI circuit packs) for the si model can be either x.25 or tcp/ip . The rest of the links (up to 25) must be tcp/ip .
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-channel**S8700 series**

```
display communication-interface processor-channel n
```

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

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>display communication-interface processor-channel</code>	<code>n</code>	Number of the processor channel Example: <code>display communication-interface processor-channel 125</code>	init inads craft	

list communication-interface processor-channel

S8700 series

```
list communication-interface processor-channel
```

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

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>list communication-interface processor-channel</code>		Example: <code>list communication-interface processor-channel</code>	init inads craft	

conference

S8700 series | S8500 | S8400 | S8300

See:

[status conference](#) on page 164

status conference

S8700 series | S8500 | S8400 | S8300

```
status conference [all | conference-ID] [print | 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 <i>conference-ID</i>	display all stored conference data display data on specified conference (current or last completed)	inads init system technician	all
	endpoint all <i>endpoint-id</i> print schedule	See Common Input Parameters on page 25. Examples: status conference status conference 2 print 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 50Page 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:                               Admin Bandwidth: 64k       No of Channels: 2
Format (in/out): CIF                    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 24: 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 24: status conference field descriptions, page 1 2 of 9

Field	Description
Format (in/out)	<ul style="list-style-type: none"> 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	<p>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.</p> <p>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.</p> <p>QFPS field is blank for proprietary modes.</p>
2 of 9	

Table 24: 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	<p>Is the endpoint currently participating in the conference or in process of connecting to the conference? - y, c, e, f, n, blank.</p> <ul style="list-style-type: none"> ● 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
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Table 24: status conference field descriptions, page 1 4 of 9

Field	Description
Chl	<p>Data on the quantify and quality of channels (transfer rate)? - y, e, n, blank</p> <ul style="list-style-type: none"> ● 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	<p>Does it have the required audio capability? - y, c, e, blank</p> <ul style="list-style-type: none"> ● 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
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Table 24: status conference field descriptions, page 1 5 of 9

Field	Description
Vid	<p>Does it have the required video capability and is receiving video? - y, c, e, n, blank</p> <ul style="list-style-type: none"> • 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	<p>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 <code>none</code>, and therefore, the data does not apply, or the endpoint has never joined the conference.</p>
Gx	<p>Does it have the Still Frame Graphics capability? - y, e, blank</p> <ul style="list-style-type: none"> • 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.
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Table 24: status conference field descriptions, page 1 6 of 9

Field	Description
Rate Adpt	<p>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.</p> <ul style="list-style-type: none"> ● 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.
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Table 24: status conference field descriptions, page 1 7 of 9

Field	Description
Ts	<p>Indication of the talking state of the endpoint - t, m, M, S, blank.</p> <ul style="list-style-type: none"> ● 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	<ul style="list-style-type: none"> ● 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.
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Table 24: status conference field descriptions, page 1 8 of 9

Field	Description
Vs (cont'd)	<ul style="list-style-type: none"> ● 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.
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Table 24: status conference field descriptions, page 1 9 of 9

Field	Description
	<ul style="list-style-type: none"> ● 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.
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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 Time			Drop Time			Drop Reason			AC Num		-----Ports-----			Sum Grp		Software											
1:																													
2:																													
3:																													
4:																													
5:																													
6:																													

status conference field descriptions, page 2

Table 25: 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	<p>The reason for the channel’s disconnect:</p> <ul style="list-style-type: none"> ● 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.
1 of 4	

Table 25: status conference field descriptions, page 2 2 of 4

Field	Description
Drop Reason	<ul style="list-style-type: none"> ● 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. ● Endpoint Clearing received from DS1 - the disconnect came from the endpoint. The endpoint notified the MCU that it intended to disconnect. ● Far-end Clearing received from DS1 - the disconnect came from either the network or the endpoint. ● 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. ● 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. ● 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). ● Network Clearing received from DS1 - the disconnect came from the network. The endpoint that had the disconnect notification capability disconnected without notifying the MCU. ● No-ring This dial-out drop reason occurs when the call has been up for 30 seconds and no ringing is detected. ● 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.
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Table 25: status conference field descriptions, page 2 3 of 4

Field	Description
Drop Reason (cont'd)	<ul style="list-style-type: none"> ● 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). ● 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. ● 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. ● 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. ● 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.
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.
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Table 25: 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.
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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: ____ MLP Rate: ____
Admin Bandwidth: ____		Rate Adaptation: ____
Conf Bandwidth: ____		Lo/Hi Interworking: ____
Meet-Me Number: ____		Dial Out #1: ____
Sum Grp: _ L1: ____ L2: ____		#2: ____
Quadrature: ____		
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 26: 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
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Table 26: status conference endpoint field descriptions, page 1 2 of 8

Field	Description
In Use	<p>Is the endpoint currently participating in the conference or in process of connecting to the conference? – y, c, e, f, n, blank.</p> <ul style="list-style-type: none"> ● 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 – The field is blank until the first call is made from/to the endpoint.
Enh BAS	<p>EnhancedBasic Service Flag – n, y</p> <p>y – The endpoint supports the enhanced BAS commands/caps; n – The endpoint only supports the basic BAS commands/caps.</p>
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Table 26: status conference endpoint field descriptions, page 1 3 of 8

Field	Description
Chl	<p>Data on the quantify and quality of channels (transfer rate)? – y, e, n, blank</p> <ul style="list-style-type: none"> ● 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	<p>Does it have the required audio capability? – y, c, e, blank</p> <ul style="list-style-type: none"> ● 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.
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Table 26: status conference endpoint field descriptions, page 1 4 of 8

Field	Description
Vid	<p>Does it have the required video capability and is receiving video? – y, c, e, n, blank</p> <ul style="list-style-type: none"> ● 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 endpoint always have the Vid field set to blank.
Mlp	<p>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.</p>
Gx	<p>Does it have the Still Frame Graphics capability? – y, e, blank</p> <ul style="list-style-type: none"> ● 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.
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Table 26: status conference endpoint field descriptions, page 1 5 of 8

Field	Description
Rate Adpt	<p>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.</p> <ul style="list-style-type: none"> ● 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 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. ● 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). ● 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 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 26: status conference endpoint field descriptions, page 1 6 of 8

Field	Description
Ts	<p>Indication of the talking state of the endpoint – t, m, M, S, blank.</p> <ul style="list-style-type: none"> ● 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 26: status conference endpoint field descriptions, page 1 7 of 8

Field	Description
Vs	<p>Indication of the MCU video state for this endpoint – a, b, B, c, i, r, R, s, S, u, U, v, blank.</p> <p>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.</p> <p>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.</p> <ul style="list-style-type: none"> ● 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. ● 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. ● 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. ● 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 26: status conference endpoint field descriptions, page 1 8 of 8

Field	Description
Vs (cont'd.)	<ul style="list-style-type: none"> ● 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 displays when both 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/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. ● 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.
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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	<p>The reason for the channel's disconnect:</p> <ul style="list-style-type: none"> ● 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.
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status conference endpoint field descriptions, page 2 3 of 5

Field	Description
Drop Reason (cont'd)	<ul style="list-style-type: none"> ● Endpoint Clearing received from DS1—The disconnect came from the endpoint. The endpoint notified the MCU that it intended to disconnect. ● Far-end Clearing received from DS1—The disconnect came from either the network or the endpoint. ● 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. ● 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. ● 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). ● Network Clearing received from DS1—The disconnect came from the network. The endpoint that had the disconnect notification capability disconnected without notifying the MCU. ● 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. ● No-ring This dial-out drop reason occurs when the call has been up for 30 seconds and no ringing is detected. ● 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. ● 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)	<ul style="list-style-type: none"> ● 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	<p>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.</p> <p>For “UCC” endpoint type, the channel 1 port slot position displays the allocated Call Classifier resource.</p>
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

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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
-----					AIM:	y n	---	---
XRATE:	y	384	384	384	VIS	y n	A-OUT:	y n
AUDIO:	n	G728	neutral	G728	MIS:	n	A-IN:	y n
56/64:	y	derestrict	derestrict	derestrict	MCV:	n	M-FRM:	y n
VIDEO:	n	H.261	H.261	H.261	-----		MFA:	y n
MLP:	y	MLP-off	MLP-off	MLP-off	TALK:	y 05	MFN:	y n
H-MLP:	y	H-MLP-off	H-MLP-off	H-MLP-off	VFCV:	y 01	FAS:	y n
LSD:	y	LSD-off	LSD-off	LSD-off	BCTK:	n 02	MCUFAL:	00 00
HSD:	y	HSD-off	HSD-off	HSD-off	RTTK:	y 01	FEFAL:	00 00
CRYPT:	y	encrypt-off	encrypt-off	encrypt-off	BCLS:	n		
S/M:	y	N-comp-6B-H0	N-comp-6B-H0	N-comp-6B-H0	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	<p>Indicates the endpoint number that is the current broadcaster. Applies to full-screen and quad-screen presentation mode conferences.</p> <ul style="list-style-type: none"> ● 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	<p>Indicates the endpoint number that is the current return video. The return video can be qualified with the following keywords:</p> <ul style="list-style-type: none"> ● 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 MODE COMMANDS/COMMUNICATION MODES

Table 27: status conference endpoint field descriptions, page 3 MODE COMMANDS/COMMUNICATION MODES 1 of 2

Fields	Description
<p>MODE COMMANDS/COMMUNICATION MODES</p> <p>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</p>	
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 28: Supported Transfer Rates on page 196. 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	<p>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.</p> <p>Table 29: Audio Mode Configurations on page 196 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.'</p> <p>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.</p>
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**Table 27: status conference endpoint field descriptions, page 3 MODE COMMANDS/
COMMUNICATION MODES 2 of 2**

Fields	Description
56/64	<p>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.</p> <p>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.</p>
VIDEO	<p>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.</p>
MLP	<p>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.</p> <p>The MLP mode should be MLP-off when Data Mode is administered as none. Again, other values in this mode will affect video status.</p>
H_MLP	<p>The High Speed MLP mode. The HMLP mode should be H-MLP-off. Other values in this mode will affect video status.</p>
LSD	<p>Low Speed Data mode. The LSD mode should be LSD-off. Other values in this mode will affect video status.</p>
HSD	<p>High Speed Data mode. The HSD mode should be HSD-off. Other values in this mode will affect video status.</p>
CRYPT	<p>Encryption mode. The CRYPT mode should be encrypt-off. Other values in this mode will affect video status.</p>
S/M	<p>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.</p>
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Table 28: 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 29: 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 29: 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 Endpoint Miscellaneous (EPT) Information

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.
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status conference endpoint field descriptions, page 3 Frame Alignment Word (FAW) Information

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

Field	Description
<p>Frame Alignment Word (FAW) Information</p> <p>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.</p>	
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.

Maintenance SAT Commands

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

status conference endpoint

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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 40k 48k 56k 62.4k 64k			
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 46.4k 62.4k			
HMLP	var 62.4k	68k 128k 192k 256k 320k 384k			

status conference endpoint field descriptions, page 4, Endpoint Capability Information

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	<p>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:</p> <ul style="list-style-type: none"> ● 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	<p>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.</p> <p>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:</p> <ul style="list-style-type: none"> ● 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	<p>Transfer rate capabilities are statement about the speeds at which the endpoint can operate over the current connection and operate a Px64 Multiplex.</p> <p>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.</p>
AUD	<p>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.</p>
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

page 5 of 6

ENDPOINT CALL STATUS INFORMATION

	Join	Join	Drop	-----	Drop	-----	--- Previous ---	-----
Chan	Count	Time	Time	Reason	Code	BondCode	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

page 6 of 6

ADMINISTERED CONNECTIONS INFORMATION

AC	Chan 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, Administered Connections Information

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	<p>Indicates the current call state of the AC. The following are connection states associated with dial-out ACs:</p> <ul style="list-style-type: none"> ● 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: <ul style="list-style-type: none"> - 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 30: Status AC - Failure Cause Values on page 206 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.
2 of 2	

Table 30: 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 30: 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

2 of 2

configuration

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:
[list configuration](#) on page 208
[list configuration media-gateway](#) on page 213
[list configuration power-supply](#) on page 215
[list configuration software-versions](#) on page 216
[list configuration stations](#) on page 218

list configuration

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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

See also:
[list configuration media-gateway](#) on page 213
[list configuration power-supply](#) on page 215
[list configuration software-versions](#) on page 216
[list configuration stations](#) on page 218

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 UUCSS	Displays every assigned port on a circuit pack specified by cabinet, carrier, and slot.		

1 of 2

Action/Object	Qualifier	Qualifier Description	Login	Default
	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.		
	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 218.		
	trunks	Displays every circuit pack that can be used for administering trunks. Every assigned port appears.		
	print schedule	See Common Input Parameters on page 25.		
		Examples: list configuration carrier 2c schedule list configuration port-network 5 list configuration stations print		
2 of 2				

Maintenance SAT Commands

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

list configuration all												Page	1
SYSTEM CONFIGURATION													
Board						Assigned Ports							
Number	Board Type	Code	Vintage		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	u	u	
					17								
01A08	CO TRUNK	TN747B	000026		u	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	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	u	u	u	

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	<p>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.</p> <p>Identifies the current status of the port that corresponds to the position:</p> <p>01 - 32 - the circuit number of an assigned port</p> <p>m -</p> <p>mj - the port is assigned as an external device major (mj) alarm port</p> <p>mn - the port is assigned as an external device minor (mn) alarm port</p> <p>P -</p> <p>t - the port is not assigned and is supported by Terminal Translation Initialization. Activate the port with the TTI association sequence.</p> <p>u - the port exists but is unassigned.</p> <p>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.</p>
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

[S8400](#) | [S8300](#) | [G700](#) | [G700](#) | [G350](#) | [G250](#) | [G250-BRI](#)

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	Login	Default
list configuration media-gateway	x	media gateway number		

This is an example of **list configuration media-gateway**.

list configuration media-gateway x										
SYSTEM CONFIGURATION										
Module				Assigned Ports						
Number	Module Type	Code	Vintage	u=unassigned	t=tti	p=psa				
002V1	ANA MM	MM711	HW00 FW000	u	u	u	u	u	u	u
002V2	DS1 MM	MM710	HW00 FW000	u	u	u	u	u	u	u
002V3	VOIP MM	MM760	HW00 FW000							
002V4	VOIP MM	MM760	HW00 FW000							
001V8	MSG VMM			u	u	u	u	u	u	u
002V9	ANN VMM			u	u	u	u	u	u	u
001V1	MG ICC	S8300	HW00 FW00							
001V2	DCP MM	MM712	HW00 FW00	u	u	u	u	u	u	u
001V3	BRI MM	MM720	HW00 FW00	u	u	u	u	u	u	u
001V4	DS1 MM	MM710	HW00 FW00	u	u	u	u	u	u	u

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	<p>Type of Avaya Media Module in the slot:</p> <ul style="list-style-type: none"> • V1-V4 accept: <ul style="list-style-type: none"> ANA MM (analog) bri dcp icc (S8400 S8300 and LSPs, both processor-type Media Modules) VOIP MM (voip) ds1 (also referred to as T1/E1) • V8 accepts: <ul style="list-style-type: none"> MSG VMM (messaging-analog) • V9 accepts: <ul style="list-style-type: none"> ANN VMM (gateway-announcements) <p>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.</p>
Code	MM720 (BRI) MM712 (DCP) MM711 (Analog) MM710 (T1/E1) MM760 (VoIP) S8400 S8300 (ICC)
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

G650 | S8500

`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
<code>list configuration power-supply</code>	<i>cabinet</i> carrier	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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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

Use `list configuration software-version` to display:

- software version numbers and compatibility indexes of the software load modules stored in system memory (RAM) and on the Mass Storage System devices
- the dates and times when translation and announcement data were last saved to the MSS
- 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 print 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: R011x.01.0.059.0
  Disk Resident:  R011x100.0.059.0

TRANSLATION DATA
  Memory Resident: 11:12 am  FRI FEB 22, 2002
  Disk Resident:  11:12 am  FRI FEB 22, 2002
  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 and in the MSS
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 MSS
Memory Resident	Date and time marked on the removable media or disk when translation data was last read from the MSS 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

S8700 series | S8400 | S8300 | G700 | G700 | G350 | G250 | G250-BRI

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.

cti-link

S8700 series | [S8500](#) | [S8400](#) | [S8300](#)

See:

[busyout cti-link](#) on page 219

[list cti-link](#) on page 220

[list usage cti-link](#) on page 221

[release cti-link](#) on page 221

[test cti-link](#) on page 222

busyout cti-link

S8700 series | [S8500](#) | [S8400](#) | [S8300](#)

busyout cti-link link

Use **busyout cti-link** to busyout a specified endpoint for a link that is administered on the DLG 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 374 for more details on links.

Action/ Object	Qualifier	Qualifier Description	Login	Feature Interaction
busyout cti-link	<i>link</i>	Link number (1- 8): For Co_Resident DLG, the CTI link number For MAPD, cabinet-carrier-slot-circuit Example: busyout cti-link 1	init inads craft customer -type login	See Feature interactions for busyout cti-link on page 219.

Feature interactions for busyout cti-link

- All ASAI service is disabled.
- A Warning alarm is generated even if more severe CTI link (for example, adj-ip) alarms are present.
- Periodic and scheduled tests continue to run. No alarms more severe than a Warning are generated until the CTI link is released from busyout.
- The release of CTI link from busyout retires all alarms.
- 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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<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 374 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

S8700 series | S8500 | S8400 | S8300

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 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	Feature Interaction
list usage cti-link	link	Link number (1- 8): For Co_Resident DLG, the CTI link number For MAPD, cabinet-carrier-slot-circuit Example: list usage cti-link 1	init inads craft customer -type login	

The following is an example of **list usage cti-link**.

list usage cti-link	Page 1
LIST USAGE REPORT	
Used By	
Hunt Group Group Number 1 ASAI Notif Link	
Hunt Group Group Number 2 ASAI Dom Link	
Hunt Group Group Number 2 ASAI Ctrl Link	
IP Service DLG Link Admin CTI Link	
Vector Vector Number 1 Step 1	

release cti-link

S8700 series | S8500 | S8400 | S8300

release cti-link [link n]

Use **release cti-link** to release a busied-out endpoint for a link that is administered on the DLG 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.

For Co-resident DLG, when a busied-out CTI link is released, ASAI is brought up at Level 3.

See [status link](#) on page 374 for more details on links. For more information, also see [Busyout and Release Commands](#) on page 33.

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

test cti-link

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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

For more information on the CTI link, see [status firmware download](#) on page 302. See [status link](#) on page 374 for more details on links.

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

customer alarm

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#) | [G650](#)

See:

[test customer-alarm](#) on page 222

test customer-alarm

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#) | [G650](#)

```
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>	<code>location</code> <code>short</code> <code>long</code> <code>repeat n</code> <code>clear</code>	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>	<code>init</code> <code>inads</code> <code>craft</code> <code>dadmin</code> <code>switch circuit pack</code> <code>maintenance</code> <code>permissions</code>	1a 1

data-module

[S8700 series](#) | [S8500](#)

See:

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

[release data-module](#) on page 224

[status data-module](#) on page 224

[test data-module](#) on page 226

busyout data-module

[S8700 series](#) | [S8500](#)

`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	Login
<code>busyout data-module</code>	<code>extension</code>	Extension number per dial plan Example: <code>busyout data-module 31300</code>	

Maintenance SAT Commands

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
dtm	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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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	Default	Feature Interaction
<code>release data-module</code>	<i>extension</i>	Extension number associated with data module or data channel.	init inads craft cust nms		

status data-module

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

```
status data-module extension [print]
```


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	Default	Feature Interaction
status data-module	extension	Data module extension	init inads craft cust rcust bcms browse	none	none

```
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

Maintenance SAT Commands

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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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

dialplan

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[display dialplan](#) on page 227

display dialplan

S8700 series | S8500 | S8400 | S8300

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

directory

S8700 series | S8500 | S8400 | S8300

See:

[list directory](#) on page 227

list directory

S8700 series | S8500 | S8400 | S8300

`list directory board UUCSS / 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	Login	Default	Feature Interaction
<code>list directory</code>	<i>PPCSS</i> [full path]	board location file/ directory name			

The following is an example of `list directory board 1C12`.

<code>list directory board 1C12</code>				Page	1
LIST DIRECTORY					
Board	File/Directory	Creation	Size		
Location	Name	Date	Time	Kb	
01C12	F:fwdlimg464gv01	2000/01/01	00:00:00	367	
01C13	F:fwdlimg2302av01	2000/02/29	23:59:59	493	
D = Directory F = File					

disabled-MOs

S8700 series | S8500 | S8400 | S8300

See:

[list disabled-MOs](#) on page 228

list disabled-MOs

S8700 series | S8500 | S8400 | S8300

```
list disabled-mos [print | 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	Login	Default
<code>list disabled-mos</code>	<code>print</code> <code>schedule</code>	See Common Input Parameters on page 25.		

disabled-tests

S8700 series | S8500 | S8400 | S8300

See:

[display disabled-tests](#) on page 228

display disabled-tests

S8700 series | S8500 | S8400 | S8300

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	Default
<code>display disabled-tests</code>			init inads craft cust rcust	

dlg cti-link

S8700 series | S8500 | S8400 | S8300

See:

[status dlg cti-link](#) on page 229

status dlg cti-link

S8700 series | S8500 | S8400 | S8300

Use **status dlg cti-link** to see the status of all CTI links administered on the DLG Administration page of the IP Services form (**change ip-services**). These links provide connectivity to ASAI adjuncts, which are connected to an Ethernet LAN.

The status of the TCP/IP Tunnel Connection and CTI link appears, along with the number of ASAI messages sent and received during a specified 30-min moving window collection period.

See [status link](#) on page 374 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status dlg cti-link	<i>n</i>	link number	init inads craft cust		

The following display shows a typical result for **status dlg cti-link**.

status dlg cti-link								
DLG CTI-LINK STATUS								
CTI Lnk	Client Name/Link	Vers	Mnt Busy	Local Node	Service State	Msgs Sent	Msgs Rcvd	
1	Dorothy/1		yes	procr	down	0	0	
2	Lion/3	4	no	clan1	established	14	14	
5	Tinman/7		no		down	9	9	

status dlq cti-link field descriptions

status dlq cti-link field descriptions

Field	Description
CTI Link	The CTI link number (1 – 8) as administered on the DLG Administration page of the IP Services form (change ip-services).
Client Name/Link	The Client name and link number.
Vers	Negotiated ASAI protocol version.
Maintenance Busy State	The link has been busied out using the busyout cti-link 1 command. It may be released by using the release cti-link 1 command.
Local Node	The node name of the interface over which the client is connected (e.g., procr)
Service State	<p>The service state of the CTI link</p> <ul style="list-style-type: none"> ● Down: The ASAI link is down. ● Restarting: The switch sends a Restart message to the client but has not received a Restart Acknowledgment message from the client. ● Restarted: After receiving a Restart Acknowledgement message, the switch sends a Heartbeat message to the client and awaits a response. ● Established: Normal State for the ASAI client. ● Hyperactive: The link has sent too many messages per unit time. Stop accepting new associations from the client. ● Disabled: The Enabled field on the DLG Administration page of the IP Services form (change ip-services) is set to n for this client.
Messages Sent	The number of ASAI messages sent during the 30-min moving window collection period.
Messages Received	The number of ASAI messages received during the 30-min moving window collection period.

dlg interface

S8700 series | S8500 | S8400 | S8300

See:

[status dlg interface](#) on page 231.

status dlg interface

S8700 series | S8500 | S8400 | S8300

`status dlg interface`

Use `status dlg interface` to see the status of the interfaces over which the co-resident DLG is listening for client connections.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>status dlg interface</code>			init inads craft cust		

The following display shows a typical result for `status dlg interface`.

<code>status dlg interface</code>			
<code>DLG INTERFACE STATUS</code>			
<code>Local Node</code>	<code>Enabled?</code>	<code>Number of Connections</code>	<code>Status</code>
<code>procr</code>	<code>yes</code>	<code>1</code>	<code>listening</code>

status dlq interface field descriptions

status dlq interface field descriptions

Field	Description
Local Node	The name of the DLG interface as administered on the IP Services form (change ip-services).
Enabled	Shows if the interface is enabled, as set in the Enabled field on the IP Services form (change ip-services).
Number of Connections	Shows the number of active DLG client connections over this interface.
Status	The current state of this interface: <i>disabled</i> : The Enabled field is set to n on the IP Services form (change ip-services) for this interface. <i>intfce-down</i> : This interface is not functioning and cannot accept incoming communications. <i>listening</i> : The interface is up and running and the DLG clients can connect over it.

ds1-echo-cancellation

S8700 series | S8500 | S8400 | S8300

See:

[change ds1-echo-cancellation](#) on page 232

change ds1-echo-cancellation

S8700 series | S8500 | S8400 | S8300

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	Feature Interaction
change ds1-echo-cancellation	xx	plan number to change Example: change ds1-echo-cancellation 05	init inads craft	

```

add 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

S8700 series

See:

[busyout ds1-facility](#) on page 234

[test ds1-facility](#) on page 236

busyout ds1-facility

S8700 series

busyout ds1-facility *UUCSSf* [*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.

- The packet facility carries the control channel for every facility in the complex, all packet traffic, and some circuit connections.
- The other facilities carry circuit connections only.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
busyout ds1-facility	<i>UUCSSf</i> 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

S8700 MC

```
test ds1-facility UUCSSf [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	Login	Default	Feature Interaction
<code>test ds1-facility</code>	<i>UUCSSf</i> short long external loopback repeat# schedule	<p>The location of the DS1 Converter circuit pack plus a letter (a to d) corresponding to the four facilities connected to the circuit pack.</p> <p>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 1064 in <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (03-300430) (formerly 03-300190)</i> and DS1-BD (DS1 Interface Circuit Pack) on page 989 in <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (03-300430) (formerly 03-300190)</i>.</p> <p>See Common Input Parameters on page 25.</p> <p>Examples: <code>test ds1-facility 04a01d</code> <code>test ds1-facility 03a01a sh c</code></p>			

ds1-loop

S8700 series | [S8500](#) | [S8400](#) | [S8300](#)

See:

[test ds1-loop](#) on page 237

test ds1-loop

S8700 series | S8500 | S8400 | S8300

```
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 238.			
	Examples: 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				

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. For standard cabinets a location is entered as UUcSS where “UU” represents the cabinet number, “c” represents the carrier, and “SS” represents 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

S8700 series | S8500 | S8400 | S8300

See:

[list eda-external-device-alm](#) on page 239

[test eda-external-device-alm](#) on page 239

list eda-external-device-alm

S8700 series | S8500

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

S8700 series | S8500 | S8400 | S8300

```
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	Feature Interaction
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 240.	init inads craft	1	
	physical- location repeat repeat# clear schedule	See Parameters for test eda-external-device-alm on page 240. <i>UUcSSpp</i> 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	<p>For an administered external device alarm analog line port, the physical location represents the physical position of the port to be tested.</p> <p>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 <i>UUmajor</i> and <i>UUminor</i> are used designate the major or minor maintenance board alarm connection for cabinet UU.</p> <p>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.</p>
----------------------	--

emergency transfer

S8500 | G650 | G600

See:

[set emergency transfer](#) on page 241

set emergency transfer

S8500 | G650 | G600

`set emergency-xfr on | off | auto <cabinet>`

Use `set emergency-xfr` to manually set the state of emergency transfer on a TN2312BP in a media gateway or Compact Modular Cabinet (CMC). `set emergency transfer` 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	Feature Interaction
<code>set emergency-xfr</code>	<code>on</code> <code>off</code> <code>auto</code> <code>cabinet</code>	activates emergency transfer deactivates emergency transfer the media server controls emergency transfer specify cabinet location	init super-user inads craft dadmin switch circuit pack maintenance permissions	

environment

S8500 | G650

See:
[status environment](#) on page 242
[test environment](#) on page 246

status environment

S8500 | G650

`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	Default	Feature Interaction
<code>status environment</code>	<code>cabinet</code> <code>carrier</code>	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: <ul style="list-style-type: none"> • ok • wn (warning) • sh (shutdown)
1 of 3	

status environment field descriptions 2 of 3

Field	Description
Voltage	The three voltages monitored are: <ul style="list-style-type: none"> • +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: <ul style="list-style-type: none"> • 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 245 for the valid states for Ring Stat and Ring Ctrl: <ul style="list-style-type: none"> • 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 245 for the valid states for Ring Ctrl and Ring Stat: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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. <ul style="list-style-type: none"> ● AC (Alternating Current) ● 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

S8700 series | S8500 | G650

```
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	Default	Feature Interaction
<code>test environment</code>	<code>UU</code> <code>short</code> <code>long</code> <code>repeat#</code> <code>clear</code> <code>schedule</code>	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 <code>test maintenance</code> . See test customer-alarm on page 222.
1 of 2	

Maintenance Objects reported with the test environment command 2 of 2

Maintenance Object	Notes
DC-POWER	
EMG-XFER	
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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[clear errors](#) on page 247

[display errors](#) on page 248

clear errors

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`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	Default	Feature Interaction
<code>clear errors</code>		Examples: <code>clear errors</code>	init inads craft	none	none

display errors

S8700 series | [S8500](#) | [S8400](#) | [S8300](#)

`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
<code>display errors</code>	<code>high-resolution</code>	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 251.
	<code>schedule</code>	See Common Input Parameters on page 25.

Help Messages

- 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

- 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

- 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:

- The `save translation` command is executed.
- Translations are saved as part of scheduled maintenance (as administered on the Maintenance-Related System Parameters screen).
- 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:

- The attempt to save at reload did not succeed.
- The media 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 326 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 (or print).

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 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	<p>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.</p> <ul style="list-style-type: none"> ● Media Gateway: Enter the media gateway number. ● Cabinet: Enter the cabinet number. ● Port Network; Enter the port network number. ● Board: Enter the cabinet-carrier-slot address of the circuit pack (for example, 11c04). If the cabinet number is omitted, it defaults to 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. ● Category: Enter a category to restrict the report to maintenance objects in a specific category. The HELP key displays a list of categories, and Alarm category field values on page 36 lists the type of alarms included in each alarm category report. ● Extension: Enter the extension number of a port. ● 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
HARDWARE ERROR REPORT - ACTIVE ALARMS											
Port	Mtce Name	Alt Name	Err Type	Aux Data	First Occur	Last Occur	Err Cnt	Err Rt	Rt/ Hr	Al St	Ac
01C0702	ANL-LINE	311	257		01/31/09:20	01/31/20:26	255	999	255	a	y
01C0701	ANL-LINE	1051	257		01/31/20:26	01/31/20:26	4	0	4	a	y
01C0703	ANL-LINE	1053	257		01/31/20:26	01/31/20:26	4	0	4	a	y
01A	TDM-CLK		0	0	01/31/20:34	01/31/20:34	1	0	1	a	n
01C1505	CO-TRK	078/001	3329	57408	01/31/20:26	01/31/20:27	5	300	5	a	y
01C1505	CO-TRK	078/001	1537		01/31/20:26	01/31/20:28	5	150	5	a	y
02A0201	TONE-PT		0		01/31/20:34	01/31/20:34	1	0	1	a	y
PN 02B	TDM-BUS		18	0	01/31/14:53	01/31/21:12	1	0	1	a	n
1 A-PNC	FIBER-LK		18	0	01/31/21:55	01/31/21:55	1	0	1	a	y

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
HIGH RESOLUTION HARDWARE ERROR REPORT - ACTIVE ALARMS											
Port	Mtce Name	Alt Name	Err Type	Aux Data	First Occur	Seq Cnt	Last Occur	Seq Cnt	Err Cnt	Al St	
01C0702	ANL-LINE	311	257		01/31/09:20:21	1	01/31/20:26:05	1	255	a	
01C0701	ANL-LINE	1051	257		01/31/20:26:18	1	01/31/20:26:18	7	4	a	
01C0703	ANL-LINE	1053	257		01/31/20:26:18	2	01/31/20:26:18	8	4	a	
01A	TDM-CLK		0	0	01/31/20:34:35	1	01/31/20:34:35	1	1	a	
01C1505	CO-TRK	078/001	3329	57408	01/31/20:26:07	1	01/31/20:27:28	1	5	a	
01C1505	CO-TRK	078/001	1537		01/31/20:26:52	1	01/31/20:28:41	1	5	a	
02A0201	TONE-PT		0		01/31/20:34:28	1	01/31/20:34:28	1	1	a	
PN 02B	TDM-BUS		18	0	01/31/14:53:03	1	01/31/21:12:22	1	1	a	
1 A-PNC	FIBER-LK		18	0	01/31/21:55:24	1	01/31/21:55:24	1	1	a	

display errors high-resolution field descriptions

display errors high-resolution 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: <ul style="list-style-type: none"> ● 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 3.1.x, (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 Occur	Month, day, hour, and minute (and second, if the high-resolution command-line option is used) that the error was first recorded.
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.
Last Occur	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”
Err Cnt	The total number of times that the error type has occurred. The maximum entry is 999.
1 of 2	

display errors high-resolution 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. <ul style="list-style-type: none"> • 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

S8700 series | S8500

See:

[change system-parameters ess](#)[display system-parameters ess](#)[disable ess](#)[enable ess](#)[status ess clusters](#)[status ess port-networks](#)

change system-parameters ess

S8700 series | S8500

change system-parameters ess

Use change system-parameters ess to administer

Action/Object	Qualifier	Qualifier Description	Login
change system-parameters ess			

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														
CL Plat	Server A				Server B				Pri	Com	Sys	Loc	Loc	
ID Type	ID	IP	Address		ID	IPAddress			Scr		Prf	Prf	Only	
MAIN SERVERS														
1	Duplex	1	172.21	.22	.1	2	172.21	.22	.2					
ENTERPRISE SURVIVABLE SERVERS														
10	Duplex	91	172.21	.22	.37	92	172.21	.22	.38	65	10	y	n	n
20	Simplex	97	172.21	.22	.39					20	20	y	n	n
30	Simplex	96	172.21	.22	.40					70	30	y	y	n
40	Simplex	95	172.21	.22	.41					99	64	n	n	y
50	Simplex	94	172.21	.22	.46					55	10	n	y	n
50	Duplex	90	172.21	.22	.64	89	172.21	.22	.65	10	20	n	y	n
50	Duplex	87	172.21	.22	.67	88	172.21	.22	.68	45	30	n	y	y
50	Simplex	8	172.21	.22	.69					40	40	n	y	n

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 1 of 2

Field	Description
ENTERPRISE SURVIVABLE SERVER INFORMATION	
CL 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 media server (no data needed for Server B column) duplex = S8700 series series media server
Server A ID	Server ID as entered on the Set Server Identities web page during server configuration. For S8700 series media server, this is the Server ID of the A-side server For S8500 media server, this is the Server ID of the only media server
Server A IP Address	IP address for the media server For S8700 series media server, this is the IP Address of the A-side server For S8500 media server, this is the Server ID of the only media server
Server B ID	Server ID as entered on the Set Server Identities web page during server configuration. For S8700 series media server, this is the Server ID of the B-side server For S8500 media server, this is blank
Server B IP Address	IP address for Media Server B For S8700 series media server, this is the IP Address of the B-side server For S8500 media server, this is blank
Pri Scr	1 - 100 The Priority Score (plus community and preference) helps determine the position of the ESS server on an IPSI's Priority Score List. The Port Network IPSI chooses the ESS server with the highest priority score in the event of a failover. An IPSI uses only the Priority Score to prioritize an ESS server when the server is assigned a priority score and no preferences.
Com	Community number identifies a virtual group of one ESS server and one or more Port Networks. Assigning an ESS server to a community associates the ESS server with the IPSI in the Port Networks for that community. The Port Networks are assigned to Communities in the system-parameters ess form.
1 of 2	

change system-parameters ess field descriptions 2 of 2

Field	Description
Sys Prf	<p>y = the System Preferred (Sys Prf) ESS has a higher value than any other Local Preferred server (independent of Community or Priority Score).</p> <p>Use y to keep as much of the system network intact as possible, allowing one ESS server 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.</p> <p>n = Loc Prf and Loc Only may be y or n.</p>
Loc Prf	<p>y = the Local Preferred (Loc Prf) ESS has the second highest value within an IPS community, after a System Preferred ESS.</p> <p>Use y to have the ESS server 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.</p> <p>n = default</p>
Loc Only	<p>y = the Local Only (Loc Only) preference has no priority value. A Local Only ESS server 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.</p> <p>Use y to have the ESS server 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.</p> <p>n = default</p>
2 of 2	

This is an example of **change system-parameters ess**, COMMUNITY ASSIGNMENTS FOR PORT NETWORKS, 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:	14:	27:	40:	53:
2:	15:	28:	41:	54:
3:	16:	29:	42:	55:
4:	17:	30:	43:	56:
5:	18:	31:	44:	57:
6:	19:	32:	45:	58:
7:	20:	33:	46:	59:
8:	21:	34:	47:	60:
9:	22:	35:	48:	61:
10:	23:	36:	49:	62:
11:	24:	37:	50:	63:
12:	25:	38:	51:	64:
13:	26:	39:	52:	65:

change system-parameters ess, page 6 field descriptions

change system-parameters ess, ENTERPRISE SURVIVABLE SERVER OPTIONAL FEATURES 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 server community number (also assigned on system-paramters 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				
Auto Return:				
Day:				
Time:				
No Nervice Time Out Interval:				

change system-parameters ess, page 7 field descriptions

change system-parameters ess, ENTERPRISE SURVIVABLE SERVER OPTIONAL FEATURES field descriptions page 7

Field	Description
ENTERPRISE SURVIVABLE SERVER OPTIONAL FEATURES	
Auto Return	n = The Main server does not automatically regain control of all Port Networks after a failover occurs. scheduled = display additional fields to schedule the day and time for all Port Networks to return to the control of the Main server after a failover occurs.
Day	Day of the week for all Port Networks to return to the control of the Main server after a failover occurs
Time	Time of day (24-hour format) for all Port Networks to return to the control of the Main server after a failover occurs
No Service Time Out Interval	Number of minutes that the IPSIs wait before requesting service from the highest ESS server on the priority list. 3-15 minutes

display system-parameters ess

S8700 series | S8500

See: [change system-parameters ess](#)

disable ess

S8700 series | S8500

```
disable ess [ all | cluster n <1-999> ]
```

Use `disable ess` to disable an ESS or Main server from connecting to IPSIs in Port Networks.

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.

If an ESS or Main is controlling any Port Networks (IPSI circuit packs), it may not be disabled.

A disabled ESS server or Main server will not connect to any IPSIs.

A disabled ESS server remains registered and receives file sync translation updates.

Use `disable ess` from either a Main server or an ESS. An ESS server may disable only its own cluster ID. When `disable ess` is run from the Main, any and all cluster IDs may be disabled including the Main server itself.



CAUTION:

Use caution when using `disable ess all`. If the Main is not controlling any IPSIs it will be disabled `disable ess all` is used at the Main. However, because the Main typically controls IPSIs it is generally safe to use `disable ess cluster n` to disable only the ESS cluster IDs.

When a Main or ESS server is disabled it performs a reset system 4 operation. Because a server may not be disabled when it is controlling any Port Networks, this should not cause a service interruption. When the server comes back up it will not attempt to connect to any IPSIs and will not be available for requests for service from any IPSI.

When `disable ess` is run from an ESS:

- The server resets and no SAT screen results appear.
- Wait for the ESS to reset and use `status ess cluster` to confirm that the disable operation succeeded.

When `disable ess` is run from a Main server:

- Any and all cluster IDs may be disabled including the Main server itself.
- A results screen appears, indicating that the disable operation is in progress.
- Use `status ess cluster` to confirm that the disable operation succeeded.

The complete operation for `disable ess` on a Main server may take several minutes. The request is first sent in a message from the Main server to the ESS. Once the ESS server receives the message, it changes to the ESS disabled state and performs a reset system 4 operation. After the reset, the ESS server re-registers with the Main. When this re-registration is complete, the Main receives the results of the disable request.

Action/Object	Qualifier	Qualifier Description	Login
<code>disable ess</code>	<code>all</code> <code>cluster n</code>	disable all ESS servers Number (1 - 999) of the cluster ID for the target ESS or Main. Examples: <code>disable ess all</code> <code>disable ess cluster 9</code>	init inads craft cust su

The following display shows typical result for **disable ess cluster 90**.

disable ess cluster 90					
TEST RESULTS					
Port	Maintenance Name	Alt. Name	Test No.	Result	Error Code
CL 090	ESS		1607	IN PROGRESS	

disable ess command Error Codes

disable ess command Error Codes

Error Code	Description
1991	ESS cluster not administered
1992	ESS cluster not registered
1993	ESS cluster controlling IPSIs (Port Networks)
1994	ESS cluster (non-main) may not disable other clusters (ESS or main)
2500	Internal operation failed

enable ess

[S8700 series](#) | [S8500](#)

enable ess [all | cluster n <1-999>]

Use **enable ess** to enable a Main or ESS server’s ability to connect to IPSIs in Port Networks.

Note:

A server cluster is a either a [S8500](#) or [S8700 series](#).

Use **enable ess** from either a Main server or an ESS. An ESS server may enable only its own cluster ID. When **enable ess** is run from the Main, any and all cluster IDs may be enabled including the Main server itself.

When `enable ess cluster <ess cluster n>` is run:

- if it is enabled, the ESS does nothing. The TEST RESULTS screen indicates that test 1606 passed for the ESS. See [disable ess](#) on page 258.
- if it is disabled, the ESS changes its state to enabled and:
 - removes its translations
 - performs a reset system 4 operation
 - registers with the Main once the reset is complete
 - receives a download of translations from the Main
 - resets a second time (after the translation download is complete)
 - re-registers with the Main once the second reset is complete
 - establishes socket connections to the IPSIs in the configuration
 - advertises its administered values to all IPSIs in the configuration

At this point the Main receives the enabled/disabled status of the ESS



Tip:

Use `status ess cluster n` to check if the enable operation succeeded. The complete enable operation may take several minutes to complete.

When `enable ess cluster <main cluster n>` is run, the Main:

- if it is enabled, the Main does nothing. The TEST RESULTS screen indicates that Test 1606 passed for the Main. See [enable ess command TEST RESULTS example](#) on page 262.
- if it is disabled, the Main changes its state to enabled and:
 - performs a reset system 4 operation
 - establishes socket connections to the IPSIs in the configuration
 - advertises its administered values to all IPSIs in the configuration

Action/Object	Qualifier	Qualifier Description	Login
<code>enable ess</code>	<code>all</code> <code>cluster n</code>	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 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	

enable ess command Error Codes

enable ess command Error Codes

Error Code	Description
1991	ESS cluster not administered
1992	ESS cluster not registered
1993	ESS cluster controlling IPSIs (Port Networks)
1994	ESS cluster (non-main) may not disable other clusters (ESS or main)
2500	Internal operation failed

status ess clusters

[S8700 series](#) | [S8500](#)

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 servers 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				
Cluster ID		Enabled?	Active Server ID	Registered?	Translations Updated	Software Version
1		y	1	y	11:02 3/7/2005	R013x.00.0.338.0
10		y	91	y	11:02 3/7/2005	R013x.00.0.338.0
20		y	97	y	11:02 3/7/2005	R013x.00.0.338.0
30		y	96	y	11:02 3/7/2005	R013x.00.0.338.0
40		n	95	y	11:02 3/7/2005	R013x.00.0.338.0
50		y	94	y	11:02 3/7/2005	R013x.00.0.338.0
60		y	90	y	11:02 3/7/2005	R013x.00.0.338.0
70		y	88	y	11:02 3/7/2005	R013x.00.0.338.0
80		n	8	y	11:02 3/7/2005	R013x.00.0.338.0
90		y	9	y	11:02 3/7/2005	R013x.00.0.338.0

See [status ess clusters field descriptions](#) on page 264.

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 server and the equivalent state displayed for the ESS server 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 3/7/2005	R013x.00.0.338.0

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 server that is registered with the Main. When status ess is issued on an ESS server there is only one detail line since an ESS server only knows its own state.
1 of 2	

status ess clusters 2 of 2

Field	Description
Enabled	<p>The ESS server enabled / disabled state of the server.</p> <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> - the ESS server is not registered with the Main - the ESS server has not yet acknowledged a maintenance state change request from the Main via an enable ess or disable ess command
Active Server ID	<p>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.</p> <ul style="list-style-type: none"> • 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 servers are displayed.
Registered	<p>The registration state of the server.</p> <ul style="list-style-type: none"> • y = registered • n = not registered <p>The Main server does not register with itself, but always displays its own registration as y.</p>
Translations Updated	<p>For an ESS:</p> <ul style="list-style-type: none"> • The time and date of the latest translation update reported by the ESS server to the Main server over the registration link. <p>For a Main server (Cluster ID 1):</p> <ul style="list-style-type: none"> • The time and date of the latest successful save translation command of any kind. <p>Note:</p> <p>For a Main server this time stamp may be later than those shown for ESS servers. A save translation on the Main updates its time stamp. A save translation [ess all] updates the ESS server translations and time stamp.</p>
Software Version	<p>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.</p>
2 of 2	

status ess port-networks

[S8700 series](#) | [S8500](#)

`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
<code>status ess port-networks</code>		Example: <code>status ess port-networks</code>	init inads craft cust su

[status ess port-networks](#) on page 267 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 267 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 media 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) <ul style="list-style-type: none"> ● blank = there is no interface
Intf Type	The type of interface whose location is shown in the Intf Loc field. <ul style="list-style-type: none"> ● 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. <ul style="list-style-type: none"> ● 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 media server that is controlling the Port Network. The Port Network is down from the perspective of all other media 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. <ul style="list-style-type: none"> ● 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	<p>The state of the Primary and Secondary IPSIs whose locations are shown in the Pri / Sec Loc field.</p> <ul style="list-style-type: none"> ● 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	<p>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</p> <ul style="list-style-type: none"> ● Cluster ID (1 - 999) ● * (asterisk) <ul style="list-style-type: none"> - The media server where status ess port-networks is run cannot connect to the IP Server Interface in this Port Network. This may be because: <p>the IPSI is being reset</p> <p>the IPSI rejected the connection request from the media server, perhaps because it is already connected to its limit (8) of media servers.</p> - The controlling Cluster ID reported for the IPSI is not known to the media server (in its translations) where status ess port-networks was run. ● . (period) <ul style="list-style-type: none"> - 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 server is brought on-line and translated on the main server but the translations have not yet been file synchronized to every other ESS server. 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) <ul style="list-style-type: none"> - The Cluster ID reported by this interface is not in the valid range of values. ● blank <ul style="list-style-type: none"> - There is no IPSI in this Port Network. - There is no controlling media server.
3 of 4	

Status ess port-networks field descriptions 4 of 4

Field	Description
Connected Clus(ter) IDs	<p>Connected Cluster IDentifiers. The list of cluster identifiers that were last known to be connected to this IP Server Interface.</p> <p>These media servers are candidates to control the Port Network through the IPSI should connectivity to the current controlling media server be lost. If a media server was rejected by an IPSI, the information displayed here may be stale. This information will be updated periodically as each media server attempts to connect, or reconnect, to the IPSI. The Cluster ID of the controlling media server should always be displayed in the list of Cluster IDs.</p> <ul style="list-style-type: none"> ● Cluster ID (1 - 999) ● - (dash) <ul style="list-style-type: none"> - 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. ● . (period) <ul style="list-style-type: none"> - 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 server is brought on-line and translated on the main but the translations have no yet been file synchronized to every other ESS server. 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) <ul style="list-style-type: none"> - There is no IP Server Interface in this port network - There is no connected Cluster ID. ● * (asterisk) <ul style="list-style-type: none"> - The Cluster ID reported by the IPSI is not known to the media server (in its translations) where status ess port-network was executed. ● blank <ul style="list-style-type: none"> - There is no IPSI in this Port Network. - There is no controlling media server.
4 of 4	

ethernet-options

S8700 series

See:

[get ethernet-options](#) on page 271

[list eda-external-device-alm](#) on page 239

[set ethernet-options](#) on page 272

get ethernet-options

S8700 series

`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
<code>get ethernet-options</code>	<i>location</i>	The physical location of the circuit pack (<i>UUCSS</i>)	init inads craft cust	

<code>get ethernet-options 1C07</code>		
GET ETHERNET OPTIONS		
	Administered Value	Actual Value
Auto Negotiation:	Yes	Yes
Speed:	N/A	10Mbps
Duplex:	N/A	Full
Link Integrity:		Active

get ethernet-options field descriptions

get ethernet-options field descriptions

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)
Duplex	Half Full N/A (not available)
Link Integrity	Active Inactive

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

S8700 series

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	Login	Default	Feature Interaction
<code>set ethernet-options</code>	<i>location</i>	The physical location of the circuit pack (<i>UUCSS</i>)			

```

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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[display events](#) on page 274

display events

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`display events [print]`

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 3.1 Call Vectoring and Expert Agent Selection (EAS) Guide, 07-300477 (formerly 07-300186, 555-230-714)*, to see how to interpret vectoring fields on this report.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>display events</code>			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 denial , meetme , vector , or all to specify the type of event to display.
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: m (month), d (day), h (hour), m (minute), or a (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 3.1 Call Vectoring and Expert Agent Selection (EAS) Guide*, 07-300477 (formerly 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.

Maintenance SAT Commands

The following example shows an IP denial event report.

display events		EVENTS REPORT					Page 1 of 1
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 3.1.x, (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 3.1.x, (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 3.1.x, (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 3.1.x, (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 3.1.x, (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.

extension-type

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[list extension-type](#) on page 277

list extension-type

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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>	

The following is an example of `list extension-type`.

list extension-type 90000 Count 1					
EXTENSION TYPE					
Ext.	Type	Name	COR/ COS	TN	Cv1 Cv2
---	----				
90001	feature-name-extension	Exclusion (Toggle On/Off)		1	

failed-ip-network-region

S8700 series | S8500 | S8400 | S8300

See:
[display failed-ip-network-region](#) on page 278
[test failed-ip-network-region](#) on page 279

display failed-ip-network-region

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`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 339 and [test failed-ip-network-region](#) on page 279.

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

S8700 series | **S8500** | **S8400** | **S8300**

```
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 278 and [change ip-network-region](#) on page 338.

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

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.
Test No.	Test Number used to run ping test
Result	Result of ping 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 3.1.x, (03-300430) (formerly 03-300190)</i>
Error Code	ping test error code

fiber-link

[S8700 series](#) | [S8500](#)

See:

[add fiber-link](#) on page 280

[busyout fiber-link](#) on page 282

[change fiber-link](#) on page 283

[display fiber-link](#) on page 287

[list fiber-link](#) on page 287

[reset fiber-link](#) on page 289

[test fiber-link](#) on page 290

add fiber-link

[S8700 series](#) | [S8500](#)

```
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	SPE B
FIBER LINK ADMINISTRATION			
Fiber Link #: 6			
Is one endpoint remototed 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 remototed 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.
1 of 2	

add fiber-link field descriptions page 1 2 of 2

Field	Description
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.
Converter	y/n Use for faster remote diagnosis.
Type of Transceivers	A/B Use for faster remote diagnosis.
2 of 2	

busyout fiber-link

S8700 series | S8500

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 374 for more details on links. For more information about fiber links, see [FIBER-LK \(Fiber Link\)](#) on page 1258 of the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (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	Feature Interaction
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

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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	Login	Default	Feature Interaction
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:

- High-reliability system, an unduplicated PNC
- Critical-reliability system with a fully operational duplicated PNC

See [status link](#) on page 374 for more details on links.

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 Tranceivers:                            Converter Type:

Is one endpoint remoted via DS1 Converter Complex? n
```

change fiber-link field descriptions, page 1

change fiber-link field descriptions page 1 1 of 2

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.
1 of 2	

change fiber-link field descriptions page 1 2 of 2

Field	Description
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 .
2 of 2	

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 1 of 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 31: DS1 Line Equalization Settings on page 286. 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.
1 of 2	

change-fiber link field descriptions page 2 2 of 2

Field	Description
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.
2 of 2	

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 31: 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

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`display fiber-link fiber# [print | 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.		
	print schedule	See Common Input Parameters on page 25.		

See [status link](#) on page 374 for more details on links.

list fiber-link

S8700 MC | S8500

`list fiber-link [print | 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	print schedule	See Common Input Parameters on page 25.		

See [status link](#) on page 374 for more details on links.

Maintenance SAT Commands

The following display shows a typical result for **list fiber-link** on a system with duplicated PNC and 5 PNs, one of which is DS1C remoted.

list fiber-link							
FIBER LINK ADMINISTRATION							
FIBER	- - -	ENDPOINT 1- -		- - -	ENDPOINT 2- -		DS1
LINK #	TYPE	A-PNC	B-PNC	TYPE	A-PNC	B-PNC	CONV
		LOC	LOC		LOC	LOC	
1	ei	01E01	01D01	sni	01E02	01D02	n
2	ei	02A01	02B02	sni	02E02	02D02	n
3	ei	03A01	03B02	sni	01E20	01D20	n
4	ei	04A01	04B02	sni	02E02	02D20	n
5	ei	05A01	05B02	sni	02E03	02D03	y
6	sni	01E13	01D13	sni	02E13	02D13	n
7	sni	01E09	01D09	sni	02E09	02D09	n
8	sni	01E14	01D14	sni	02E14	02D14	n
9	ei	06A01	06B02	sni	01E03	01D03	n

list fiber-link field descriptions

list fiber-link field descriptions

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.
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	Whether or not an endpoint of the link is remotely located by means of a DS1C Converter complex.

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
SPE A											
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

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`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 374 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>reset fiber-link</code>	<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			
<code>reset fiber-link</code>	<code>a-pnc</code> <code>b-pnc</code>	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

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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.

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 374 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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[remove file](#) on page 292

remove file

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`remove file path board UUCSS`

Use `remove file` to request the board `UUCSS` 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	Login	Default	Feature Interaction
remove file	<code>PPCSS</code>	board location			
	<code>path</code>	file location (using the entire path starting at <code>/</code>)			

filesystem

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See:

[disable filesystem](#) on page 292

[enable filesystem](#) on page 293

disable filesystem

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`disable filesystem board ppcss`

Use `disable filesystem board` to request that the board `ppcss` remove the memory file system. Use `disable filesystem board` after a firmware download to remove the memory filesystem on the source board.

`disable filesystem board` fails when:

- the file system is already disabled
- there are files present on the file system

The error message "filesystem still has files" appears on the SAT.

Use `remove file filename board ppcss SAT` to remove every file on the file system.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>disable filesystem</code>	<i>location</i>	board address			

enable filesystem

S8700 series

```
enable filesystem board UUCss / PPCSS [size actual-size] login ID
password
```

Use `enable filesystem` to request that the board to create a file system of actual-size KB. If the optional size parameter is not specified, the maximum available is used. If more than 32K is not available, an error message is given.

In Communication Manger 3.0 and later, use `enable session`

`Enable filesystem` fails if the source board cannot create a file system of the specified size, or if the file system is already enabled.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>enable filesystem</code>	<i>UUCSS</i> <i>PPCSS</i> <code>filesystem size</code> <code>actual-size</code>	The address of the circuit pack. The size of memory allocated is 1KB to 1024 KB. 1KB to 100KB with a default of 512KB	dadmin inads use these logins if the optional superuser login ID is not specified	

filexfer

S8700 series | S8500

See:

[enable filexfer](#)

[disable filexfer](#)

enable filexfer

S8700 series | S8500

`enable filexfer location`

Use `enable filexfer` (SAT command) to enable Secure Shell (SSH) and Secure FTP (SFTP) remote access protocols through login/password authentication on CLAN and VAL circuit packs. FTP capabilities remain enabled.

In Communication Manager 2.2 and earlier, use `enable filesystem` for CLAN and VAL, and `ipsisession` (CLI command) for IPSI circuit packs.

Action/Object	Qualifier	Qualifier Description	Login
<code>enable filexfer</code>	<code>location</code>	location of the circuit pack	

`Enable filexfer` enables the CLAN and VAL circuit packs as SSH/SFTP servers (not clients) that prefer the following symmetric algorithms in decreasing order:

- AES
- Arcfour
- Blowfish
- CAST128
- 3DES

These algorithms are supported and preferred by the CLAN, VAL and IPSI circuit packs.

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`.

```
enable filexfer a03                                     Page 1

                                ENABLE FILE TRANSFER

      Login: _____
    Password: _____
    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. Enter the password identically in both fields.
Secure	y = enable SFTP n = enable FTP
Board Address	location of the circuit pack

disable filexfer

[S8700 series](#) | [S8500](#)

`disable filexfer location`

Use `disable filexfer` (SAT command) to disable Secure Shell (SSH), and Secure FTP (SFTP) remote access protocols through login/password authentication on CLAN and VAL circuit packs. `Disable filexfer` also disables FTP sessions.

In Communication Manager 2.2 and earlier, use `disable filesystem` for CLAN and VAL, and `ipsisession` (CLI command) for IPSI circuit packs.

Action/Object	Qualifier	Qualifier Description	Login
<code>disable filexfer</code>	<i>location</i>	location of the circuit pack	

firmware-counters

[S8700 series](#)

See:

[clear firmware-counters](#) on page 296

clear firmware-counters

S8700 series

`clear firmware-counters UUCSS | 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>	<code>UUCSS a-pnc b-pnc</code>	<p>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.</p> <p> WARNING:</p> <p><code>Clear firmware-counters</code> can mask actual hardware problems, because firmware is cleared and appears as if no problems were ever encountered.</p>	init inads craft cust rcust

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

firmware download

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See:

[change firmware download](#) on page 297

[disable firmware download](#) on page 299

[display firmware download](#) on page 300

[status firmware download](#) on page 302

[test firmware download](#) on page 304

change firmware download

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`change firmware download`

Use `change firmware download` to schedule a C-LAN-distributed download or a self-download firmware download, immediately or at a later date and time.

For information regarding firmware downloads, see [FW-DWNLD \(Firmware Download\)](#) on page 1307 in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (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.

Maintenance SAT Commands

This is the Firmware Download screen that appears when running `change firmware download`.

```

change firmware download
                                Page    1 of    1

                                FIRMWARE DOWNLOAD

Source Board Location:
Firmware Image File Name:
    Target Board Code:          Suffix:          Firmware Vintage:
    Schedule Download? y       Remove Image File After Successful Download? y
Start Date/Time:    /    /          :    Stop Date/Time:    /    /          :

    Target          Target          Target          Target          Target
    Location        Location        Location        Location        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 (<i>UUCSS/PPCSS</i>) where the firmware image resides. For “remote downloads”, this location is a CLAN board. For “self-downloads”, this location is the same as the target board location.
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 TN250. Do not include the suffix, such as “AP.”
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.

1 of 2

change firmware-download field descriptions 2 of 2

Field	Description
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 .
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 (<i>UUCSS</i> or <i>PPCSS</i>) 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

S8700 series | S8500

disable firmware download

Use **disable firmware download** to stop the current firmware download. 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 302 to determine how far along the current download is.

Action/Object	Qualifier	Qualifier Description	Login	Default
disable firmware download	<i>UUCSS</i>	board location		

display firmware download

S8700 series | S8500

`display firmware download [schedule]`

Use `display firmware download` to see the status of the current download schedule. Use [change firmware download](#) on page 297 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 302, [disable firmware download](#) on page 299, and [test ipserver-interface](#) on page 362, and the MO [FW-DWNLD \(Firmware Download\)](#) on page 1307 in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (03-300430) (formerly 03-300190)* for more information.

Here is an example of `display firmware download`.

display firmware download				Page	1 of 1
FIRMWARE DOWNLOAD					
Source Board Location: 1C02					
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: 10/02/2002 13:30 Stop Date/Time: 10/02/2002 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

display firmware download field descriptions

Field	Description
Source Board Location	The CLAN board location (<i>UUCSS</i>) where the firmware image resides
Firmware Image File Name	The firmware image file name that will be downloaded
Target Board Code	The TN-code of the target board to be downloaded
Suffix	The suffix of the target board to be downloaded.
Firmware Vintage	The vintage of the firmware to be downloaded. Appears when a download is in progress or after a download.
Schedule Download	y/n Schedule the download for a later time. When y , Start Date/Time and Stop Date/Time indicate when the download will occur.
Remove Image File After Successful Download	y/n The firmware image file on the source board will automatically be removed following the successful download to every specified target board, and the file system on the source board will be disabled.
Start Date/Time	Appears when Schedule Download is y . The date portion of the field is formatted: mm/dd/yyyy (mm=2 digits for the month, dd=2 digits for the day and yyyy = 4 digits for the year). The time portion of the field is formatted: hh:mm (hh=2 digits for the hour and mm = 2 digits for the minutes).
Stop Date/Time	Appears when Schedule Download is y . The date portion of the field is formatted: mm/dd/yyyy (mm=2 digits for the month, dd=2 digits for the day and yyyy = 4 digits for the year). The time portion of the field is formatted: hh:mm (hh=2 digits for the hour and mm = 2 digits for the minutes). If blank, the download continues until completion.
Target Location	Target board locations (<i>UUCSS</i>) of the boards that will receive the download file image.

status firmware download

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`status firmware download [last]`

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. 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
<code>status firmware download</code>	<code>last</code>	last completed or aborted download schedule		

The **status firmware download** screen is display only.

status firmware download		Page 1 of 1	
STATUS FIRMWARE DOWNLOAD			
Source Board Location: 01C02			
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: 01/12/2002 13:30 Stop Date/Time: 01/14/2002 16:30			
Target Location St	Target Location St	Target Location St	Target Location St
1. 01C04 C	11. _____ -	21. _____ -	31. _____ -
2. 01C06 C	12. _____ -	22. _____ -	32. _____ -
3. 01C08 P	13. _____ -	23. _____ -	33. _____ -
4. _____ -	14. _____ -	24. _____ -	34. _____ -
5. _____ -	15. _____ -	25. _____ -	35. _____ -
6. _____ -	16. _____ -	26. _____ -	36. _____ -
7. _____ -	17. _____ -	27. _____ -	37. _____ -
8. _____ -	18. _____ -	28. _____ -	38. _____ -
9. _____ -	19. _____ -	29. _____ -	39. _____ -
10. _____ -	20. _____ -	30. _____ -	40. _____ -
41. _____ -			
42. _____ -			
43. _____ -			
44. _____ -			
45. _____ -			
46. _____ -			
47. _____ -			
48. _____ -			
49. _____ -			
50. _____ -			
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 TEST #1413 Firmware Download Test on page 1314 in <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (03-300430) (formerly 03-300190)</i> .

For more field descriptions, see [change firmware download](#) on page 297.

test firmware download

S8700 series

`test firmware download`

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 [TEST #1413 Firmware Download Test](#) on page 1314 in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (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

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See:

[change firmware station-download](#) on page 305
[disable firmware station-download](#) on page 305
[display firmware station-download](#) on page 306
[status firmware station-download](#) on page 306
[test firmware station-download](#) on page 309

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.

<code>status firmware station-download</code>		
STATUS FIRMWARE STATION DOWNLOAD		
Image File: 2420v01.bin		
Schedule Download? n		
Continue daily until completed?: n		
Start Date/Time: / / : Stop Date/Time: / / :		
Status for this download: Idle		
Terminal type for download:		
Extension Range: to: Number of stations in range:		
Stations completed: Stations unsuccessful:		
Extension Status Error Extension Status Error Extension Status Error		
12345 ABORT 513		
12346 ACTV		
12347 ACTV		

Table 32: 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 33: Reason Codes for status firmware station-download command on page 308.
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 <code>disable firmware station-download</code> 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 33: 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 33: 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](#) on page 1317 in *Maintenance Alarms for Avaya Communication Manager 3.1, Media Gateways and Servers (03-300430)*.

Action/Object	Qualifier	Qualifier Description	Login	Default
test firmware station-download				

hardware

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[cancel hardware-group](#) on page 309
[resume hardware-group](#) on page 310
[status hardware-group](#) on page 311
[test hardware-group](#) on page 313

cancel hardware-group

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

```
cancel hardware-group
```

Action/Object	Qualifier	Qualifier Description	Login	Feature Interaction
cancel hardware-group		Example: cancel hardware-group	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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

```
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
<code>resume hardware-group</code>			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

S8700 series

`status hardware-group [print]`

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 362) initiated, and the state (active/canceled/complete) of the hardware group test.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>status hardware-group</code>			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 362) 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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

```
test hardware-group [system | carrier UUC | cabinet UU | port-network
PN# | pnc a-pnc | b-pnc | board UUCSS] [print | 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 <i>UUCSS</i> print 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 246.		see test hardware-group feature interactions on page 314
		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. Type print on the command line to engage auto-page.
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:

TN#	Description	TN#	Description
TN413	Digital Line [G3r V2]	TN753	Direct-Inward-Dial Trunk
TN417	Auxiliary Trunk [G3r V2]	TN754	Digital Line
TN429	DIOD Trunk [G3r V2]	TN754	Digital Line
TN436	DID Trunk [G3r V2]	TN760C	Tie Trunk
TN437	Tie Trunk [G3r V2]	TN762	Hybrid Line
TN438	Central Office Trunk [G3r V2]	TN762B	Data Line
TN439	Tie Trunk [G3r V2]	TN763C	Auxiliary Trunk
TN447	Central Office Trunk [G3r V2]	TN769	Analog Line with Message Waiting
1 of 2			

TN#	Description	TN#	Description
TN458	Tie Trunk [G3r V2]	TN784	Digital Line
TN459	DID Trunk [G3r V2]	TN785	16-Port Analog Line
TN465	Central Office Trunk [G3r V2]	TN2135	Italian 16-Port Analog Line [G3r V2]
TN467	8-Port Analog line [G3r V2]	TN2136	Digital Line [G3r V2]
TN468	16-Port Analog line [G3r V2]	TN2138	Central Office Trunk [G3r V2]
TN479	16-Port Analog line [G3r V2]	TN2139	Direct Inward Dialing Trunk [G3r V2]
TN497	Tie Trunk [G3r V2]	TN2140	Tie Trunk [G3r V2]
TN556	ISDN-BRI Line	TN2144	Analog Line [G3r V2]
TN735	MET Line	TN2146	Direct Inward Dialing Trunk [G3r V2]
TN742	8-Port Analog Line	TN2147	Central Office Trunk [G3r V2]
TN746	16-Port Analog line	TN2149	Analog Line [G3r V2]
TN747B	Central Office Trunk	TN2180	16-Port Analog line [G3r V2]
		TN2312AP	IPSI (IP Server Interface)
2 of 2			

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

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See:
[monitor health](#) on page 318
[status health](#) on page 320

monitor health

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`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	Qualifier	Qualifier Description	Login	Feature Interaction
<code>monitor health</code>			init inads craft cust nms browse	If standby SPE Emergency Transfer Select Switches change and handshakes are down, the displayed Emerg Trans field is incorrect until handshake re-initializes. When <code>monitor health</code> terminates, users are logged off of the system.

This is an example output screen for **monitor health** for **S8700 IP-PNC**.

Monitor health										Page 1 of 1
OCC: St: 11% Sm: 0% Cp: 28% Idl: 61%										
PNC: Simplex										ALARMS:Maj: 0 Min: 4 Wrn: 13
Pwr: comm Sync:primary Logins:6										BUSYOUT:Trk: 0 Stn: 0 Oth: 0
Cab	EmTr	Maj	Min	Wrn	PNC					
1	NoEqp	0	4	13	up					
2	NoEqp	0	0	0	up					
13	NoEqp	0	0	0	up					
26	NoEqp	0	0	0	up					
32	NoEqp	0	0	0	up					
64	NoEqp	0	0	0	up					

This is an output screen for **monitor health** for **S8700 MC**.

```
monitor health
Pwr: Simplexnc:primary Logins:4 BUSYOUT:Trk: 2 Stn: 1 Oth: 39
      comm      primary      4      0      0      0
Cab EmTr  Maj  Min Wrn PNC          Cab EmTr  Maj  Min Wrn PNC
1  n.a.    2|  1| 25 up
1  n.a.    2|  1| 25 up
2  n.a.    0|  0|  4 up/up
3  n.a.    0|  0|  3 up/up
4  n.a.    0|  0|  3 up/up
5  n.a.    0|  0|  4 up
6  n.a.    0|  0|  0 up

9:52 THU MAR 14 2002
Use 'Status Media-Gateway' for G700 statusto quit - 9:53 THU MAR 14 2002
- Press CANCEL to quit -
```

See [status health](#) on page 320 for field descriptions.

status health

S8700 series | S8500 | S8400 | S8300

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	Default	Feature Interaction
status health		See Common Input Parameters on page 25. In Communication Manager 3.0 and later, the print option is not supported. Press Return .	init inads craft cust nms browse	none	none

The following example shows the output for **status health**.

```
status health

                                OCC:  St: 0%   Sm: 155   Cp:   0% Idl: 85%
                                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
3  auto    0| 0| 5 up
4  auto    0| 0| 0 up
5  auto    0| 0| 0 up

                                                                9:51 THU MAR 14 2002

Use 'Status Media-Gateway' for G700 status
```


status health field descriptions

status health field descriptions 1 of 3

Field	Description
Major	Number of major alarms logged
Minor	Number of minor alarms logged
Warning	Number of warning alarms logged
Trunks	Number of maintenance busied-out trunks
Stations	Number of maintenance busied-out stations
Others	Number of busied-out maintenance objects, excluding trunks and stations
Static	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.
Idle	Percentage of CPU time currently idle and available for use, rounded to the nearest whole number
# Logins	Number of current users
Cab	Cabinet number Use <code>list cabinet</code> to relate cabinet numbers to port network numbers.
1 of 3	

status health field descriptions 2 of 3

Field	Description
EmTr	<p>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 1144 in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (03-300430)</i> (formerly 03-300190).</p> <p>The following states are available:</p> <p>Auto- Emergency Transfer is under system control and is not currently activated (normal operating state).</p> <p>Auto+ Emergency Transfer is under system control and is in effect.</p> <p>On Emergency Transfer has been manually activated. This setting should only be in effect during an emergency.</p> <p>Off Emergency Transfer is manually prevented from occurring. This setting should only be in effect when a technician is on site.</p> <p>na The setting of the switch in this PN is not available to the switch. The Expansion Archangel Link (EAL) may be down.</p> <p>NoEqp means that the cabinet has circuit packs that do not support Emergency Transfer.</p>
Maj, Min, Wrn	<p>Number of major, minor or warning alarms associated with the cabinet</p> <p>An asterisk indicates that the number exceeds 99 or 999.</p>
2 of 3	

status health field descriptions 3 of 3

Field	Description
PNC	<p>Current Port Network Connectivity (PNC) status for each of the port networks in the cabinet</p> <p>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).</p> <p>aa Points to a problem with the archangel. The control is up, but the archangel is not functioning and is not available.</p> <p>up Both the Expansion Archangel Link (EAL) and the Indirect Neighbor Link (INL, if applicable) are available.</p> <p>dn Both EAL and INL (if applicable) are not available.</p> <p>ne (Near End) The EAL is available but the INL is not available.</p> <p>fe (Far End) The INL is available but the EAL is not available.</p> <ul style="list-style-type: none"> ● S8700 MC cabinets only: <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Use <code>list cabinet</code> to see the carriers and port networks in each cabinet in the system.</p>
Time of Day	Current system time
3 of 3	

history

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[list history](#) on page 324

list history

S8700 series | S8500 | S8400 | S8300

```
list history [print | schedule]
```

Use `list history` to generate 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, thus, help reduce fraud.

Data commands are those administration and maintenance commands that change the data state associated with any object and qualifier in the system. Administration data commands affect translation data, while maintenance data commands affect state information. For example, `change station` is a data command, and `display station` is not a data command.

Use `save translation` (LIFO order) to save transaction log information on tape as translation data. When the switch COLD I starts or reboots, the saved translation, and thus the transaction log, is loaded from tape. In this way, the translation data and the data in the transaction log remain compatible.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list history	print schedule	See Common Input Parameters on page 25.	init inads craft cust browse rms		See list history feature interactions on page 324
		Examples: list history list history print list history schedule			

list history feature interactions

The translation log is written to the memory card 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 the memory card 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: 1:45pm Tue Mar 12, 2002						
Date	Time	Port	Login	Actn Object	Qualifier	
3/12	13:46	MAINT	init	save translation		
3/12	13:35	MAINT	init	logn		
3/12	13:29		maint	save translation		
3/12	13:27	MAINT	init	go shell		
3/12	13:24	MAINT	init	go shell		
3/12	13:19	MAINT	init	go shell		
3/12	13:17	MAINT	init	logn		
3/12	11:21	MAINT	init	logf		
3/12	11:20	MAINT	init	logn		
3/12	11:20	MAINT	init	logf		
3/12	10:13	MAINT	init	logn		
3/12	9:35	MAINT	init	save translation		

list history field descriptions

list history field descriptions 1 of 2

Field	Description
Date	The date <code>list history</code> was issued (mm/dd).
Time	The time <code>list history</code> was issued (hh:mm).
Port	<p>The port type to which the user was connected when <code>list history</code> was issued.</p> <ul style="list-style-type: none"> • 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
1 of 2	

list history field descriptions 2 of 2

Field	Description
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.
2 of 2	

initcauses

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[display initcauses](#) on page 326

display initcauses

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`display initcauses [print | 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. A power failure results in loss of every record in the `initcauses` log.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>display initcauses</code>	<code>print schedule</code>	See Common Input Parameters on page 25			

```
display initcauses
```

INITIALIZATION CAUSES				
Cause	Action	Escalated	Carrier	Time
Internal Request	1	no		03/15 06:24
Initialized	4	no		03/15 11:41
Internal Request	1	no		03/15 11:42
Software Request	4	yes		03/15 11:42
Internal Request	1	no		03/15 14:41
Craft Request	2	no		03/18 11:11
Initialized	4	no		03/18 16:25
Internal Request	2	no		03/19 14:17
Internal Request	1	no		03/19 14:17
Initialized	4	no		03/19 17:56
Upgrade Software	2	no	1A	08/05 9:29
Software Request	1	no	1A	08/09 2:34

display initcauses field descriptions

display initcauses field descriptions 1 of 2

Field	Description
Cause	<p>This gives the reason for the system reset, as follows:</p> <p>Craft Request: The reset was manually initiated using <code>reset system</code>.</p> <p>Initialized: This represents a power-up, and is always the first entry in the log unless more than 15 restarts have occurred since the last power up.</p> <p>Internal Request: A fault has triggered the system to automatically reset.</p> <p>Software Request: Software requested the system restart.</p> <p>Unknown: The reason for the system reset is unknown. The Software Error Log may contain more information about the restart.</p> <p>Bad Memory: A defective memory circuit pack generating too many errors caused a restart.</p> <p>System Technician Request: The restart was performed because of system technician demand. A system technician-requested reset system 4 command entry should always precede an upgrade software command entry.</p> <p>Maintenance Reset: This refers to resets of the SPE by maintenance in SPE Down mode in which maintenance periodically tries to awaken the SPE.</p>
Action	<p>The level of recovery performed by the system.</p> <p><code>Reset system 1</code> (Warm)</p> <p><code>Reset system 2</code> (Cold-2)</p> <p><code>Reset system 3</code> (Defaults to Reset system 4)</p> <p><code>Reset system 4</code> (Reload)</p> <p><code>Reset system 5</code> (Extended reboot)</p>
1 of 2	

display initcauses field descriptions 2 of 2

Field	Description
Escalated	Whether 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.
Carrier	The carrier on which the recovery was performed, if applicable.
Time	The month, day and time of the restart.
2 of 2	

integ-annc-board

S8700 series | S8500 | S8400 | S8300 | G250 | G350 | G700

See:

[list usage integ-annc-board](#) on page 328

list usage integ-annc-board

S8700 series | S8500 | S8400 | S8300 | G250 | G350 | G700

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
list usage integ-annc-board	location	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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[status ip-board](#) on page 329

status ip-board

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`status ip-board UUCss`

`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 UUCss` is a SAT command that cannot be run on the MAPD board.

Use `status ip-board UUCss` 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	Login	Default	Feature Interaction
<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	icmpInDestUnreachs	The number of ICMP Destination Unreachable messages received.
ICMP Redirect message	Counter	Long	icmpInRedirects	The number of ICMP Redirect messages received
				2 of 2

ip-codec-set

S8700 series | S8500 | S8400 | S8300

See:

[change ip-codec set](#) on page 331

change ip-codec set

S8700 series | S8500 | S8400 | S8300

`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	Login	Default	Feature Interaction
<code>change ip-codec-set</code>	<i>n</i>	codec set number			

Maintenance SAT Commands

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	<p>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.</p> <p>Enter the options in the order of preference. Enter aes in one of the fields to add AES Media Encryption.</p> <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> - 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. • Or leave blank
2 of 2	

ip-interface

See:

[list ip-interface](#) on page 335

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 clan 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 CLAN 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

S8700 series | S8500 | S8400 | S8300

See:

[change ip-network-region](#) on page 338

[status ip-network-region](#) on page 339

change ip-network-region

S8700 series | S8500 | S8400 | S8300

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	Login	Default	Feature Interaction
change ip-network-region	x	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:
      Name:
      Home Domain:
      Intra-region IP-IP Direct Audio?
      Inter-region IP-IP Direct Audio?
      IP Audio Hairpinning? y
      RTCP Reporting Enabled? y
      RTCP MONITOR SERVER PARAMETERS
      Use Default Server Parameters? n
      Server IP address: 172.16.24.28
      Server Port: 5005
      RTCP Report Period(secs): 5
      AUDIO RESOURCE RESERVATION PARAMETERS
      RSVP Enabled? y
      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:
```

See *Administration for Network Connectivity for Avaya Communication Manager, (555-233-504)* for field descriptions for **change ip-network-region** for page 1.

change ip-network-region 3	Page 2 of x
IP Network Region	
LSP NAMES 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							
1	2	1	y	:NoLimit					
1	3	1	y	:NoLimit					
1	4	1	n	:		___3: : :			
1	5	1	n	:		___3: 4: :			
1	6	1	n	:		___3: 4: 5:			

status ip-network-region

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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	Login	Default	Feature Interaction
status ip network-region	x	ip-network region number			

Maintenance SAT Commands

This is an example of the output for **status ip-network-region 2**.

status ip-network-region 2											
Inter Network Region Bandwidth Status											
Src Rgn	Dst Rgn	Conn Type	Conn Stat	BW-Limits	BW-Used (Kbits)		#Connections		# Times		IGAR
					Tx	Rx	Tx	Rx	Hit	Today	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
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
1 of 2	

status ip-network-region field descriptions 2 of 2

Field	Description
#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

S8700 series

See:

[list ip-route](#) on page 341[netstat ip-route](#) on page 343[refresh ip-route](#) on page 345

list ip-route

S8700 series

```
list ip-route [board UUCss]
```

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 CLAN circuit pack, for example, `list ip-route board UUCss`.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>list ip-route</code>	<code>board <i>UUCss</i></code>	Board location Example: <code>list ip-route board 01A03</code>	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	xxxxxxxxxxxxxxxxxx	xxxxxxx	xxxxxxx	0	accepted	
		xxx.xxx.xxx.xxx		24		
xxx	xxxxxxxxxxxxxxxxxx	xxxxxxx	xxxxxxx	0	pending	
		xxx.xxx.xxx.xxx		24		
xxx	xxxxxxxxxxxxxxxxxx	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 CLAN 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 CLAN 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 CLAN	<p>Indicates whether a CLAN circuit pack has accepted the administered IP-route. Routes for a link are downloaded to the CLAN circuit pack when the link comes into service. Possibilities include:</p> <ul style="list-style-type: none"> ● accepted – the route has been accepted by the CLAN circuit pack ● rejected – the route has been rejected by the CLAN 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 CLAN 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**S8700 series**

netstat ip-route [**board** *UUCSS*]

Use **netstat ip-route** to see the routing tables that are resident in the CLAN and/or VAL circuit packs. Without the **board** option, all CLAN and VAL circuit packs are displayed. With the **board** option, only the specified CLAN or VAL circuit pack appears.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
netstat ip-route	board <i>UUCSS</i>	(none) Display routing tables for all CLAN and VAL circuit packs specific CLAN or VAL circuit pack	init inads craft		

The following example shows the output from `netstat ip-route`.

netstat ip-route				page 1
IP ROUTING				
Bd/Pt	Destination	Gateway	Subnet Mask	Interface
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

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.
Interface	<ul style="list-style-type: none"> ● pppn represents one of the PPP interfaces on the CLAN, which is administered as port n+1. ● cpm0 represents the ethernet interface on the CLAN 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 CLAN or VAL.

refresh ip-route

S8700 series

refresh ip-route [**all** | **location**]

Occasionally, tables that are used to route IP messages become corrupted and/or contain stale routes, delaying packet delivery. Use **refresh ip-route** to remove dynamic (learned) routes from CLAN circuit pack route tables, and replace any administered routes that have been corrupted.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
refresh ip-route	all location	Refreshes route tables in all CLAN circuit packs. Refreshes ip-route tables in a specific CLAN circuit pack (CCcss).	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	
01A11	CLAN-BD	Success	0	0	

refresh ip-route all field descriptions

refresh ip-route all field descriptions

Field	Description
C-LAN Board Location	The physical location of the circuit pack, CCcss (cabinet, carrier, slot)
Routes Deleted	Number of routes that were deleted from the TN799DP (CLAN) route tables
Routes Added	Number of routes that were added from the TN799DP (CLAN) route tables

ip-stations

S8700 series

See:
[reset ip-stations](#) on page 346

reset ip-stations

S8700 series

```
reset ip-stations [ip-phones | all | tti] [ ip-network-region n |  
all-regions]
```

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, or to all IP endpoints in a specific network region. 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 ip-network-region n all-regions	reset all IP endpoints reset IP phones only reset phones in TTI state only reset IP endpoints in specified IP network region reset IP endpoints in all network regions	(all)	all-ip all regions	See Feature Interactions for reset ip-stations on page 347
		Examples: reset ip-stations ip-phones reset ip-stations ip-network-region 2 reset ip-stations ip-phones ip-network-region 2			

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 CLANS controlled by an ATM WAN Spare Processor, and CLANS controlled by the processor on a Survivable Remote EPN.

ipserver-interface

S8700 series | S8500

See:

[add ipserver-interface](#) on page 348
[busyout ipserver-interface](#) on page 350
[change ipserver-interface](#) on page 351
[display ipserver-interface](#) on page 353
[get forced-takeover ipserver-interface](#) on page 355
[list ipserver-interface](#) on page 357
[release ipserver-interface](#) on page 359
[remove ipserver-interface](#) on page 359
[reset ipserver-interface](#) on page 361
[set ipserver-interface](#) on page 362
[test ipserver-interface](#) on page 362

add ipserver-interface

S8700 series | S8500

add ipserver-interface n

Use add ipserver-interface n to administer a port-network n to be IPSI controlled.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
add ipserver-interface	n	Port network			
		Examples: add ipserver-interface 10			

The following screen shows an example of add ip-server interface 10 on an S8700 MC.

```
add ipserver-interface 12
      IP SERVER INTERFACE (IPSI) ADMINISTRATION - PORT NETWORK 2

  IP Control? y                               Socket Encryption? y

                                           Enable QoS? y
Primary IPSI                                QoS Parameters
-----
Location:  1A02                               Call Control 802.1p: 4
      Host:  ipsi-A01a                         Call Control DiffServ: 42
      DHCP ID: ipsi-A01a

Secondary IPSI
-----
Location:  1B01
      Host:  ipsi-A01b
      DHCP ID: ipsi-A01b
```

The following screen shows an example of add ip-server interface 12 on an S8700 IP-PNC.

```
add ipserver-interface 12                                     Page 1 of 1
      IP SERVER INTERFACE (IPSI) ADMINISTRATION - PORT NETWORK 2

                                           Socket Encryption? y

                                           Enable QoS? y

Primary IPSI                                QoS Parameters
-----
Location:  2A02                               Call Control 802.1p: 6
      Host:  170.20.20.170                     Call Control DiffServ: 46
      DHCP ID: ipsi-A02a
```

add ip-server interface field descriptions

add ip-server interface field descriptions 1 of 2

Field	Description
IP Control	y/n y = All port networks have an IPSI that provides control. <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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	S8700 series and IPSI link: Enter y to turn on socket encryption Appears for S8700 IP-PNC .
Enable QoS	Enter y to turn on quality of service (QoS) from the server to the IPSI link. If you enable QoS for the control network, also enable it from the Web interface using Server Configuration and Upgrades > Configure Server and on each IPSI interface.
Primary IPSI	
Location	Location of the IPSI board
Host	Name of the host machine
DHCP ID	DHCP client identifier
Secondary IPSI	Secondary IPSI fields
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)
1 of 2	

add ip-server interface field descriptions 2 of 2

Field	Description
Call Control DiffServ	DiffServ code point (DSCP)
Socket Encryption	S8700 series and IPSI link: Enter y to turn on socket encryption Appears for S8700 IP-PNC .
2 of 2	

busyout ipserver-interface

[S8700 series](#) | [S8500](#)

```
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	Login	Default	Feature Interaction
<code>busyout ipserver-interface</code>	<code>Uc</code>	Cabinet and carrier you want to test.			
		Example: <code>busyout ipserver-interface 6b</code>			

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

S8700 series | S8500

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	Login	Default	Feature Interaction
change ipserver-interface	<i>n</i>	port network			
		Example: change ipserver-interface 2			

This is an example of **change ipserver-interface** on **S8700 MC**.

```

change ipserver-interface 2                                     Page 1 of 1
      IP SERVER INTERFACE (IPSI) ADMINISTRATION - PORT NETWORK 2

                                                                Enable QoS? y

Primary IPSI                                                    QoS Parameters
-----
Location: 2AXX                                                  Call Control 802.1p: 6
Host: ipsi-A02a                                                Call Control DiffServ: 46
DHCP ID: ipsi-A02a

Secondary IPSI
-----
Location: 2B01
Host: ipsi-A02b
DHCP ID: ipsi-A02b

```

This is an example of **change ipserver-interface** on an **S8700 IP-PNC**.

```

change ipserver-interface 1                                     Page 1 of 1
      IP SERVER INTERFACE (IPSI) ADMINISTRATION - PORT NETWORK 1

IP Control? y                                                  Socket Encryption? y

                                                                Enable QoS? y

Primary IPSI                                                    QoS Parameters
-----
Location: 1A02                                                  Call Control 802.1p: 6
Host: 130.120.50.10                                           Call Control DiffServ: 46
DHCP ID: ipsi-A01a

```

change ipserver-interface field descriptions

change ipserver-interface field descriptions

Field	Description
IP Control	<p>y means all port networks have an IPSI circuit pack that provides control. Display only, y when IP-PNC is y on the display system-parameters customer-options screen.</p> <p>n means this IPSI is used only for Tone Clock/Tone Detector functions. Remaining fields on this screen do not appear if IP Control is n, and IP-PNC is n on the display system-parameters customer-options screen.</p>
Socket Encryption	y to turn on socket encryption for the server and IPSI link.
Enable QoS	<p>y to turn on quality of service (QoS) from the server to the IPSI link.</p> <p>Enabling QoS for the control network also requires that you enable it from the Web interface using Server Configuration and Upgrades > Configure Server and on each IPSI interface.</p>
Primary IPSI	
Location	Location of the IPSI board
Host	Name of the host machine
DHCP ID	DHCP client identifier
Secondary IPSI	Secondary IPSI fields appear only 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)

display ipserver-interface

S8700 series | S8500

```
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	n	Port network 1 - 64 Example: display ipserver-interface 2		

This is an example of `display ipserver-interface` on an [S8700 IP-PNC](#).

```
display ipserver-interface 2
      IP SERVER INTERFACE (IPSI) ADMINISTRATION - PORT NETWORK 2

                                     Socket Encryption? y

                                     Enable QoS? y

Primary IPSI                               QoS Parameters
-----
Location:  2A02                               Call Control 802.1p: 6
      Host: 130.120.30.0                       Call Control DiffServ: 46
      DHCP ID: ipsi-A02a
```

This is an example of `display ipserver-interface` on [S8700 MC](#).

```
display ipserver-interface 2
      IP SERVER INTERFACE (IPSI) ADMINISTRATION - PORT NETWORK 2

                                     Enable QoS? y

Primary IPSI                               QoS Parameters
-----
Location:  2A02                               Call Control 802.1p: 6
      Host: 135.122.30.4                       Call Control DiffServ: 46
      DHCP ID: ipsi-A02a
```

display ipserver-interface field descriptions**display ipserver-interface field descriptions**

Field	Description
Socket Encryption	Enter y to turn socket encryption on for the media server and IPSI link.
Enable QoS	y/n Turn on or off quality of service (QoS) from the media server to the IPSI link. Enabling QoS for the control network also requires that you enable it from the Web interface using Server Configuration and Upgrades > Configure Server and on each IPSI interface.
Primary IPSI	
Location	Location of the IPSI board
Host	Name of the host machine
DHCP ID	DHCP client identifier
Secondary IPSI	Secondary IPSI fields appear only on the 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)

get forced-takeover ipserver-interface

S8700 series | S8710 | S8500

```
get forced-takeover ipserver-interface [ all | port-network n <1 - 64>]
```



CAUTION:

Moving a Port Network from one server to another causes a level two 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.

Use `get forced-takeover ipserver-interface` to give an ESS server or Main server the capability to manually take control of IPSI Port Networks.

Run `get forced-takeover ipserver-interface` from the Main server or ESS server that intends to take control of a Port Network.

- If the Port Network targeted by `get forced-takeover ipserver-interface` is already controlled by the Main server or ESS server where the command is issued, Test #1605 will immediately **PASS**.
- If the Port Network is not controlled by the Main server or ESS server where `get forced-takeover ipserver-interface` is issued the ESS server shows the test result as **IN PROGRESS**.



Important:

On a media server administered as Local Only, the `get forced-takover ip-server` command will only attempt to gain control of Port Networks with the same community number as the Local Only media 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-takover ip-server` command will not attempt to gain control of these Port Networks.

Maintenance SAT Commands

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						

get forced-takeover ipserver-interface command Error Codes

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

S8700 series | S8500 | G650

```
list ipserver-interface [schedule]
```

Use `list ipserver-interface` to list all administered IPSIs in the system.

Action/Object	Qualifier	Qualifier Description	Login
<code>list ipserver-interface</code>	<code>schedule</code>	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/ Sec 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	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

S8700 series | S8500

`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 350.

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	Login	Default	Feature Interaction
<code>release ipserver-interface</code>	<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

S8700 series | S8500

`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
<code>remove ipserver-interface</code>	<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 S8700 media 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[S8700 series](#) | [S8500](#)**reset ipserver-interface** *UUc*

Use **reset ipserver-interface** to reset an IPSI in the named cabinet/carrier. This is equivalent to **reset board** *UUcSS*.

Note:

Use **busy ipserver-interface** to take the IPSI out of service before a reset is allowed.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
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

S8700 series | S8500

```
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.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
set ipserver-interface	<i>Uc</i>	Specify the cabinet and carrier with the IPSI board you want to make active.			
	a-all b-all	Sets all "a" side IPSIs active. Sets all "b" side IPSIs active. Examples: set ipserver-interface 1b set ipserver-interface a-all set ipserver-interface b-all			

test ipserver-interface

S8700 series | S8500

```
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	Login	Default	Feature Interaction
test ipserver-interface	<i>Uc</i>	Cabinet and carrier you want to test. Examples: test ipserver-interface 3A test ipserver-interface 12A repeat 2			

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	

isdn-testcall

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[clear isdn-testcall](#) on page 363

[list isdn-testcall](#) on page 364

[status isdn-testcall](#) on page 365

[test isdn-testcall](#) on page 367

clear isdn-testcall

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

Use `clear isdn-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	Default	Feature Interaction
clear isdn-testcall	group number member number	Trunk group number.	init inads craft	none	none
		Member within the trunk group.			
		Examples: clear isdn-testcall 80/1 clear isdn-testcall 78/2			

list isdn-testcall

S8700 series | S8500 | S8400 | S8300

```
list isdn-testcall [print | schedule]
```

Use `list isdn-testcall` to display the ISDN-PRI trunks currently in use for outgoing ISDN test calls.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>list isdn-testcall</code>	<code>print</code> <code>schedule</code>	See Common Input Parameters on page 25.		

The following display shows a typical result for `list isdn-testcall`.

list isdn-testcall				
ISDN-PRI TESTCALLS				
B-Channel	Start Time	Duration	M/T Port	
078/001	25/14:36	120	1B1102	

Field Descriptions for list isdn-testcall

list isdn-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 isdn-testcall

S8700 series | S8500 | S8400 | S8300

`status isdn-testcall group# / member# [print]`

Use `status isdn-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
<code>status isdn-testcall</code>	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: <code>status isdn-testcall 78/1 print</code>		

status isdn-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 isdn-testcall 80/1`.

status isdn-testcall 80/1					Page 1 of 1 SPE A			
ISDN TESTCALL STATUS								
	Bit	Number	Block	Number		Duration	Reason	
	Error	Of	Error	Of	Start	Duration	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

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.
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 isdn-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.

test isdn-testcall

S8700 series | S8500 | S8400 | S8300

```
test isdn-testcall group#/member# [minutes num-minutes] [schedule]
```

Use `test isdn-testcall` to start an outgoing ISDN-PRI test call using the asynchronous method.

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.

For more information, see Test #258 under [ISDN-TRK \(DS1 ISDN Trunk\)](#) in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (03-300430)* (formerly 03-300190).

Action/Object	Qualifier	Qualifier Description	Login	Default
test isdn-testcall	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 isdn-testcall 78/2 minutes 10				

The output screen for `test isdn-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

S8700 series

See:
[status journal-link](#) on page 368

status journal-link

S8700 series

```
status journal-link wakeup-log | pms-log [print]
```

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 374 for more details on links.

Action/ Object	Qualifier	Qualifier Description	Login
<code>status journal -link</code>	<code>wakeup-log</code> <code>pms-log</code> <code>print</code>	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 See Common Input Parameters on page 25. Examples: <code>status journal-link wakeup-log</code> <code>status journal-link pms-log print</code>	

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

S8700 series

See:

[busyout journal-printer](#) on page 369

[release journal-printer](#) on page 370

[test journal-printer](#) on page 371

busyout journal-printer

S8700 series

`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	Login	Default	Feature Interaction
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

S8700 series

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 464. For information on journal printers, see [status journal-link](#) on page 368.

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

S8700 series

```
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	Login	Feature Interaction
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	See Common Input Parameters on page 25.		
	long			
	repeat-number			
	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

S8700 series | S8500 | S8400 | S8300

See:

[test led](#) on page 372

test led

S8700 series | S8500 | S8400 | S8300

```
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

S8700 series

See:

[test license](#) on page 372

test license

S8700 series

```
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
<code>test license</code>	<code>short</code> <code>long</code>	On an S8700 media server, <code>short</code> and <code>long</code> 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 (<code>display system-parameters customer-options</code>), 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:

- PASS, the system is in License-Normal mode.
- FAIL, the system is in License-Error or No-License mode, depending on the **Error** value.

link

S8700 series

See:

[busyout link](#) on page 373

[clear link](#) on page 374

[status link](#) on page 374

[test link](#) on page 379

busyout link

S8700 series

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 374 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

S8700 series

`clear link n`

Use `clear link` to clear the counters associated with a numbered PPP CLAN link. The statistical counters cannot be cleared for a CLAN's Ethernet link.

See [status link](#) on page 374 for more details on links.

Use `clear clan-port` to clear the counters associated with a numbered PPP CLAN link.

status link

S8700 series | S8500 | S8400 | S8300

`status link n` (with CLAN circuit pack–Ethernet connection)

Use `status link` to see:

- static information about the link
- the data extension and port used, connect speed, and protocol information
- a counter of CHAP failures for PPP links
- time information for PPP and Ethernet links, including the time of the last reset
- 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 CLAN links.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>status link</code>	<code>n</code>	The number of the administered link Example: <code>status link 1</code>	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, Link/Port Status**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
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)
1 of 2	

status link field descriptions, page 1 2 of 2

Field	Description
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, Error Counters

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, Error Counters

status link field descriptions, page 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.
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.

status link screen, page 3, Processor Channel Status

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, Processor Channel Status

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)

TCP/IP Applications Currently Active screen (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 CLAN 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 CLAN.

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

S8700 series

`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 374 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test link	link# short long repeat repeat# clear schedule	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.			

login-id

S8700 series | S8400 | S8300

See:
[reset login-id](#) on page 380

reset login-id

S8700 series | S8400 | S8300

`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
<code>reset login-id</code>	<code>n</code>	The number (0-999) of the SAT session Example: <code>reset login-id 9</code>	init	

logins

S8700 series | S8500 | S8400 | S8300

See:
[status logins](#) on page 380

status logins

S8700 series | S8500 | S8400 | S8300

`status logins [print]`

Use `status logins` to see information about all of the users that are currently logged into the system. This includes login names, location of physical access, and currently executing commands.

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. The `active` command on the `status logins` screen may not be accurate, and updates are not reflected until the next execution of `status logins`.

The following is an example of the results of **status logins**.

status logins					
USER LOGIN INFORMATION					
Login	Type	Location	Aux	Active Command	ID
*init	SYS-PORT	TELNET	135.9.38.18	stat logins	2

maintenance

S8700 series

See:

[reset maintenance](#) on page 381

[test maintenance](#) on page 381

reset maintenance

S8700 series

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

S8700 series

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

S8700 series | S8500 | S8400 | S8300

See:
[list marked-ports](#) on page 382

list marked-ports

S8700 series | S8500 | S8400 | S8300

`list marked-ports [print | schedule]`
Use `list marked-ports` to list every port that has been marked unusable with `mark port`.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>list marked-ports</code>	<code>print</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.

list measurements

S8700 series | S8500

Use list measurements to get system performance measurements.

Table 34: list measurements command qualifier information 1 of 2

Action/Object	Qualifier	Qualifier Description	Login
list measurements	log detail summary print 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 384	
	announcements		
	atm		
	attendant		
	blockage		
	call-rate		
	call-summary		
	cbc-trunk-group		
	clan ethernet	list measurements clan ethernet on page 385	
	clan ppp	list measurements clan ppp on page 387	
	clan sockets	list measurements clan sockets on page 388	
	communications-links		
	coverage-path		
	ds1_location	list measurements ds1 on page 391	
	expansion-services mod		
	hunt-group		
1 of 2			

Table 34: list measurements command qualifier information 2 of 2

Action/Object	Qualifier	Qualifier Description	Login
	ip codec	list measurements ip codec on page 394	
	ip dsp-resource	list measurements ip dsp-resource on page 398	
	ip-signaling group	list measurements ip-signaling-group on page 401	
	lar-route-pattern		
	lightly-used-trunk		
	load-balance		
	modem-pool		
	multimedia-interface		
	occupancy		
	outage-trunk		
	principal		
	route-pattern		
	security-violations		
	summary		
	tone-receiver	list measurements tone-receiver on page 201	
	trunk-group		
	voice-conditioners		
			2 of 2

list measurements aca

S8700 series | S8500 | S8400 | S8300

For more information about using ACA refer to “Automatic Circuit Assurance” in *Administrator Guide for Avaya Communication Manager (03-300509)*.

list measurements clan ethernet

S8700 series | S8500 | S8400 | S8300

```
list measurements clan ethernet UUCss [print | 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:

- high collision counts could indicate high traffic on the LAN segment, or congestion on the bus.
- 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	UUCss print schedule	Cabinet-carrier-slot address of the CLAN circuit pack See Common Input Parameters on page 25.	init inads craft cust	
		Examples: <pre>list measurements clan ethernet 1A05</pre> <pre>list measurements clan ethernet 1A05 print</pre>		

Maintenance SAT Commands

The following example shows the output from `list measurements clan ethernet`.

list measurements clan ethernet 1C1017				Page 1 of x	
Switch Name: sierra			Date:4:07pm MON AUG 01,1999		
C-LAN ETHERNET PERFORMANCE MEASUREMENT 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

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 <code>reset board</code> , and reseating the board all clear the firmware counters.
Delta	The difference between the current and the previous sample
Collision Count	The error count for collisions on the ethernet

list measurements clan ppp

S8700 series | S8500 | S8400 | S8300

```
list measurements clan ppp UUCSSpp [print | 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
	UUCsspp	Cabinet-carrier-slot port address of the CLAN circuit pack See Common Input Parameters on page 25.		
	print schedule	Example: <code>list measurements clan ppp 1C1001</code>		

The following example shows the output from `list measurements clan ppp`.

list measurements clan ppp 1C1001						Page 1 of x	
Switch Name: sierra						Date:02/02/1999	
C-LAN PPP PERFORMANCE MEASUREMENT DETAILED REPORT							
Date	Time	CRC Check		Invalid Frame		CHAP Failures	
		Total	Delta	Total	Delta	Total	Delta
02/01	03:08	85	25	185	85	5	0
02/01	02:53	60	60	100	100	5	5
02/01	02:38	N/A	N/A	N/A	N/A	N/A	N/A
02/01	02:23	1000060	10	1000090	10	25	5
02/01	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. Busying 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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`list measurements clan sockets qualifier`

Use `list measurements clan sockets` on IP Media Processor and Medpro.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list measurements clan sockets	hourly <i>UUCSS</i>	Lists the measurements for the last 24 hours, from current hour backwards, for the indicated board.			
1 of 2					

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
	summary yesterday-peak summary today-peak summary last-hour	Lists the measurements for the previous day's peak, in socket usage (Erl), for the CLAN boards administered on the IP interfaces screen. The screen output may reflect multiple CLAN boards.			
	detail yesterday-peak <i>UUCSS</i> detail today-peak <i>UUCSS</i> detail last-hour <i>UUCSS</i>	Lists the measurements for the previous day's peak for the specified board. If the switch clock is changed, the report shows asterisks.			

2 of 2

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 12, 2002				
CLAN SOCKETS HOURLY REPORT								
(Last 24 Hours)								
			Socket	Socket				
Meas			Usage	Socket	Denial	%	% Time	
Hour	Board	Region	(Erl)	Peg	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

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 CLAN for this measurement resides.
Socket Usage (Erl)	The total time, in Erlangs, that is available from sockets on this CLAN board. Calculated by: (Total Socket Seconds of usage) / 3600.
Socket peg	Total number of times a CLAN socket on the board was allocated to a call or link.
Socket Denial peg	Total number of times a CLAN socket on the board was needed for a call or link, but was not available.
% Denials	(Socket Denial peg)/(Socket Denial peg + Socket peg).
% Time ASB	The percentage of time during the measured interval that every CLAN socket on the board was unavailable for use.

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 12, 2002					
CLAN SOCKETS PEAK REPORT									
(Yesterday-Peak Hour for Each Board)									
			Socket						
Meas			Usage	Socket	Denial	%			
Hour	Board	Region	(Erl)	Peg	Peg	Denials	% Time		
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 12, 2002			
CLAN SOCKETS DETAIL REPORT (Yesterday-Peak Hour)							
			Socket	Socket			
Meas			Usage	Socket	Denial	%	% Time
Hour	Board	Region	(Erl)	Peg	Peg	Denials	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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

```
list measurements [ ds1 ] [ ds1-log ] UUCSS [print | schedule]
list measurements [ ds1-facility ] UUCSS [log | summary] [print |
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.

Maintenance SAT Commands

Action/Object	Qualifier	Qualifier Description	Login	Default
list measurements ds1 list measurements ds1-facility	log summary UUCSS	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 <i>UUCSS</i> is the location of the circuit pack 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	
	print schedule	Examples: list measurements ds1 log 2a18 list measurements ds1 summary list measurements ds1-log 2e01a list measurements ds1-fac summary 2e01d schedule		

This is the output screen for **list measurements ds1 summary**:

list measurements ds1 summary 2a19					
SPE A					
Switch Name: Date: 1:25 pm THU APR 16, 1992					
DS-1 Link Performance Measurements Summary Report					
Counted Since: 1:20 pm THU APR 16, 1992					
Valid 15-Minute Intervals in Last 24 Hours:					
Seconds Elapsed In Current Interval: 323 ESF Error Events: 14					
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	Count
Errored Seconds	04/16	13:20	0	0	4
Bursty Errored Seconds	04/16	13:20	0	0	4
Severely Errored Seconds	04/16	13:20	0	0	0
Unavailable/Failed Seconds	04/16	13:20	0	0	0
Controlled Slip Seconds					
Loss of Frame Count					

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	
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)
1 of 2	

list measurements ds1-summary field descriptions 2 of 2

Field	Description
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	<p>The categories correspond to measurement error counters:</p> <ul style="list-style-type: none"> ● 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

S8700 series | S8500 | S8400 | S8300

list measurements ip codec *qualifier*

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 region# yesterday-peak detail region# today-peak detail region# 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 MAR 26, 2002				
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. $(22 \text{ or } 31) * \# \text{ Medpro} + 64 * \# \text{IP Media Processors}$. 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: $(\text{Total Call Seconds}) / 3600$ 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
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: $(\text{Total Call Seconds}) / 3600$ 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
1 of 2	

list measurements ip codec field descriptions 2 of 2

Field	Description
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    Page    1
```

Switch Name: _____ Date: 5:27 pm WED MAR 26, 2002

IP CODEC RESOURCE SUMMARY REPORT

		G711			G723/9		
		Usage	In Reg	Out of	Usage	In Reg	Out of
Meas	DSP	(Erl)	peg	Reg peg	(Erl)	peg	Reg peg
Hour Region	Rscs						
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 4**.

```
list measurements ip codec detail 4 yesterday-peak 4
```

Switch Name: _____ Date: 5:32 pm WED MAR 26, 2002

IP CODEC RESOURCE DETAIL REPORT

		G711			G723/9		
		Usage	In Reg	Out of	Usage	In Reg	Out of
Meas	DSP	(Erl)	peg	Reg peg	(Erl)	peg	Reg peg
Hour Region	Rscs						
0400 4	xxxx	xxxx.x	xxxxx	xxxxx	xxxx.x	xxxxx	xxxxx

list measurements ip dsp-resource

S8700 series | S8500 | S8400 | S8300

`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 region# yesterday-peak detail region# today-peak detail region# 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 MAR 26, 2002				
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 MAR 26, 2002			
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 4`.

list measurements ip dsp-resource detail 4 yesterday-peak 4							
Switch Name:				Date: 5:32 pm WED MAR 26, 2002			
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	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx

list measurements ip-signaling-group

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`list measurements ip-signaling-group qualifier`

Use `list measurements ip-signaling-group` 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	Login	Default
list measurements ip-signaling-group				
	current-hour	Shows the 10 worst signaling groups for the current hour.		
	last-hour	Shows the ten worst signaling groups for the last full hour.		
	today yesterday	Shows the ten worst signaling groups for each hour of today, starting with the most recent whole hour, or yesterday.		

Maintenance SAT Commands

The following example shows the output for **list measurements ip-signaling-group current-hour**.

list measurements ip-signaling-group current-hour

Page 1 of 1

Switch Name:

Date: 6:28 pm THU FEB 4, 1997

IP SIGNALING GROUPS LATENCY AND LOSS REPORT

CURRENT HOUR 10 WORST PERFORMING IP SIGNALING GROUPS

RANK ORDERED WORST TO LEAST WORST

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
---	-----	-----	-----	-----	-----	-----	-----	-----
001	01	10000	xx	100%	18:03	10000	xx	100%
002	02	10000	xx	100%	18:06	10000	xx	100%
003	03	10000	xx	100%	18:09	10000	xx	100%
004	04	10000	xx	100%	18:12	10000	xx	100%
005	05	10000	xx	100%	18:15	10000	xx	100%
006	06	10000	xx	100%	18:18	10000	xx	100%
007	07	10000	xx	100%	18:21	10000	xx	100%
008	08	10000	xx	100%	18:24	10000	xx	100%
009	09	10000	xx	100%	18:27	10000	xx	100%
010	10	10000	xx	100%	18:30	10000	xx	100%

The following examples show the output for **list measurements ip-signaling-group last-hour**.

list measurements ip-signaling-group last-hour

Switch Name:

Page 1 of 24

Date: 6:28 pm THU FEB 4, 1997

IP SIGNALING GROUPS LATENCY AND LOSS REPORT

LAST FULL HOUR 10 WORST PERFORMING IP SIGNALING GROUPS

RANK ORDERED WORST TO LEAST WORST

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
001	01	10000	xx	100%	18:03	10000	xx	100%
002	02	10000	xx	100%	18:06	10000	xx	100%
003	03	10000	xx	100%	18:09	10000	xx	100%
004	04	10000	xx	100%	18:12	10000	xx	100%
005	05	10000	xx	100%	18:15	10000	xx	100%
006	06	10000	xx	100%	18:18	10000	xx	100%
007	07	10000	xx	100%	18:21	10000	xx	100%
008	08	10000	xx	100%	18:24	10000	xx	100%
009	09	10000	xx	100%	18:27	10000	xx	100%
010	10	10000	xx	100%	18:30	10000	xx	100%

The following example shows the report for **list measurements ip-signaling-group today**.

list measurements ip-signaling-group today

Page 1 of 24

Switch Name:

Date: 6:28 pm THU FEB 4, 1997

IP SIGNALING GROUPS LATENCY AND LOSS REPORT

TODAY'S 10 WORST PERFORMING IP SIGNALING GROUPS PER HOUR

RANK ORDERED WORST TO LEAST WORST FOR EACH HOUR

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
---	-----	-----	-----	-----	-----	-----	-----	-----
001	01	10000	xx	100%	18:03	10000	xx	100%
002	02	10000	xx	100%	18:06	10000	xx	100%
003	03	10000	xx	100%	18:09	10000	xx	100%
004	04	10000	xx	100%	18:12	10000	xx	100%
005	05	10000	xx	100%	18:15	10000	xx	100%
006	06	10000	xx	100%	18:18	10000	xx	100%
007	07	10000	xx	100%	18:21	10000	xx	100%
008	08	10000	xx	100%	18:24	10000	xx	100%
009	09	10000	xx	100%	18:27	10000	xx	100%
010	10	10000	xx	100%	18:30	10000	xx	100%

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-group today field descriptions

list measurements ip-signaling-group today 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-group today 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.
2 of 2	

list measurements tone-receiver**S8700 series**

list measurements tone-receiver

Use **list measurements tone-receiver** to see how many tone receiver ports the media server is using and has available.

Action/Object	Qualifier	Qualifier Description
list measurements tone-receiver	print 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 media 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 media 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	SPE B
Switch Name: Denver				Date: 5:18 pm WED MAR 31, 2004				
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

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	
PN Alloc	
Peak Alloc	
Total Off-PN	
Peak Off-PN	

Maintenance SAT Commands

The following example shows the output from **list measurements tone-receiver summary last-hour**.

list measurements tone-receiver summary last-hour						SPE B	
Switch Name: Denver			Date: 5:23 pm WED MAR 31, 2004				
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	
Peak Req	
Total Queued	
Peak Queued	
Total Denied	
Peak Denied	
1 of 2	

list measurements tone-receiver summary last-hour field descriptions 2 of 2

Field	Description
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

S8700 series | [S8500](#) | [S8400](#) | [S8300](#) | [G700](#) | [G350](#) | [G250](#) | [G250-BRI](#) | [G250-DCP](#) | [G250-DS1](#)

See:

[add media-gateway](#) on page 407

[change media-gateway](#) on page 414

[display media-gateway](#) on page 414

[list media-gateway](#) on page 415

[list configuration media-gateway](#) on page 213

[list trace media-gateway](#) on page 621

[status media-gateways](#) on page 418

[test media-gateway](#) on page 420

add media-gateway

S8700 series | [S8500](#) | [S8400](#) | [S8300](#) | [G700](#) | [G350](#) | [G250](#) | [G250-BRI](#) | [G250-DCP](#) | [G250-DS1](#)

`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>	number to assign to the media gateway		
	<code>next</code>	next available number		

This following example shows a typical input screen for **add media-gateway x**.

add media-gateway x

MEDIA-GATEWAY

Page 1 of 1

Number:

Type:

Name:

Serial No:

Network Region:

Registered?

Recovery Rule:

IP Address:

FW Version/HW Vintage:

MAC Address:

Encrypt Link?

Location:

Controller IP Address:

Site Data:

Name:

Slot

Module

Type

Name

V1:

#

ICC

MM

V2:

ANA

MM

V3:

DCP

MM

V4:

DS1

MM

V8:

messaging-analog

V9:

gateway-announcements

Max Survivable IP Ext:


Announcement board must also be enabled; use 'enable announcement-board'

add media-gateway field descriptions

add media-gateway field descriptions 1 of 4

Field	Description
Number	Display only. Number assigned to the media gateway.
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.
Type	Type of media gateway g700 g350 g250 g250-bri g250-dcp g250-ds1
1 of 4	


add media-gateway field descriptions 2 of 4

Field	Description
FW Version/ HW Vintage	Display only. Current firmware and hardware versions on the media gateway.
Name	Name assigned to the gateway
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.
Serial No	Used for the controller to identify the gateway
Encrypt Link	y/n Enter y to encrypt the H.248 link on the gateway. y is the default when the gateway is added.
Network Region	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.
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.
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.
Controller IP Address	Display only. CLAN or NIC address. Blank until the media gateway registers for the first time.
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>
Site Data	General site information
2 of 4	

add media-gateway field descriptions 3 of 4

Field	Description
Name (Controller)	Name assigned to the controller.
Slot	Display only. Slot number for the identified Media Module. Slots V8-V9, for virtual media modules, are listed after Slots V1-V4.
Module Type	<p>Type of Avaya Media Module in the slot: See Media Gateway slot configurations on page 412 for valid entries for each type of Media Gateway. In general: V1: S8300 V9: gateway-announcements</p> <p>G700: V2 - V4: general slots for G350/G700 form factor media modules V8: messaging-analog V9: gateway-announcements</p> <p>G350: V2 - V5: general slots for G350/G700 form factor media modules V6: messaging-analog V7: 1T + 2L virtual-analog V8: messaging-analog V9: gateway-announcements</p> <p>G250: V2: slot for a WAN media module, MM340 or MM342 (display only) V3: 4T + 2L virtual-analog V4 - V8: do not appear</p>
3 of 4	

add media-gateway field descriptions 4 of 4

Field	Description
Module Type (continued)	<p>G250-BRI V2: slot for a WAN media module, MM340 or MM342 (display only) V3: 1T + 2L virtual-analog V4: 2T integrated BRI V5 - V8: do not appear</p> <p>G250-DS1 V2: slot for a WAN media module, MM340 or MM342 (display only) V3: 1T + 2L Integ Analog V4: Integ-DS1 V5 - V8: do not appear</p> <p>G250-DCP V2: slot for a WAN media module, MM340 or MM342 (display only) V3: 4T + 2L Integ Analog V4: Integ-DCP (in port) V5 - V8: do not appear</p> <p>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.</p>
Max Survivable IP Ext:	<p>Appears when Type is g250 or g250-bri. Limits the number of simultaneous endpoint registrations for the media gateway.</p> <p> Important: Avaya recommends this field be set at 10 or less on Communication Manager 3.0.</p>
4 of 4	

Media Gateway slot configurations

G700 Media Gateway slot configurations

V1	V2	V3	V4	V5	V6	V7	V8	V9
MM710 MM711 MM712 MM714 MM717 MM720 MM722 MM760 S8300	MM710 MM711 MM712 MM714 MM717 MM720 MM722 MM760			Not applicable, field turned off			messaging-analog	gateway- announcements

G350 Media Gateway slot configurations

V1	V2	V3	V4	V5	V6	V7	V8	V9
MM710 MM711 MM712 MM714 MM717 MM720 MM722 S8300	MM710 MM711 MM712 MM714 MM717 MM720 MM722 Display only: MM340, MM342				Display only MM312 MM314	1T +2L virtual- analog	messaging- analog	gateway- announcements

G250 Media Gateway slot configurations

V1	V2	V3	V4	V5	V6	V7	V8	V9
S8300	Display only MM340, MM342 (WAN)	4+2 virtual-analog	Not applicable, field turned off					gateway- announcements

G250-BRI Media Gateway slot configurations

V1	V2	V3	V4	V5	V6	V7	V8	V9
S8300	Display only MM340, MM342 (WAN)	1T+2L integrated -analog	2T Integrated BRI	Not applicable, field turned off				gateway- announcements

G250-DS1 Media Gateway slot configurations

V1	V2	V3	V4	V5	V6	V7	V8	V9
S8300	Display only MM340, MM342 (WAN)	1T+2L integrated -analog	Integ-DS1	Not applicable, field turned off				gateway- announcements

G250-DCP Media Gateway slot configurations

V1	V2	V3	V4	V5	V6	V7	V8	V9
S8300	Display only MM340, MM342 (WAN)	4T+2L integrated -analog	Integ-DCP (in port)	Not applicable, field turned off				gateway- announcements

change media-gateway

S8700 series | S8500 | S8400 | S8300 | G700 | G350 | G250 | G250-BRI | G250-DCP | G250-DS1

`change media-gateway [x | next]`

Use `change media-gateway` to change the administration of a Media Gateway.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>change media-gateway</code>	<code>x</code> <code>next</code>	number assigned to media gateway next available number		

See [add media-gateway](#) on page 407 for an example screen and an explanation of field descriptions.

display media-gateway

S8700 series | S8500 | S8400 | S8300 | G700 | G350 | G250 | G250-BRI | G250-DCP | G250-DS1

`display media-gateway [x | next]`

Use `display media-gateway` to see information for a specific Media Gateway.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>display media-gateway</code>	<code>x</code> <code>next</code>	number to assign to media gateway next available number		

See [add media-gateway](#) on page 407 for a screen example and an explanation of field descriptions.

list media-gateway

S8700 series | S8500 | S8400 | S8300 | G700 | G350 | G250 | G250-BRI | G250-DCP | G250-DS1

`list media-gateway [type x] [region x] [schedule]`

Use `list media-gateway` from the primary server to see all administered media gateways.

Action/Object	Qualifier	Qualifier Description	Login
<code>list media-gateway</code>	<code>type</code> <code>region</code> <code>schedule</code>	type of media-gateway 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 1 of 2

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 <code>show system media gateway</code> CLI command or see the sticker on the back of the unit to locate the media gateway serial number.
1 of 2	

list media-gateway field descriptions 2 of 2

Field	Description
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 g700 g350 g250 g250-bri g250-dcp g250-ds1
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 CLAN 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> .
2 of 2	

reset media-gateway

S8700 series | S8500 | S8400 | S8300 | G700 | G350 | G250 | G250-BRI | G250-DCP | G250-DS1

`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	Login	Default
reset media- gateway	x	number of the media gateway to reset		
	all	all registered media gateways		
	level 1	<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.		
	level 2	<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.		
	level 3	<code>reset media-gateway level 3</code> resets all media modules and tears down all calls.		

status media-gateways

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#) | [G700](#) | [G350](#) | [G250](#) | [G250-BRI](#) | [G250-DCP](#) | [G250-DS1](#)

`status media-gateways [x | next]`

Use `status media-gateways` to see the alarm status of the administered Media Gateways.

`status media-gateways` lists alarms, busyout summary, and H.248 link status for the media gateways. The alarms are associated only with board-type alarms on the Media Modules. Status for VoIP and MGP alarms are provided via the Media Gateway Processor CLI.

Action/Object	Qualifier	Qualifier Description	Login
<code>status media-gateways</code>	<code>x</code> <code>next</code>	number of the media gateway next available number	

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	up	9	0	0	0	up	17	0	0	0	up	25	0	0	0	up	33	0	0	0	up
2	0	0	0	up	10	0	0	0	up	18	0	0	0	up	26	0	0	0	up	34	0	0	0	up
3	0	0	0	up	11	0	0	0	up	19	0	0	0	up	27	0	0	0	up	35	0	0	0	up
4	0	0	0	up	12	0	0	0	up	20	0	0	0	up	28	0	0	0	up	36	0	0	0	up
5	0	0	0	up	13	0	0	0	up	21	0	0	0	up	29	0	0	0	up	37	0	0	0	up
6	0	0	0	up	14	0	0	0	up	22	0	0	0	up	30	0	0	0	up	38	0	0	0	up
7	0	0	0	up	15	0	0	0	up	23	0	0	0	up	31	0	0	0	up	39	0	0	0	up
8	0	0	0	rd	16	0	0	0	up	24	0	0	0	up	32	0	0	0	up	40	0	0	0	up

status media-gateways field descriptions

status media-gateways field descriptions

Field	Description
ALARM SUMMARY	Current alarms (Major/Minor/Warning) for all administered media gateways
BUSY-OUT SUMMARY	Current trunks/stations in a busy-out state for all administered media gateways
H.248 LINK SUMMARY	Current H.248 links that are down and up for all administered media gateways
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

test media-gateway

S8700 series | S8500 | S8400 | S8300 | G700 | G350 | G250 | G250-BRI | G250-DCP | G250-DS1

```
test media-gateway [ x | ]
```

Use `test media-gateway` from the primary server to run a board audit, and to run an H.248 link audit and an H.248 context audit.

- 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.
- 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

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>test media-gateway</code>	<code>x</code>	number assigned to the media gateway		

media-processor

S8700 series | S8500

See:

[set media-processor](#) on page 421

[status media-processor board](#) on page 426

[campon-busyout](#) on page 128

set media-processor

S8700 series | S8500

```
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.

set media-processor error messages

SAT Error Message	Description
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 status media-processor 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 set media-processor location override 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 35: 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 set media-processor lock . Error Code 3 appears when a demand interchange is requested and the board is locked in the active state. Use set media-processor unlock to unlock the boards.
4	Board locked standby. To prevent interchanges when certain operations are being performed, interchanges are disabled with set media-processor lock . Error Code 4 is returned when a demand interchange is requested and the board is locked in the standby state. Use set media-processor unlock 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 set media-processor override to force the interchange if necessary. Use set media-processor lock within 20 seconds; otherwise the boards will automatically interchange back.
1 of 2	

Table 35: set media-processor Test Results Error Codes 2 of 2

Error Code	Description
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
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

S8700 series | S8500

`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
<code>status media-processor</code>	<code>location</code> <code>all</code>	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					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 1 of 2

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
1 of 2	

status media-processor all field descriptions 2 of 2

Field	Description
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
2 of 2	

status media-processor board

S8700 series | S8500

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	<i>location</i>	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

Links

Alarms

mpcl: up

eth: up

peer: up

Locked? no

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 = <code>set media-processor override</code> or <code>set media-processor lock</code> command is in use. Appears for duplicated circuit packs.

mis

S8700 series | S8500 | S8400 | S8300

See:

[busyout mis](#) on page 428

busyout mis

S8700 series | S8500 | S8400 | S8300

`busyout mis`

Use `busyout mis` to busyout a management information system.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>busyout mis</code>			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

S8700 series | S8500 | S8400 | S8300

`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	Default	Feature Interaction
<code>release mis</code>			init inads craft cust rcust	none	none

modem-pool

S8700 series | S8500 | S8400 | S8300

See:

[release modem-pool](#) on page 429

[test modem-pool](#) on page 429

release modem-pool

S8700 series | S8500 | S8400 | S8300

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

S8700 series | S8500 | S8400 | S8300

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	Feature Interaction
test modem-pool	group number	The administered group number (1-5) See Common Input Parameters on page 25.	init inads craft	short	none
	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

list moh-analog-group

S8700 series | S8500 | S8400 | S8300 | G250 | G350 | G700

```
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

S8700 series

See:

[list monitored-station](#) on page 432

list monitored-station

S8700 series

```
list monitored-station [start extension] [count xxxx] [print]
```

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
<code>list monitored-station</code>	<code>start extension</code> <code>count xxxx</code> <code>print</code>	starting extension for the list number of stations on the list See Common Input Parameters on page 25.	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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[clear mst](#) on page 433

[disable mst](#) on page 433

[list mst](#) on page 434

clear mst

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

Use `clear mst` before a trace. If `clear mst` is active during a trace, it clears unwanted data.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>clear mst</code>			init inads		

disable mst

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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	Default	Feature Interaction
<code>disable mst</code>			init inads	none	none

list mst

S8700 series | S8500 | S8400 | S8300

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
list mst	from message number	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. count number The number of messages in the list. Use this number to limit the trace	init inads	FIFO order	See Common Input Parameters on page 25
	continuous	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.			
	LIFO	Show newest message first			
	FIFO	Show messages in the order received			
	auto-page	The screen will automatically page when full. Use with continuous to see messages arrive. Examples: list mst continuous list mst continuous auto-page list mst LIFO list mst from 222 count 7			

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	a1	83	86	70	01	80	96	28	0d
			6f	6e	20	35	31	30	30	31		
2	14:30:22.420	60	00	00	74	17	08	02	80	11	02	18
3	14:30:23.420	60	00	00	74	17	08	02	80	11	03	1e
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
			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
			01	03	02	01	c4	40	08	96	49	05
9	14:52:26.020	57	00	00	70	00	08	01	84	64	96	1c
			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 (ISDN or X.25).

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.

Maintenance SAT Commands

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

S8700 series

See:

[list multimedia](#) on page 436

list multimedia

S8700 series

`list multimedia [print | schedule]`

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>list multimedia</code>	<code>endpoints</code> <code>h.320-stations</code> <code>ip-stations</code> <code>print</code> <code>schedule</code>	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

S8700 series

See:

[display node-names](#) on page 438

display node-names

S8700 series

`display node-names [print | 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>print</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**

NODE NAMES				page 1 of 6
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

[S8700 series](#) | [S8500](#) | [S8300](#) | [G250](#) | [G350](#) | [G700](#)

See:

[monitor socket-usage](#) on page 521

[status socket-usage](#) on page 521

disable nr-registration

S8700 series | S8500 | S8300 | G250 | G350 | G700

`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 a "save translation" operation.

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
<code>disable nr-registration</code>	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

S8700 series | S8500 | S8300 | G250 |G350 | G700

`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
<code>enable nr-registration</code>	<code>x</code>	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 station

S8700 series | S8500 | S8400 | S8300

See:

[status off-pbx-telephone station](#) on page 443

status off-pbx-telephone station

S8700 series | S8500 | S8400 | S8300

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 x
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.

options

S8700 series | S8500 | S8400 | S8300

See:

[set options](#) on page 445

set options

S8700 series | S8500 | S8400 | S8300

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	Qualifier	Qualifier Description	Login	Default	Feature Interaction
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

Set options can help reduce the number of ineffective alarms to the TSC.

Set options settings are not intended to be changed on a per-system basis. Special circumstances (for example, special studies) may require temporary changes under the guidance of Tiers 3 and 4.

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		
	Off-board CLAN TCP/IP Ping Test Alarms:		w		

set options										Page 3 of 22
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:

- station alarms
- four trunk alarm severity groups
- adjunct alarms
- off-board DS1 alarms
- other off-board alarms
- each trunk group (this reduces the level of alarms reported for on-board or off-board trouble conditions)
- remote max alarms
- off-board CLAN TCP/IP Ping Test alarms: downgrade alarm levels of the Off-board CLAN 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.

- Report

Report treats the alarms in the same way as the warning category with one exception: alarms are reported to INADS using a special WARNING category. When an alarm of this type is received, INADS logs the occurrence and creates a trouble ticket or closes it immediately. The retry strategy for a call of this type is similar to normal major or minor alarm reports. However, the acknowledgment LED on the attendant console or alarm reporting station does not reflect the status of the call.

- Yes

Alarms are raised in the normal manner. There is no filtering of alarm data.

- 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:

- Major on-board station alarms
- Minor on-board station alarms
- Major off-board station alarms
- Minor off-board station alarms

Four alarm severity groups are provided for trunk alarms. You can administer the alarm options for the categories listed below in each alarm severity group. In G1, the alarm options can be administered only on a system-wide basis for the following categories:

- Major on-board trunk alarms
- Minor on-board trunk alarms
- Major off-board trunk alarms
- Minor off-board trunk alarms

For Adjuncts, an alarm severity option is assigned to each of the following categories:

- Major on-board adjunct alarms
- Major off-board adjunct alarms
- Minor on-board adjunct alarms
- 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.

This feature affects the alarming of the MOs listed below. 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	<ul style="list-style-type: none"> ● 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) <p>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.</p>
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	<ul style="list-style-type: none"> ● CDR Link (CDR) ● PN or EPN Maintenance circuit pack (MAINT) ● Expansion Interface (EXP-INTF) (S8700 MC) ● 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) ● SPE Select Switches (SPE-SELEC) ● Synchronization (SYNC) ● System Communication Interface (PI-SCI) ● System printer (SYS-PRNT) ● TDM clock (TDM-CLK) ● Tone Generator board (or circuit pack on S8700 MC) (TONE-BD)
Circuit Pack MOs	<ul style="list-style-type: none"> ● DS1 Interface Circuit Pack (DS1-BD) ● Control LAN Ethernet (ETH-PT)
Station MOs	<ul style="list-style-type: none"> ● 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) <p>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.</p>
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	<ul style="list-style-type: none"> • 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) <p>Trunks that are not members of Trunk Groups, (for example, PCOLs) are downgraded according to the alarm severity of group one.</p>
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.
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

S8700 series | S8500

See:
[reset packet-interface](#) on page 452
[status packet-interface](#) on page 453
[test packet-interface](#) on page 455

reset packet-interface

S8700 series | S8500

`reset packet-interface Uc`

Use `reset packet-interface` to reset and initialize the Packet Interface (PKT-INT) module on the IPSI (TN2312AP) circuit pack.

`reset packet-interface` runs on:

- **S8500** TN2312BP (IPSI) circuit pack
S8700 series TN2312BP (IPSI) circuit pack

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
<code>reset packet-interface</code>	<code>U</code> <code>c</code>	Specify the cabinet number that has the board to test. Specify the carrier you want to test.	

status packet-interface

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

```
status packet-interface [cabinet #] [print]
```

Use `status packet-interface` to see the status of the IPSIs in the [S8500](#) and [S8700 series](#).

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
<code>status packet- interface</code>			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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

```
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 [S8500](#) and [S8700 series](#), `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 452 and [status packet-interface](#) on page 453.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>test packet-interface</code>	<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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[status periodic-scheduled](#) on page 456

status periodic-scheduled

S8700 series | S8500 | S8400 | S8300

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 590.

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 3.1.x, (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	

ping

S8700 series | S8500

```
ping ip-address addr [board UUCSS | source port-id] [packet-length
len] [repeat #]
```

```
ping node-name name [board UUCSS | source port-id] [packet-length len]
[repeat #]
```

When debugging connectivity problems, a ping helps 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.

- The destination can be:
 - an IP address (**ip-address addr**)
 - a node (**node-name name**)
- The source can be:
 - a CLAN 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 CLAN 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 CLAN 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 UUCSS 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

ip-address addr	The IP address of the device to ping, www.xxx.yyy.zzz.
node-name name	The name of the node to ping. Use display node-names ip to see what IP nodes are administered.
board location	The location of the CLAN or IP Medpro board (UUCSS) used as the source of the ping. Specify the board if there are multiple CLAN or IP Medpro boards. If neither board nor source is given, the first CLAN in the same region as the IP address that is being pinged will be the source of the ping.
source port-id	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 CLAN in the same region as the IP address that is being pinged will be the source of the ping.
packet-length len	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: <ul style="list-style-type: none"> • if a router or host has a problem fragmenting or reassembling transferred packets • a more complete indication of the link status
repeat rpt	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

Field	Description
End-pt IP or End-pt Node-name	The destination of the <code>ping</code> command.
Port	The source's slot or port
Port Type	The source port's maintenance object name
Result	PASS, FAIL or ABORT
Time (ms)	The round-trip time (in milliseconds) of the <code>ping</code> .
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 3.1.x, (03-300430) (formerly 03-300190)</i> . The MO description indicates the type of <code>ping</code> test used and the meaning of that ping test's error codes.

Error messages

Error messages for `ping` are listed in [Ping command error messages](#) on page 461.

Ping command error messages

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 CLAN 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 CLAN 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 <code>board</code>).
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.
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.

pkt

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[clear pkt](#) on page 462

[test pkt](#) on page 462

clear pkt

S8700 series | S8500 | S8400 | S8300

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

S8700 series | S8500 | S8400 | S8300

`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
<code>test pkt port-network</code>	<code>pn short long repeat n clear</code>	The Packet bus to be tested: <code>nn</code> (1)	init inads craft	short 1
		Examples: <code>test pkt port-network 1 l</code> <code>test pkt port-network 1 sh r 2</code> <code>test pkt port-network 1 l r 25</code> <code>test pkt port-network 1</code> <code>test pkt port-network 1 c</code>		

pms-down

S8700 series

See:

[list pms-down](#) on page 463

list pms-down

S8700 series

```
list pms-down [start-time] [stop-time] [print]
```

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	Login	Default
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.		
	print	See Common Input Parameters on page 25		

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

S8700 series

See:

[busyout pms-link](#) on page 464

[release pms-link](#) on page 465

[status pms-link](#) on page 466

[test pms-link](#) on page 467

busyout pms-link

S8700 series

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:

- Far-end data module
- Simulated data channel

- Manager that initiates and maintains the link
- 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 466. See [status link](#) on page 374 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

S8700 series

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 374 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:

- Far end data module
- Simulated data channel on a NETCON board
- Manager that initiates and maintains the link
- 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

S8700 series

```
status pms-link [print]
```

Use `status pms-link` to see the status of the property management system interface link.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>status pms-link</code>	<code>print</code>	See Common Input Parameters on page 25.	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 464. See [status link](#) on page 374 for more details on links.

The following display shows a typical result for `status pms-link`.

status pms-link	PMS LINK STATUS
Physical Link State: down	
Protocol State: down	
Number of Retries: 3	
Maintenance Busy? no	

status pms-link field description

status pms-link field description 1 of 2

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 CLAN protocol. Blank if not administered.
1 of 2	

status pms-link field description 2 of 2

Field	Description
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.
2 of 2	

test pms-link**S8700 series**

```
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 466 for information about the PMS and interpreting its status. See [busyout pms-link](#) on page 464 for information on PMS links. See [status link](#) on page 374 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>test pms-link</code>	<code>short</code> <code>long</code> <code>repeat n</code> <code>clear</code> <code>schedule</code>	See Common Input Parameters on page 25. Examples: <code>test pms-link sh r 5</code> <code>test pms-link l</code> <code>test pms-link</code> <code>test pms-link c</code> <code>test pms-link c sch</code>	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

S8700 series

See:
[set pnc](#) on page 468
[status pnc](#) on page 469

set pnc

S8700 series

`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	Login	Default	Feature Interaction
<code>set pnc</code>	<code>lock</code> <code>unlock</code>	PNC interchanges are prevented, and the active port network connectivity is locked on-line. Releases the PNC lock.			

status pnc

S8700 series

status pnc [print]

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.

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 .
1 of 3	

status pnc field descriptions 2 of 3

Field	Description
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.
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	<p>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).</p> <p>The meaning of each fault class field is given in Table 36: Fault Class Field Descriptions on page 471. 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.)</p> <p>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.</p>
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 36: 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 36: 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

S8700 series

See:

[reset pnc interchange](#) on page 472

reset pnc interchange

S8700 series

```
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:

- The standby PNC is busied out.
- The PNCs are locked by means of the `set pnc lock` or `reset pnc interchange override-and-lock` commands.
- 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.
- 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.
- 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 \(PNC Duplication\)](#) on page 1875 of the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (03-300430) (formerly 03-300190)*.

Action/Object	Qualifier	Qualifier Description	Login
<code>reset pnc interchange</code>	<code>override-and-lock</code>	<p>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 <code>set pnc unlock</code>.</p> <p> CAUTION: This option forces execution of the interchange regardless of the standby's state of health, possibly disrupting service.</p>	

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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:
[busyout port](#) on page 474
[clear port](#) on page 475
[display port](#) on page 475
[mark port](#) on page 476
[release port](#) on page 477
[test port](#) on page 477

busyout port

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`busyout port location`

Use `busyout port` to busyout a specified port on a circuit pack.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>busyout port</code>	<code>location</code>	port address (PCSS) marked port: PPSSpp Examples: <code>busyout port 01c1101</code> <code>busyout port 02c1501</code>	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

S8700 series | S8500 | S8400 | S8300

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	Default	Feature Interaction
<code>clear port</code>	<code>location</code>	Port location: <i>PCSSpp</i> Example: <code>clear port 01c1102</code>	init inads cust nms		none

display port

S8700 series | S8500 | S8400 | S8300

`display port location [schedule]`

Use `display port` to see a port's equipment type and identification number.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>display port</code>	<code>location</code>	address of the port Example: <code>display port 1a0502</code> <code>display port 01a05002</code> (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: <ul style="list-style-type: none"> • extension • trunk group number and member number • modem pool group number • IP address of an IP telephone that is in TTI state

mark port

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

mark port *UUCSSpp*

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	Default	Feature Interaction
mark port	<i>UUCSSpp</i>	Location of the port to be marked: <i>PCSSpp</i> Examples: mark port 1c0208 mark port 2a1001	init inads craft		

release port

S8700 series | S8500 | S8400 | S8300

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

S8700 series | S8500 | S8400 | S8300

`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	Feature Interaction
<code>test port</code>	<code>location</code> <code>short</code> <code>long</code> <code>repeat n</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	none



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

S8700 series

See:

[reset port-network](#) on page 478

[status port-network](#) on page 479

reset port-network

S8700 series

```
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 1243 in *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (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	Feature Interaction
<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

S8700 series

```
status port-network [print]
```

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										
Major		Minor	Warning	Carrier	PN Control		Internet Protocol (IP)			
PN Alarms	Alarms	Alarms	Locs	Active	Standby	Connected Port Network				
2	0	4	6	02A	up	up				
				02B						
				02C						
				02D						
TDM Service	Control	Dedicated				TONE/	Service	System	System	
Bus State	Channel	Tones				CLOCK	State	Clock	Tones	
A	in	y	n				02B	in	standby	standby
B	in	n	y				02A	in	active	active
		Service	Major	Minor	Bus	Open				
		PKT State	Alarms	Alarms	Faults	Leads				
		2	in	n	y					

Maintenance SAT Commands

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 Active	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 Active	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	<p>Active and standby (if control network is duplicated) control network status for the specified port network.</p> <p>up = the link between the TN2312 IPSI circuit pack and the server is up</p> <p>down = the link between the TN2312 IPSI circuit pack and the server is down</p> <p>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.</p> <p>up = the EAL and INL are both available</p> <p>down = the EAL and INL are both unavailable</p> <p>near-end = the EAL is available but the INL is unavailable</p> <p>far-end = the INL is available but the EAL is unavailable.</p> <p>When the far-end EAL is unavailable, Tone-Clock, TDM-bus, and packet-bus information are blank.</p> <p>aa = there is a problem with the archangel. The control is up, but the archangel is not functioning and is not available.</p>
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 appears as "UUcSS." "UU" represents the cabinet number, "c" represents the carrier, and "SS" represents the slot position. 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: <ul style="list-style-type: none"> ● Packet bus is out of service and has failed certain maintenance tests ● 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

S8500 | G650

See:
[get power-shutdown](#) on page 484

get power-shutdown

S8500 | G650

`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	Feature Interaction
<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 any Switch Circuit Pack Maintenance permissions	

The following display shows a typical result of `get power-shutdown`.

```
get power-shutdown 01
```

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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[busyout pri-endpoint](#) on page 485

[release pri-endpoint](#) on page 486

[status pri-endpoint](#) on page 486

[test pri-endpoint](#) on page 489

busyout pri-endpoint

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`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
<code>busyout pri-endpoint</code>	<i>location</i>	PRI endpoint extension number Example: <code>busyout pri-endpoint 25012</code>	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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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	Default
<code>release pri-endpoint</code>	<i>extension</i>	extension number associated with desired PRI endpoint.	init inads craft nms	

status pri-endpoint

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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	Default	Feature Interaction
status pri-endpoint	extension	PRI endpoint extension to be displayed (see dial-plan).	init inads craft nms browse		
		Examples: status pri-endpoint 25012 status pri-endpoint 77868			

The following example shows the output for **status pri-endpoint 22501** and assumes the following:

- PRI endpoint ports for extension 22501 are in cabinet 1, carrier B, slot 20, circuit 1 to 6.
- 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).
- Ports 4 and 5 of the specified PRI endpoint are idle.
- 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

Width: 6

Signaling Group ID: 3

B-Channels Active: 3

Originating Auto Restoration? n

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

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.
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.

test pri-endpoint

S8700 series | S8500 | S8400 | S8300

Use `test pr-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	Feature Interaction
test pri-end point	extension	PRI endpoint extension to be tested (must conform to dial-plan)	init inads craft nms	short 1	none
	short long repeat n clear	See Common Input Parameters on page 25. Examples: test pri-endpoint 25012 test pri-endpoint 45002 sh test pri-endpoint 45892 l test pri-endpoint 24389 sh r 4 test pri-endpoint 34899 l r 6 test pri-endpoint 34912 l r 5 schedule test pri-endpoint 93483 r 2 test pri-endpoint 10022 c			

processor-ip-interface

S8700 series | S8500 | S8400 | S8300

See:

[busyout processor-ip-interface](#) on page 490

[status processor-ip-interface](#) on page 490

[release processor-ip-interface](#) on page 491

busyout processor-ip-interface

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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	Default	Feature Interaction
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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

Use **status processor-ip-interface** to see the status of the processor-ip-interface.

Action/Object	Qualifier	Qualifier Description	Login	Default
status processor-ip-interface				

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

status processor-ip-interface	Page 1 of 2
PROCESSOR IP INTERFACE STATUS	
Status: connected	
Enabled: n	
Source IP Address: 192.11.128.148	
Subnet Mask: 255.255.255.0	
Broadcast Address: 0.0.0.0	
Maintenance Busy?: no	
Active Channels: 0	

release processor-ip-interface

S8700 series | S8500 | S8400 | S8300

```
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 [Busyout and Release Commands](#) on page 33.

psa

S8700 series

status psa

S8700 series

```
status psa
```

See [status tti](#) on page 647.

public-unknown-numbering

S8700 series | S8500

[change atm pnc](#) on page 83

[display public-unknown-numbering](#) on page 492

[list atm pnc](#) on page 86

change public-unknown-numbering

S8700 series | S8500

```
change public-unknown-numbering n [ext-digits]
```

Use `change public-unknown-numbering n` 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>	<code>n</code>	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>change public-unknown-numbering 5</code> <code>change 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.

display public-unknown-numbering

[S8700 series](#) | [S8500](#)

`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>	<code>n</code>	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

S8700 series | S8500

```
list public-unknown-numbering start n [ext digits | count]
```

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 n 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
                                Total
                                CPN
Ext  Ext    Trk    CPN
Len  Code   Grp(s) Prefix  Len
  5    4
                                4
```

list public-unknown-numbering field descriptions

Field	Description
CPN Prefix	<p>The number that is added to the beginning of the extension to form a Calling or Connected Number.</p> <ul style="list-style-type: none"> • 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	<p>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.</p>
Ext Len	Number of digits for the extension, as entered on the command line (list public-unknown-numbering n).
Total CPN Len	<p>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.</p>
Trk Grp(s)	<p>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.</p>

registered-ip-stations

S8700 series | S8500 | S8400 | S8300 | G650

See:

[list registered-ip-stations](#) on page 495

list registered-ip-stations

S8700 series | S8500 | S8400 | S8300 | G650

```
list registered-ip-stations [gatekeeper-address xx.xxx.xxx.xxx]
[network -region n]
[product-id xxxxxx] [station-type xxxxxx]
```

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

Action/Object	Qualifier	Qualifier Description	Login	Default
list registered- ip-stations	ext x	extension number of the registered stations		
	type x	administered set type (<i>xxxxxx</i>)		
	id x	the product type (x.yyy) of the registered extension		
	release x	release number of the registered stations		
	region x	the network region of the registered stations		
	port x	the port number of the registered stations		
	gatekeeper x	the CLAN's or processor's IP address (xxx.xxx.xxx.xxx)		
	print	See Common Input Parameters on page 25.		

The following example shows a typical result of **list registered-ip-stations**.

list registered-ip-stations region 10								
REGISTERED IP STATIONS								
Station Ext	Set Type	Product ID	Prod Rel	Station IP Address	Net Rgn	Orig Port	Gatekeeper IP Address	TCP Skt
3030	4624	IP_Phone	1.700	135.9.44.56	10		135.9.44.200	y
3030	4624	IP_Soft	5.000	135.9.44.57	10		135.9.44.200	y
3031	4624	IP_Soft	5.100	135.9.44.58	10		135.9.44.200	n
3032	6408D+	IP_Soft	1.800	135.9.44.57	10	1E0303	135.9.44.200	n
3033	console	IP_eCons	1.500	135.9.44.57	10		135.9.44.200	y
3034	606A1	IP_Agent	1.800	135.9.44.57	10		135.9.44.200	y
3035	8410D	IP_ROMax	1.100	135.9.44.58	10		135.9.44.200	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	Station extension number
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 CLAN or processor IP address or port location.
Net Rgn	Network region number assigned to the endpoint.
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.
1 of 2	

list registered-ip-stations 2 of 2

Field	Description
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
2 of 2	

release

S8700 series | [S8500](#) | [S8400](#) | [S8300](#)

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>UUCSS 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 UUCSSpp 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

S8700 series | S8500 | S8400 | S8300

See:
[status remote-access](#) on page 498

status remote-access

S8700 series | S8500 | S8400 | S8300

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 1 of 2

Field	Description
Remote Access Status	Indicates if the feature is enabled or not.
Barrier Code	
Date Modified	
Expiration Date	
1 of 2	

status remote-access field descriptions 2 of 2

Field	Description
No. of Calls	
Calls Used	
Status	
Date/Time Expired	
Cause	Reason for the expiration
2 of 2	

remote-office

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[add remote-office](#) on page 499

[change remote-office](#) on page 500

[list remote-office](#) on page 501

[display remote-office](#) on page 501

[remove remote-office](#) on page 502

[status remote-office](#) on page 502

add remote-office

[S8700 series](#)

`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
<code>add remote-office</code>	<code>nn</code>	The number assigned to the remote office.		

The following example shows the screen for `add remote-office`.

<code>add remote-office n</code>	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 form 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

S8700 series

`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 499 for screen and field information.

display remote-office

S8700 series

`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	Login	Default
<code>display remote-office</code>	<code>print schedule</code>	See Common Input Parameters on page 25.		

See [add remote-office](#) on page 499 for screen and field information.

list remote-office

S8700 series

`list remote-office [print | 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
<code>list remote-office</code>	<code>print schedule</code>	See Common Input Parameters on page 25.		

The following example shows the screen from `list remote-office`.

<code>list remote-office</code>					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

S8700 series

remove remote-office nn

Use **remove remote-office nn** to remove a specific remote office from your system. See [add remote-office](#) on page 499 for screen and field information.

status remote-office

S8700 series | S8500 | S8400 | S8300

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

S8700 series

See:

[refresh route-table](#) on page 503

refresh route-table

S8700 series

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 CLAN 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 CLAN circuit packs. Refreshes ip-route tables in a specific CLAN circuit pack (CCcss).	init inads craft station trunk MSP permissions	<i>all</i>

Maintenance SAT Commands

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 (CLAN) route tables
Number of Routes Added	The number of routes that were added from the TN799DP (CLAN) route tables

security violations

S8700 series | [S8500](#) | [S8400](#) | [S8300](#)

See:

[monitor security violations](#) on page 505

monitor security violations

S8700 series | [S8500](#) | [S8400](#) | [S8300](#)

`monitor security-violations [print]`

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	Default	Feature Interaction
<code>monitor security-violations</code>	<code>print</code>	See Common Input Parameters on page 25.	init inads craft cust rcust bcms browse	none	

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).

set-data

S8700 series

See:7

[list set-data](#) on page 507

list set-data

S8700 series

```
list set-data [print | schedule]
```

Use `list set-data` to see phone information administered from the **Site Data** and **Station** screens.

Action/Object	Qualifier	Qualifier Description	Login
<code>list set-data</code>	<code>print</code> <code>schedule</code>	See Common Input Parameters on page 25.	

The following example shows the screen from `list set-data`.

list set-data		SET DATA					
		Building			Speaker		
		Floor	Cable	Color/	Headset	Set	
Ext	Name	Room	Jack	Cord Len	Mounting	Type	
-----	----	-----	-----	-----	-----	-----	
4000	sdfsd				n	H.323	
				0	n		
				d			
4001	793 Analog 1				n	2500+	
				0	n		
				d			

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
1 of 2	

list set-data field descriptions 2 of 2

Field	Description
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
Mounting	desk or wall
Set Type	type of phone
2 of 2	

shell

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[go shell](#) on page 508

go shell

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`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 Jul 24 13:24:30 MST 2002
Enter your terminal type (i.e., xterm, vt100, etc.) [vt100]=>vt100
31516: old priority 0, new priority 0
craft@server1>

```

signaling-group

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[display signaling-group](#) on page 509

[list signaling-group](#) on page 513

[set signaling-group](#) on page 515

[status signaling-group](#) on page 515

[test signaling-group](#) on page 517

display signaling-group

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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
<code>display signaling-group</code>	<code>xx</code>	number of signaling group to display Example: <code>display signaling-group 4</code>	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  Max number of NCA TSC: 4
Remote Office? n                                     Max number of CA TSC: 4
                                                Trunk Group for NCA TSC: 4

Trunk Group for Channel Selection: 4
Supplementary Service Protocol: a
T303 Timer (sec):

Near-end Node Name:  jb_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)
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
1 of 3	

display signaling-group field descriptions 2 of 3

Field	Description
Supplementary Service Protocol	<p>This field appears only when trunk Group Type is ISDN.</p> <p>a = AT&T Customer Supplementary Services, when Country Code is 1A on the DS1 screen.</p> <p>a = Bellcore Supplementary Services when Country Code is 1B on the DS1 screen</p> <p>a = Nortel Proprietary Supplementary Services when Country Code is 1C on the DS1 screen.</p> <p>b = ISO Q SIT</p> <p>c = ETSI</p> <p>d = ECMA QSIG</p> <p>e allows DCS with rerouting, when DCS with Rerouting is y, and Used for DCS on the trunk group screen is y.</p> <p>f = Feature Plus</p> <p>g = ANSI.</p>
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.
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	<p>n when the far-end PBX uses a Communication Manager server</p> <p>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</p>
RRQ Required	<p>y when the signaling group serves a remote office (gateway)</p> <p>n when the signaling group serves a gatekeeper</p>
2 of 3	

display signaling-group field descriptions 3 of 3

Field	Description
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.
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

ADMINISTERED NCA TSC ASSIGNMENT

Page 2 of 5

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

S8700 series | **S8500** | **S8400** | **S8300**

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	FAS?	No. Trunk Brds	Primary D-Channel	Secondary D-Channel	Max NCA	TSCs	Max NCA	No. 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)
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.
1 of 2	

list signaling-group field descriptions 2 of 2

Field	Description
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

S8700 series

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	<i>group#</i>	The number assigned to the signaling group.		

status signaling-group

S8700 series | S8500 | S8400 | S8300

status signaling-group *group#* [**print**]

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> print	The administered number associated with each signaling group. See Common Input Parameters on page 25.		

Maintenance SAT Commands

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 1457 in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (03-300430) (formerly 03-300190)</i> for more information about group types. <ul style="list-style-type: none">● 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	<p>State of the primary or secondary D-channels:</p> <p>in-service: the D-channel is in the multiple-frame-established state at layer 2 carrying normal call-control signaling at layer 3.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>no-link: no link is administered for the D-channel</p>
2 of 2	

test signaling-group

S8700 series | S8500 | S8400 | S8300

```
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 515 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>	<code>group identifier</code>	The station extension (must conform to dial-plan) See Common Input Parameters on page 25.	init inads craft	short 1
	<code>short</code> <code>long</code> <code>repeat n</code> <code>clear</code>	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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[list skill-status](#) on page 518

list skill-status

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

```
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>	<code>starting-number xx</code> <code>count num-groups yy</code>	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 S O W A A P S O	C S C T P Q	D D D	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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[monitor socket-usage](#) on page 521

[status socket-usage](#) on page 521

monitor socket-usage

S8700 series | [S8500](#) | [S8400](#) | [S8300](#)

`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 periodical updated until the user cancels out of the command.

Action/Object	Qualifier	Qualifier Description
<code>monitor socket-usage</code>		

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

S8700 series | [S8500](#) | [S8400](#) | [S8300](#)

`status socket-usage`

Use `status socket-usage` to show a snapshot of the individual socket usage for each CLAN or Processor Ethernet information, 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

`Status socket-usage` replaces `status clan-usage`.

Action/Object	Qualifier	Qualifier Description
<code>status socket-usage</code>	<code>print schedule</code>	See Common Input Parameters on page 25

The following example shows the output for **status socket-usage**.

status socket-usage									
CLAN AND PROCESSOR ETHERNET SOCKET USAGE									
Total Registered IP Endpoints: 20									
Registered IP Endpoints With TCP Signaling Socket Established: 10									
Total Socket Usage: 00010/03700									
Intf	Board		Socket	Net		Intf	Board		Socket
Type	Loc	Sfx	Usage	Rgn		Type	Loc	Sfx	Usage
									Net
									Rgn
procr			003/2500	6		CLAN	02A09	D	007/400
CLAN	03A04	D	000/400	2		CLAN	03A05	D	000/400
									1
									2

status socket-usage field descriptions

status socket-usage field descriptions

Field	Description
Intf Type	Type of interface.S CLAN = TN799 circuit pack procr = Processor Ethernet circuit pack
Loc	The cabinet/carrier/slot location of the CLAN 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 CLAN 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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[busyout sp-link](#) on page 523

[release sp-link](#) on page 523

[status sp-link](#) on page 524

[test sp-link](#) on page 524

busyout sp-link

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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 374 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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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 374 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release sp-link			init inads craft		

status sp-link

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`status sp-link [print]`

Use `status sp-link` to see a summary of the operational state of the system printer link.

See [status link](#) on page 374 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: <ul style="list-style-type: none">● up — A call is currently set up to the system printer.● down — The link is administered but a call is not currently set up to the printer.● 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

S8700 series | S8500 | S8400 | S8300

`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 466 for more information. See [status link](#) on page 374 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>test sp-link</code>	<code>short</code> <code>long</code> <code>schedule</code>	See Common Input Parameters on page 25.	init inads craft	short	none
		Examples: <code>test sp-link</code> <code>test sp-link sh</code> <code>test sp-link l</code> <code>test sp-link schedule</code> <code>test sp-link sh sch</code>			

ssh-keys

[S8700 series](#) | [S8500](#)

See:

[reset ssh-keys](#)

reset ssh-keys

[S8700 series](#) | [S8500](#)

`reset ssh-keys board location`

Use `reset ssh-keys board` (SAT command) to generate new SSH dynamic host keys on CLAN 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 CLAN and VAL circuit packs.

Action/Object	Qualifier	Qualifier Description	Login
<code>reset ssh-keys board</code>	<code>location</code>	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.
- If not, there is a security issue, and the technician should notify the appropriate personnel.

station

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[add station](#) on page 527

[busyout station](#) on page 529

[change station](#) on page 529

[list station](#) on page 530

[list trace station](#) on page 623

[release station](#) on page 531

[status station](#) on page 532

[test station](#) on page 549

add station

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`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)*.

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?	

Maintenance SAT Commands

add station 2000

Page2 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

Bridged Call Alerting? n

Restrict Last Appearance? y

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

Coverage After Forwarding? _

Recall Rotary Digit? n

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

Page3 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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

busyout station extension

Use **busyout station** to busyout an installed or uninstalled station extension.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
busyout station	extension	Extension number per dial plan Example: busyout station 12345	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

[S8700 series](#) |

change station extension

See [add station](#) on page 527 for examples of the Station screen. For field descriptions, see *Administrator Guide for Avaya Communication Manager (03-300509)*.

list station

S8700 series | S8500 | S8400 | S8300

```
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 x	first extension in the list		
	to-ext x	last extension in the list		
	port x	port number Shows IP Telephone port when IP Softphone and IP Telephone are in shared control.		
	type x	type of station		
	count n	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	091V303	Thorsten Analog				1			
2500			no			1			
40001	03B0601	Thorsten Analog Sim	Trunk			1			
2500			no			1			
40002	091V203	Thor DCP				1			
6408D+			no			1			
40010	S02976	Ext. 40010				1			
4620			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	01A0301	Digital a0301			1	1			
6402D			always						

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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

`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	Default	Feature Interaction
<code>release station</code>	<code>extension</code>	Extension number See your company's dial-plan	init inads craft cust		none

status station

S8700 series | S8500 | S8400 | S8300 | G650

`status station extension [print]`

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 print	Station extension (per dial plan) See Common Input Parameters on page 25.	init inads craft cust browse	
		Examples: status station 30001 status station 83277 print		

status station, page 1, GENERAL STATUS and HOSPITALITY STATUS

The following example shows the output for `status station 30001`.

status station 30001		page 1 of x	
		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		CF Destination Ext:	
Active Coverage Option: 1		Service Link Ext: 93035389077	
Service Link Port: 05D1621		Shd TCP Signal Status:	
Softphone Port: S00013		Off-PBX Service State:	
Softphone Signaling:			
EC 500 Status:			
Message Waiting:			
Connected Ports:			
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, GENERAL STATUS and HOSPITALITY STATUS

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
CF Destination Ext	Call forwarding destination extension, if any. <ul style="list-style-type: none"> • blank when Extension to Cellular is enabled • appears for mapped extensions when Extension to Cellular is disabled
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 <ul style="list-style-type: none"> • none • total • stat-stat • outward • terminate
Message Waiting	Whether there is a message waiting for the station. <ul style="list-style-type: none"> • AUDIX • PMS • blank if no messages are waiting
1 of 4	

status station field descriptions, GENERAL STATUS and HOSPITALITY STATUS 2 of 4

Field	Description
Off-PBX Service State	<ul style="list-style-type: none"> ● active = there is an OPTIM call at the station ● idle = there is no OPTIM call at the station
Parameter Download	<p>Current status of downloading terminal parameter information</p> <ul style="list-style-type: none"> ● 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	<p>State of the telephone endpoint</p> <ul style="list-style-type: none"> ● 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:	<p>Indicates whether a TCP signaling channel is established for the endpoint on a shared control connection. Appears only for IP Telephones and Softphones.</p> <ul style="list-style-type: none"> ● 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
Softphone Signaling	
Softphone Port	The port for the softphone controlling an IP telephone.
TCP Signal Status	<p>Indicates whether a TCP signaling channel is established for the endpoint. Appears only for IP Telephones and Softphones.</p> <ul style="list-style-type: none"> ● 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
User Cntrl Restr	<p>One or two of the following</p> <ul style="list-style-type: none"> ● 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
3 of 4	

status station field descriptions, GENERAL STATUS and HOSPITALITY STATUS 4 of 4

Field	Description
Group DND	activated/not activated Status of group Do Not Disturb
Room Status	Whether a room is occupied or not <ul style="list-style-type: none"> • non-guest room • vacant • occupied
4 of 4	

status station, page 2, CONNECTED STATION INFORMATION and UNICODE DISPLAY INFORMATION

Page 2 status station displays the part ID of the station for status station, if available.

status station 30001	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:N/A	
Display Message Scripts:0x08000001:latn;ChiS	
Station Supported Scripts:0x000801b7:Latn;Lat1;LatA;Grek;Cyrl;Hebr;Arab...	

status station field descriptions, CONNECTED STATION INFORMATION and UNICODE DISPLAY INFORMATION**status station field descriptions, CONNECTED STATION INFORMATION and UNICODE DISPLAY INFORMATION 1 of 2**

Field	Description
GENERAL STATUS	
CONNECTED STATION INFORMATION	
1 of 2	

status station field descriptions, CONNECTED STATION INFORMATION and UNICODE DISPLAY INFORMATION 2 of 2

Field	Description
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.
Serial Number	Serial number of the telephone. <ul style="list-style-type: none"> • 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.
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.
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	CF Destination Ext:
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, GENERAL STATUS and HOSPITALITY STATUS](#) on page 533.

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, CONNECTED STATION INFORMATION and UNICODE DISPLAY INFORMATION](#) on page 536.

status station, CALL CONTROL SIGNALING and AUDIO CHANNEL, for an IP call

status station 70103

Page 3 of x

CALL CONTROL SIGNALING

Port:S00588

Switch

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

Shared Port:S00011

Switch

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

status station 70103

Page x of x

AUDIO CHANNEL

Port: S00588

Switch

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

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 CLAN board location serving the switch end of the IP signaling link. The port number is always 17 for the "ethernet" port of the CLAN. 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 CLAN 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. <ul style="list-style-type: none"> ● 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. <ul style="list-style-type: none"> ● 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	<p>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.</p> <p>Value is one of the 30 allowed product IDs administered on the system-parameters customer-options screen, including:</p> <ul style="list-style-type: none"> ● IP_Tel - IP Telephone ● IP_Soft - IP Softphone ● IP_eCons - An IP soft console ● IP_Agent - An IP soft agent phone ● IP_ROMax - A remote office phone
H.245 Tunneled in Q.931	<p>y = H.245 is contained within Q.931, and H.245 fields do not appear. Does not apply to IP SoftPhone endpoints.</p> <p>This field appears in the second column of the screen when the Shared Port field is populated.</p>
Registration Status	<p>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.</p> <ul style="list-style-type: none"> ● unregistered (H.323 station only) — the endpoint is unregistered ● 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). ● authenticated-not-registered (H.323 station only) — the endpoint has been authorized (by the associated IP SoftPhone), but is not yet registered ● registered-authenticated — the endpoint is registered and authenticated (for example, an IP station that is able to make calls) ● 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	<p>The Media Access Control (MAC) address received from the phone when the phone registers.</p> <p>This field appears in the second column of the screen when the Shared Port field is populated.</p> <ul style="list-style-type: none"> ● not available - the phone registers but is unable to send a MAC address ● blank - the phone is not registered.
Native NAT Address	<p>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.</p> <p>This field appears in the second column of the screen when the Shared Port field is populated.</p>
ALG - NAT WAN IP address	This field is populated only when a special application turned on.
Media Encryption	<p>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%.</p> <p>aea indicates Avaya Encryption Algorithm. Not as secure as AES.</p> <p>none indicates an unencrypted media stream.</p>
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			

test station

S8700 series | S8500 | S8400 | S8300

`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	Feature Interaction
<code>test station</code>	<code>extension</code>	The station extension (per dial-plan) See Common Input Parameters on page 25.	init inads craft cust nms	short 1	none
	<code>short</code> <code>long</code> <code>repeat n</code> <code>clear</code>	Examples: <code>test station 81709 l</code> <code>test station 85136 s r 2</code> <code>test station 85036 l r 25</code> <code>test station 84297 r 4</code> <code>test station 81709 c</code>			



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.

suspend-alm-orig

S8700 series | S8500 | S8400 | S8300 | G700

See:

[disable suspend-alm-orig](#) on page 549

[enable suspend-alm-orig](#) on page 550

[list suspend-alm-orig](#) on page 551

disable suspend-alm-orig

S8700 series | S8500 | S8400 | S8300 | G700

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
<code>disable suspend-alm-orig</code>	board location	Physical location of the replaced or corrected board (does not support port location)	init inads craft cust rcust	
		Examples: <code>disable suspend-alm-orig 1C03</code> <code>disable suspend-alm-orig 1E07</code>		

enable suspend-alm-orig

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#) | [G700](#)

`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 (*UUCSS*) or port (*UUCSSpp*) 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:

- Quieting a hyperactive port board during installation or troubleshooting.
- 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.
- 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.
- 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
<code>enable suspend-alm-orig</code>	<code>board/port location</code> <code>off-board-only</code> <code>expires-in-hrs</code>	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: <code>enable suspend-alm-orig 1B03 expires-in-hrs 3</code> <code>enable suspend-alm-orig 1B0701 expires-in-hrs 72</code> <code>enable suspend-alm-orig 1B07 off-board-only expires-in-hrs 24</code>		

list suspend-alm-orig

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#) | [G700](#)

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
<code>list suspend-alm-orig</code>			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

S8700 MC

See:
[status switch-node](#) on page 552

status switch-node

S8700 MC

`status switch-node SN# [print]`

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	Login	Default	Feature Interaction
<code>status switch-node</code>	<code>SN#</code> <code>print</code>	Normally switch node 1 resides in the PN cabinet, and switch node 2, if present, resides in the nearest PN cabinet. See Common Input Parameters on page 25.		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

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	<i>UUcSS</i> : the physical location of the switch node carrier <ul style="list-style-type: none"> • A high-reliability system shows one switch node location. • A critical-reliability shows the active and standby switch node locations.
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	<i>UUcSS</i> : the physical location of the standby switch node Clock circuit pack no board if an SNC is administered but not inserted
Standby SNC Location	<i>UUcSS</i> : 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

switch-node clock

S8700 MC

See:

[set switch-node-clock](#) on page 554

set switch-node-clock

S8700 MC

```
set switch-node-clock UUCSS [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
<code>set switch-node-clock</code>	<i>override</i>	Set the active switch node clock regardless of the health of the standby SNC circuit pack.		

synchronization

S8700 series | S8500

See:

[change synchronization](#) on page 555

[display synchronization](#) on page 557

[list synchronization](#) on page 560

[set synchronization](#) on page 5624

[status synchronization](#) on page 563

[test synchronization](#) on page 565

change synchronization

[S8700 series](#) | [S8500](#)

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	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	inads craft cust rcust bcms	
	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

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

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 <ul style="list-style-type: none"> ● 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.
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)

display synchronization

S8700 series | **S8500**

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.

Maintenance SAT Commands

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 craft cust rcust bcms browse		
	port network n	display the PN number entered			
	schedule	See Common Input Parameters on page 25.			

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				
02A08	DS1	Gert<>ST13	y				
NOTE: DS1 and BRI TRUNK sources result in stratum 4, type II synchronization							

This is an example of **display synchronization css**.

display synchronization css

SYNCHRONIZATION PLAN

SYNCHRONIZATION SOURCE (circuit pack location)

Stratum: 4

Primary: 02A08Secondary:

CIRCUIT PACKS AVAILABLE FOR SYNCHRONIZATION

Location	Type	Name	Slip	Location	Type	Name
02A05	DS1	Gert Loop 415	y			
02A08	DS1	Gert<>ST13	y			

NOTE: DS1 and BRI TRUNK sources result in stratum 4, type II synchronization

Page 1 of 2

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

S8700 series

`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
<code>list synchronization</code>	<code>schedule</code>	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

S8700 series

set synchronization location [print]

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> <i>print</i>	Specifies the physical position of the synchronization-capable circuit pack that supplies a reference for synchronization. See Common Input Parameters on page 25.

status synchronization

S8700 series | S8500

```
status synchronization [ atm | css | port network <n> | all ] [print]
```

Use **status synchronization** to see the current synchronization reference.

Synchronization can be established for:

- Fiber-PNCs, established through the server-connected PN, in a direct, CSS, or ATM network.
- 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 print	status of ATM-connected PNs status of CSS-connected PNs status of the PN number status for all PNs See Common Input Parameters on page 25.	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

Maintenance SAT Commands

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: <ul style="list-style-type: none">• 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

S8700 series | S8500

```
test synchronization [ atm | css | port network <n> | all ] [print]
```

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
- Els
- 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 css port network n all print	check ATM-connected PNs check CSS-connected PNs check the PN number check all PNs See Common Input Parameters on page 25.	init inads craft cust super-user	all

test synchronization field descriptions

test synchronization field descriptions 1 of 2

Field	Description
Port	<ul style="list-style-type: none"> ● port network number ● ATM ● CSS
Maintenance Name	ATM-SYNC = ATM port networks Sync = CSS port networks or IP-PNCs
Alt Name	blank
1 of 2	

test synchronization field descriptions 2 of 2

Field	Description
Test No.	The test number, 417, associated with the synchronization test
Error Code	The maintenance error code if the test fails.
2 of 2	

synchronization-switch

[S8700 series](#) | [S8500](#)

See:

[disable synchronization-switch](#) on page 566

[enable synchronization-switch](#) on page 567

disable synchronization-switch

[S8700 series](#) | [S8500](#)

`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
<code>disable synchronization-switch</code>	<code>all</code> <code>css</code> <code>port network n</code>	disable all PN disable CSS-connected PNs disable the PN number entered	init inads craft	

enable synchronization-switch

S8700 series | S8500 | S8400 | S8300

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, and SPE-resident 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 2170 in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (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

S8700 series | S8500 | S8400 | S8300

See:

[list sys-link](#) on page 568

[status sys-link](#) on page 570

[test sys-link](#) on page 574

list sys-link

S8700 series | S8500 | S8400 | S8300

list sys-link [**print** | **schedule**]

Use **list sys-link** to see every system link. Each link's location, type and channel number, state, current path status, faulted path status, and last recorded fault (if any) are displayed. See [SYS-LINK \(System Links\)](#) on page 2203 in *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (03-300430) (formerly 03-300190)* for details. See [status link](#) on page 374 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list sys-link	print 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	Link Type/ Channel	State	Current Path	Faulted Path	Last Fault Recorded	
01A0001	EAL	up	present	none		
01B0101	EAL	up	present	present	03/12/2002 17:11	
02A0001	EAL	up	present	none		
02B0101	EAL	up	present	present	03/12/2002 17:11	
03A0001	EAL	up	present	none		
03B0101	EAL	up	present	present	03/12/2002 17:11	
04A0101	EAL	up	present	none		
04B0201	EAL	up	present	none		
05A0001	EAL	up	present	none		
05B0101	EAL	up	present	present	03/12/2002 17:11	
06A0001	EAL	up	present	none		
06B0101	EAL	up	present	present	03/12/2002 17:11	
07A0001	EAL	up	present	none		
07B0101	EAL	up	present	present	03/12/2002 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	Link Type/ Channel	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 1 of 2

Field	Description
Location	The physical location of the far endpoint associated with the system link (cabinet-carrier-slot-circuit).
Link Type/ Channel	The type of system-link and the processor channel number of the link (if there is one). System links include the following (see SYNC (Port-Network Synchronization) on page 2170 in the <i>Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x</i> , (03-300430) (formerly 03-300190): Expansion Archangel Links (EAL), Indirect Neighbor Links (INL), Processor Gate Control links (PGC), PRI signaling links (PRI), System Port links (SAP), Remote Neighbor links (RNL), Local Neighbor links (LNL).
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.
1 of 2	

list sys-link field descriptions 2 of 2

Field	Description
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.
2 of 2	

status sys-link

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

status sys-link *UUCSSpp* [channel] [print]

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 channel, 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 374 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default
status sys-link	<i>UUCSSpp</i> PCSSpp channel print	The location of the port associated with the link. The processor channel number associated with an X.25 link to an adjunct or another switch. See Common Input Parameters on page 25. Example: status sys-link 1e0201		

The following display shows a typical result for **status sys-link 8a02**.

status sys-link 8a02						Page 1 of 2		
Location: 08A0201			Type/Chan: EAL			Alarms: none		
Current Path: present			State: up			Time Up: 03/20/2002 15:49		
Faulted Path: none			Last Fault:					
Current Hardware Path								
Maintenance			Maintenance					
Location	Name	Alarms	Location	Name	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/Chan: BFDL	Alarms: none		
Current Path: present		State: up	Time Up: 03/12/2002 17:12		
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 SPE A

Location: 02A0101      Type/Chan: EAL      Alarms: none
Current Path: present   State: up      Time Up: 11/12/2000 10:48
Faulted Path: present   Last Fault: 11/17/2000 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 SPE A		
Location: 02A0101		Type/Chan: EAL	Alarms: none		
Current Path: present		State: up	Time Up: 11/12/2000 10:48		
Faulted Path: present			Last Fault: 11/17/2000 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			

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	The type of system link as follows: <ul style="list-style-type: none"> ● EAL—Expansion archangel link ● INL—Indirect neighbor link (center stage switch) ● PRI—ISDN-PRI signaling link ● BFD—Bearer fault detection link ● ACL—ATM control link ● TACL—Trunk ATM control link ● RSCL—Remote socket control link
Alarms	The highest level of alarm currently logged against the components making up the link.
Current Path	The operational status of the current path: <ul style="list-style-type: none"> ● 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: <ul style="list-style-type: none"> ● 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

S8700 series | [S8500](#) | [S8400](#) | [S8300](#)

```
test sys-link UUCSSpp [channel# ] [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 374 for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default
test sys-link	location UUCSSpp current faulted short long repeat n clear	Port location associated with the system link. Current hardware path tested 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

S8700 series | S8500 | S8400 | S8300

See:

[monitor system](#) on page 575

[reset system](#) on page 580

[status system](#) on page 581

monitor system

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`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	Default	Feature Interaction
<code>monitor system</code>		Example: <code>monitor system view1</code> <code>monitor system view2</code> <code>monitor system conn</code> <code>monitor system conn</code> <code>pnn 1 5 7</code>	<code>system</code> <code>technician</code> <code>inads</code> <code>cust</code> <code>init</code> <code>nms</code> <code>browse</code>		
	<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>connect ion</code>	show the connection monitor output for key information			
	<code>conn</code> <code>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
      ATTENDANT STATUS                                MAINTENANCE STATUS

      Console no.                                     # of alarms for trunks:  4
Activated:  1 2 3 4 5 6                             # of alarms for stations: 2
Deactivated: 7 8                                     # of alarms for other res: 1
                                                    First OSS number has been informed? n

      TRAFFIC STATUS
      Measurement Hour: 1800

      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 WED MAR 6 1996
```


The following is an example of **monitor system view2**.

```

monitor system view2
      ATTENDANT STATUS                                MAINTENANCE STATUS

      Console no.                                     # of alarms for trunks:  4
Activated:  1 2 3 4 5 6                               # of alarms for stations: 2
Deactivated: 7 8                                       # of alarms for other res: 1
First OSS number has been informed? n

TRAFFIC STATUS Measurement Hour: 1800
      Trunk Group Measurement
(4 grps with highest %time ATB)
      Grp no: 78
      Grp dir:
Calls qued: 1
      %Out blkq:
      %Time ATB:
      Attendant Group Measurement
Calls qued: 1      Calls aban: 0

16:08 WED MAR 6 1996

```

monitor system view1 and monitor system view2 field descriptions

monitor system view1 and monitor system view2 field descriptions 1 of 2

Field	Description
Console #	Console numbers that are activated or deactivated.
Activated	The attendant console is in service (its handset/headset is plugged in, it is not busied out, and the system is in day service and the console is a day or day/night or principle console, or the system is in night service and the console is a night or day/night console)
Deactivated	The attendant console is not in service.
# of alarms for trunks	The number of existing minor and major alarms on trunk ports.
# 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 .
1 of 2	

monitor system view1 and monitor system view2 field descriptions 2 of 2

Field	Description
Measurement Hour	The starting time of the period for which the measurement was taken. For example, if the measurement hour is shown as 1800, 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

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.
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-TN 748 TTRs	Number of currently active touch-tone receivers requested on the TN748 circuit pack.
Requests-TN 748 CPTRs	Number of currently active call progress tone receivers requested on the TN748 circuit pack.
Requests-TN 744 CPTRs	Number of currently active call progress tone receivers requested on the TN744 circuit pack.
Requests-TN 744 TTRs	Number of currently active touch-tone receivers requested on the TN744 circuit pack.
Requests-TN 744 MFC	Number of currently active multifrequency receivers requested on the TN744 circuit pack.

reset system

S8700 series | S8500 | S8400 | S8300

`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:

- beginning with the corresponding vector bit set, a core dump is written to memory card, only if the memory card is the special core dump card
- the vector is cleared
- 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:

- A PNC interchange is already in progress.
- A change in translation administration is in progress.

Action/ Object	Qualifier	Qualifier Description	Login	Feature Interaction
<code>reset system</code>	<code>Level</code> 1 2 4	1 = Warm Restart 2 = Cold 2 3 = Reboot (G3 systems only) 4 = Reboot 5 = Reboot (G3 systems only) See Table 37: Approximate Recovery Time for S8700 series System Resets (min:sec) System reset times differ between different configurations. on page 581. Example: <code>reset system 1</code>	init inads craft	see reset system Feature Interactions on page 581

Table 37: 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

- **reset** invokes system initialization like low-level maintenance. Software never escalates requested reset levels; technicians determine the levels.
- Two hardware switches are associated with active SPEs. These hardware switches override demand maintenance activities requested by system technicians.

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.

status system

S8700 series | S8500

Use **status system** to see the status, mode, and operational attributes of the SPE(s), TDM and Packet busses, tone-clock circuit pack(s), and emergency transfer switch of single or all cabinets in the system.

CAUTION:

The purpose of this command is to provide general information about the cabinet status. This information may not display correctly when the cabinet is in a transient period. In this case, wait for 1 minute and enter the command again.

Action/Object	Qualifier	Qualifier Description	Login	Default
status system	cabinet	1st-cabinet: PPN Examples: status system 1st-cabinet status system all-cabinets	init inads craft cust rcust bcms browse	none

The following example shows the output from **status system all-cabinets**.

status system all-cabinets					Page 1 of 3					SPE B			
SYSTEM STATUS CABINET 1													
SPE MODE		SELECT SWITCH		SPE ALARMS MAJOR MINOR		TONE/CLOCK		SERVICE STATE		SYSTEM CLOCK		SYSTEM TONE	
1A active				0 2		1A		in		active		active	
TDM STATE		SERVICE CONTROL CHANNEL		DEDICATED TONES		PKT		SERVICE STATE		BUS ALARMS MAJOR MINOR		BUS OPEN BUS FAULTS LEADS	
1A in		y		n		1		in		n n			
1B in		n		y									
EMERGENCY TRANSFER		SELECT SWITCH		EXP-LINK		SERVICE STATE		MODE		CABINET TYPE			
1A		auto-off		-						CMC 1B			

status system field descriptions

status system field descriptions 1 of 4

Field	Description
SPE	Switch Process Element (SPE) identifier (1A or 1B)
MODE	SPE modes are different for simplex systems than for duplicated systems. See SPE Modes section that follows.
SELECT SWITCH	SPE select switch position: <ul style="list-style-type: none"> ● auto: the switch is in the middle position and automatically switches SPE depending upon conditions. ● <blank> always appears for the 1A SPE in a simplex system.
PE ALARMS MAJOR	Number of Major alarms associated with the SPE complex that affect the fault severity level of this SPE.
SPE ALARMS MINOR	Number of Minor alarms associated with the SPE complex that affect the fault severity level of this SPE.
TONE/CLOCK	Location of the tone-clock circuit pack (1A and 1B).
1 of 4	

status system field descriptions 2 of 4

Field	Description
SERVICE STATE	<ul style="list-style-type: none"> ● in: Tone-Clock is installed and is in-service. ● out: Tone-Clock failed certain maintenance tests and has been removed from service. ● <blank> In simplex systems there is no B-carrier Tone-Clock, and this field displays blank.
SYSTEM CLOCK	<p>Shows which Tone-Clock supplies the system clock for the cabinet displayed:</p> <ul style="list-style-type: none"> ● active: Tone-Clock active and supplying system clock. ● down: Tone-Clock failed some maintenance activity and cannot supply the system clock for this cabinet. ● <blank> If simplex, then the 1B Tone-Clock for the PPN displays blank; if no EPN, then both the 1A and 1B Tone-Clock for this EPN display blank.
SYSTEM TONE	<p>Shows which Tone-Clock circuit pack supplies the system tones for the cabinet being displayed.</p> <ul style="list-style-type: none"> ● active: Tone-Clock active and supplying system tones. ● down: Tone-Clock failed some maintenance activity and cannot supply the system tones for this cabinet. ● <blank> If simplex, then the 1B Tone-Clock for the PPN displays blank. If the system does not have an EPN, then both the 1A and 1B Tone-Clock for this EPN display blank.
TDM	The TDM Bus identifier (1A and 1B)
SERVICE STATE	<p>Operational state of the TDM Bus circuit pack:</p> <ul style="list-style-type: none"> ● in: TDM Bus installed and is in-service. ● out: TDM Bus failed certain maintenance tests and has been removed from service.
CONTROL CHANNEL	y/n The control channel is on this TDM Bus
DEDICATED TONES	y/n The dedicated tones are on this TDM Bus
PKT	Packet Bus identifier (1). Refer to Packet Bus Maintenance descriptions for more information.
2 of 4	

status system field descriptions 3 of 4

Field	Description
SERVICE STATE	<p>The operational state of the Packet Buses:</p> <ul style="list-style-type: none"> ● in: Packet Bus in-service and operating normally. ● out: Packet Bus failed certain maintenance tests and has been removed from service. ● <blank> System does not have the Packet Bus feature.
BUS ALARMS MAJOR	y/n Major alarms exist for packet bus components
BUS ALARMS MINOR	y/n Minor alarms exist for packet bus components
BUS FAULTS	<p>Number of faulty bus leads (defined as shorted to another lead, stuck at some value, or an open lead: 0 - 24). This field may take on any integer between 0 and 24. This field displays blank if:</p> <ul style="list-style-type: none"> ● Maintenance/Test circuit pack not present. ● Packet Bus port of the Maintenance/Test circuit pack has been taken out-of-service. ● System does not have the Packet Bus feature.
OPEN BUS LEADS	<p>Number of open bus leads between the Maintenance/Test circuit pack and bus terminator (0 - 24). This could mean physical damage to the backplane or its connectors or a missing bus terminator. This field displays blank if:</p> <ul style="list-style-type: none"> ● Maintenance/Test circuit pack is not present. ● System does not have the Packet Bus feature.
EMERGENCY TRANSFER	Location of the Processor or EPN Maintenance circuit pack containing the Emergency Transfer Select Switch (1A and 1B)
3 of 4	

status system field descriptions 4 of 4

Field	Description
SELECT SWITCH	<p>Emergency Transfer Switch position on the Processor(s) or the EPN maintenance circuit pack and the state of Emergency Transfer in the cabinet display:</p> <ul style="list-style-type: none"> ● on: Designated analog phones in this cabinet are cut through to CO trunk lines only in an emergency situation. ● off: Emergency Transfer is off and cannot be invoked. The switch should only be in this state when a service technician is on site. ● auto-on: The switch is in the or auto position, however, because of a serious system fault, system software has invoked Emergency Transfer. ● auto-off: Switch in the auto position; because system has no serious faults, system software has not invoked Emergency Transfer. ● <blank> If the system is Simplex, then the 1B Emergency Transfer indication for the PPN will display a blank. If the system does not have an EPN, then both the 1A and 1B Emergency Transfer indications for the EPN will display a blank.
EXP-LINK	The Expansion Link does not exist in the system; a dash (-) appears.
SERVICE STATE	<ul style="list-style-type: none"> ● <blank> Expansion Interface Link does not exist.
MODE	<ul style="list-style-type: none"> ● <blank> Expansion Interface Link does not exist.
CABINET TYPE	<ul style="list-style-type: none"> ● CMC – This is a Compact Modular Cabinet.
SPE Modes	<ul style="list-style-type: none"> ● active: 1A SPE in a simplex system is always the active SPE.
4 of 4	

system-parameters

See:

[system-parameters duplication](#) on page 586[system-parameters ipserver-interface](#) on page 588[system-parameters maintenance](#) on page 590

system-parameters duplication

S8700 series

See:
[change system-parameters duplication](#) on page 586
[display system-parameters duplication](#) on page 587

change system-parameters duplication

S8700 series

`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
<code>change system-parameters duplication</code>			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

S8700 series

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:

- Each switch node record and every switch node with its duplicate. Cabinets must be administered.
- 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
<code>display system-parameters duplication</code>			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

S8700 series

See:
[change system-parameters ipserver-interface](#) on page 588
[display system-parameters ipserver-interface](#) on page 589

change system-parameters ipserver-interface

S8700 series

- `change system-parameters ipserver-interface`
- Use `change system parameters ipserver-interface` to:
- display the subnet address of the two media servers
 - administer the switch identifier
 - turn on/off IPSI control of port networks

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	
IPSI Host Name Prefix:	
Primary Control Subnet Address: 198.152.254. 0	
Secondary Control Subnet Address: 198.152.255. 0	
OPTIONS	
Switch Identifier: A	
IPSI Control of Port Networks: enabled	

display system-parameters ipserver-interface

S8700 series

display system-parameters ipserver-interface [print | schedule]

Use **display system-parameters ipserver-interface** to display the subnet address of the two servers, and to administer the switch identifier and turn on and off IPSI control of port networks.

Action/Object	Qualifier	Qualifier Description	Login	Default
display system-parameters ipserver-interface	print schedule	See Common Input Parameters on page 25.	init inads craft dadmin customer super-user	

The following shows an example from **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

system-parameters maintenance

S8700 series | S8500 | S8400 | S8300

See:
[change system-parameters maintenance](#) on page 590
[display system-parameters maintenance](#) on page 602

change system-parameters maintenance

S8700 series | S8500 | S8400 | S8300

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 your system.

Action/Object	Qualifier	Qualifier Description	Login	Default
<code>change system-parameters maintenance</code>			init inads craft cust rcust	

To deactivate alarm origination:

1. Make a note of the entries in the **Alarm Origination** and **CPE Alarm** fields so you can restore them later.
2. Change the **Alarm Origination to OSS Numbers** field to **neither**.
3. Change the **CPE Alarm Activation Level** field to **none**.
4. If daily scheduled maintenance must remain idle during a maintenance procedure, set **Start Time** to a time after the session ends. If daily Scheduled Maintenance is running and needs to be deactivated, set **Stop Time** to one minute after the current time.
5. Press **Enter** and look for the message:

Command successfully completed

Note:

For earlier releases of system software, disable Cleared Alarm Notification and Restart Notification before submitting the form.

Note:

When finished working on the switch be sure to return all fields to their original settings.

These are examples of page 1 of **change system-parameters maintenance**. Fields on the screen differ depending on the configuration of your system.

change system-parameters maintenance	Page	1 of 3
MAINTENANCE-RELATED SYSTEM PARAMETERS		
OPERATIONS SUPPORT PARAMETERS		
Product Identification: 1000000000		
First OSS Telephone Number: 5551212	Abbrev Alarm Report? y	
Second OSS Telephone Number: 5551212	Abbrev Alarm Report? n	
Alarm Origination to OSS Numbers: both		
Cleared Alarm Notification? y	Suspension Threshold: 5	
Restart Notification? y		
Test Remote Access Port? n		
CPE Alarm Activation Level: none		
Customer Access to INADS Port? n		
Repeat Dial Interval (mins): 7		
SCHEDULED MAINTENANCE		
Start Time: 01 : 00		Stop Time: 06 : 00
Daily Maintenance: daily		Save Translation: daily
Update LSPs When Saving Translations: y		
Command Time-out (minutes):		
Control Channel Interchange: no	System Clocks/IPSI Interchange: no	
SPE Interchange: daily	EXP-LINK Interchange: daily	

change system-parameters maintenance, field descriptions page 1: OPERATIONS SUPPORT PARAMETERS

change system-parameters maintenance field descriptions page 1: OPERATIONS SUPPORT PARAMETERS 1 of 3

OPERATIONS SUPPORT PARAMETERS	
Product Identification	Identifies switch to an Operations Support System (OSS), for example INADS. 10-digit number starting with 1.
First OSS Telephone Number	First telephone number that the switch dials to report alarms. Obtain the number from the National Customer Support Center (NCSC) or the TSC.
Abbrev Alarm Report	Enables an Abbreviated Alarm Report for the first OSS.
1 of 3	

**change system-parameters maintenance field descriptions page 1: OPERATIONS
SUPPORT PARAMETERS 2 of 3**

OPERATIONS SUPPORT PARAMETERS	
Second OSS Telephone Number	Second telephone number that the switch dials to report alarms. Obtain the number from the National Customer Support Center (NCSC) or the TSC.
Abbrev Alarm Report	Enables an Abbreviated Alarm Report for the second OSS. (no)
Alarm Origination to OSS Numbers (previously Alarm Origination Activated)	<p>Indicates one of four options for alarm origination (neither):</p> <p>both = Major and Minor alarms result in an automatic call to both administered OSS telephone numbers.</p> <p>first-only = Major and Minor alarms result in an automatic call to the first administered OSS number.</p> <p>neither = alarm origination does not occur; reports of alarms are not sent to either number.</p> <p>second no-backup = Major and Minor alarms result in an automatic call to the first administered OSS telephone number. If calling the first OSS telephone number fails four times, the switch calls the second administered OSS telephone number until calling the first OSS telephone number is successful.</p> <p>If Alarm Origination is deactivated, Cleared Alarm Notification and Restart Notification deactivate, even though they may still be activated in the administration.</p>
Cleared Alarm Notification	The switch originates calls to the OSS and sends an alarm resolution message once all previously-reported Major and Minor alarms are resolved. Activate Alarm Origination to enable Cleared Alarm Notification. (no)
Restart Notification	Enables the switch to originate calls to the OSS and report any system restarts caused by switch problems. Activate Alarm Origination to enable Restart Notification.
Suspension Threshold	Some problems cause alarms to be generated and resolved repeatedly. To detect these problems, the switch suspends Cleared Alarm Notification when it has reported the specified number of Cleared Alarm notifications in a 24 hour period. A suspended Cleared Alarm Notification reactivates with a successfully-completed <code>logoff</code> command, a system reset, or when the threshold is changed. This field is irrelevant if Cleared Alarm Notification or Alarm Origination are disabled. (1–15)
2 of 3	

**change system-parameters maintenance field descriptions page 1: OPERATIONS
SUPPORT PARAMETERS 3 of 3**

OPERATIONS SUPPORT PARAMETERS	
Test Remote Access Port	<p>Indicates if remote access testing on the SYSAM circuit pack is active. This field should be set to yes when an INADS line is connected to the switch and a maintenance contract is in effect to maintain alarm origination capability.</p> <p>If no equipment is connected to the remote access port, or if a trunk for remote access and alarm origination is not provided, running tests on the remote access port on the SYSAM results in test failures. This causes unnecessary maintenance alarms and allows potentially destructive tests to be run. To prevent this set this field to no.</p>
CPE Alarm Activation Level	<p>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)</p> <p>When the switch goes into Emergency Transfer, the CPE alarm activates regardless of the CPE Alarm Activation Level setting.</p>
Customer Access to INADS Port	Set to n to prevent customer login ID access to system administration and maintenance interface control. Avaya services has sole access to this field.
Repeat Dial Interval (mins)	Number of minutes that the system must wait before attempting another call origination to an OSS. Lack of a far-end acknowledgment triggers the timer.
3 of 3	

**change system-parameters maintenance, field descriptions page 1:
SCHEDULED MAINTENANCE**

An automated series of maintenance tests and operations runs daily according to the schedule and settings specified in the following fields

**change system-parameters maintenance field descriptions page 1: SCHEDULED
MAINTENANCE 1 of 3**

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.
1 of 3	

change system-parameters maintenance field descriptions page 1: SCHEDULED
MAINTENANCE 2 of 3

SCHEDULED MAINTENANCE	
Daily Maintenance	This display-only field lists the standard test series run by maintenance software during 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 media 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.
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	<p>The days that interchanges occur (daily, days of the week, or no). n prevents interchanges.</p> <p>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.</p> <p>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.</p> <p>Does not apply to duplex-reliability configurations since the IPSIs are not duplicated in the port networks.</p>
2 of 3	

change system-parameters maintenance field descriptions page 1: SCHEDULED MAINTENANCE 3 of 3

SCHEDULED MAINTENANCE	
SPE Interchange	The days SPE interchanges execute during scheduled maintenance, for duplicated SPE systems. (daily , days of the week, no). No prevents scheduled interchanges.
EXP-LINK Interchange	y/n Expansion links between port-networks interchange as part of scheduled maintenance. n means that EXP-LINK interchanges do not automatically occur as part of scheduled maintenance.
3 of 3	

These are examples of page 2 of **change system-parameters maintenance**. Fields on the screen differ depending on the configuration of your system.

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:	
DS1 & MF MAINTENANCE			
DS0 Loop-Around Test Call Extension:			
MF Test Call Extension:			
SPE OPTIONAL BOARDS			
Packet Intf1? y		Packet Intf2? y	
Bus Bridge:	Inter-Board Link Timeslots Pt0:	Pt1:	Pt2:

change system-parameters maintenance, field descriptions page 2: MINIMUM MAINTENANCE THRESHOLDS

change system-parameters maintenance field descriptions page 2: MINIMUM MAINTENANCE THRESHOLDS (Before Notification) 1 of 2

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.
1 of 2	

change system-parameters maintenance field descriptions page 2: **MINIMUM MAINTENANCE THRESHOLDS (Before Notification) 2 of 2**

MINIMUM MAINTENANCE THRESHOLDS (Before Notification)	
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.
2 of 2	

change system-parameters maintenance, field descriptions page 2: TERMINATING TRUNK TRANSMISSION TEST (Extension)

change system-parameters maintenance field descriptions page 2: TERMINATING TRUNK TRANSMISSION TEST (Extension)

TERMINATING TRUNK EXTENSION (Extension)	
Test Type 100	<p>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:</p> <ul style="list-style-type: none"> ● 5.5 seconds of 1004-Hz tone at 0 dB ● Quiet until disconnect; disconnect is forced after 1 minute
Test Type 102	<p>Test Type 102 tests far-end to near-end loss by sending:</p> <ul style="list-style-type: none"> ● 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	<p>Test Type 105 tests 2-way loss, gain slope, and C-message and C-notch noise by sending:</p> <ul style="list-style-type: none"> ● 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

change system-parameters maintenance, field descriptions page 2: ISDN MAINTENANCE

change system-parameters maintenance, field descriptions page 2: ISDN MAINTENANCE

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.

change system-parameters maintenance, field descriptions page 2: DS1 & MF MAINTENANCE

change system-parameters maintenance, field descriptions page 2: DS1 & MF MAINTENANCE

DS1 & MF MAINTENANCE	
DS0 Loop-Around Test Call Extension	<p>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.</p> <p>For more information, see DS0 Loop-Around test call on page 449 in <i>Maintenance Procedures for Avaya Communication Manager 3.1, Media Gateways and Servers (03-300432)</i>.</p>
MF Test Call Extension	<p>Enter the multifrequency test call extension.</p> <p>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.</p>

change system-parameters maintenance, field descriptions page 2: SPE OPTIONAL BOARDS

change system-parameters maintenance, field descriptions page 2: SPE OPTIONAL BOARDS

SPE OPTIONAL BOARDS	
SPE Optional Boards Packet Intf1 Packet Intf2	y/n Indicate if a disk circuit pack is present, and identify administered Packet Interface slots. If a Packet Interface circuit pack is present, Packet Interface is y when the system boots If a Packet Interface circuit pack is not present, Packet Interface is read from translation data, and stored on disk or tape. If the field is n , change Packet Interface to y to administer a Packet Interface circuit pack.
Bus Bridge	Physical location
Inter-Board Link Timeslots: Pt0, Pt1, Pt2	Port bandwidths

This is an example of page 3 of **change system-parameters maintenance**.

display system-parameters maintenance	Page 3 of x
MAINTENANCE-RELATED SYSTEM PARAMETERS	
Modem Connection: external	
Data Bits:	
Parity: none	
MAINTENANCE SAVE TRANSLATION CORRUPTION AUDIT	
Enable Translation Audit? y	
Display Warning When Detected? n	
Alarm When Detected? n	
Block Save Translation When Detected? n	

change system-parameters maintenance, field descriptions page 3

Avaya recommends that the translation corruption audit parameters be set at the defaults (**y**, **n**, **n**), except while translation corruption is being diagnosed. While at default settings, a translation audit is performed before every **save translation** operation performed automatically with scheduled maintenance. If a translation audit detects corruption, an error is logged in the software error log. Use **display software** to view the software error log.

change system-parameters maintenance, field descriptions page 3

Field	Description
Modem Connection	internal/external
Data Bits	
Parity	

change system-parameters maintenance, field descriptions page 3: Maintenance Save Translation Corruption Audit

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 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 .
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

S8700 series | S8500 | S8400 | S8300

`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
<code>display system-parameters maintenance</code>	<code>schedule</code>	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 590 for examples of screens and field descriptions.

tdm

S8700 series | S8500 | S8400 | S8300

See:

[busyout tdm](#) on page 602

[release tdm](#) on page 603

[set tdm](#) on page 604

[test tdm](#) on page 605

busyout tdm

S8700 series | S8500 | S8400 | S8300

`busyout tdm pn# bus`

Use `busyout tdm` to busyout a specified tdm bus.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>busyout tdm</code>	<code>pn#</code> <code>bus a</code> <code>bus a</code>	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: <code>busyout tdm 1a</code>	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

S8700 series | S8500

`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	Default	Feature Interaction
<code>release tdm</code>	<code>port-network pn</code> <code>bus bus</code>	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	none	see below

set tdm


S8700 series | S8500 | S8400 | S8300

```
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 2266 in the *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (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>	<p>Port Network number of the TDM bus to be set. Use <code>list cabinet</code> to see port network numbers for a given cabinet.</p> <p>One of the paired TDM buses, a or b.</p> <p>Sets a bus which is out of service, or a bus whose dedicated tone time slots are in use by call processing.</p> <p> CAUTION: Use of override option disrupts service.</p> <p>Example: <code>set tdm port-network 2 bus a</code></p>	See set tdm feature interactions on page 604

set tdm feature interactions

New calls go to time slots reserved for tones on the bus that have not other time slots when:

- Time slots on a specified bus are in use
- 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

S8700 series | S8500

```
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
test tdm	pn number short long repeat n clear	nn = 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: test tdm port-network 1 l test tdm port-network 2 sh r 2 test tdm port-network 1 l r 25 test tdm port-network 2 test tdm port-network 1 c	init inads craft	short 1

test-number

S8500

See:

[disable test-number](#) on page 605

[enable test-number](#) on page 606

disable test-number

S8500

Use `disable test-number` to prohibit selected maintenance tests.

Use `enable test-number` to run a disabled test.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
disable test-number	number	Maintenance test number	init inads		

enable test-number

S8700 series | S8500 | S8400 | S8300

```
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 3.1.x, (03-300430) (formerly 03-300190)</i> Example: <code>enable test-number 102</code>		

test-schedule

S8700 series

See:

[display test-schedule](#) on page 606

display test-schedule

S8700 series

```
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.

The following is the output from `display test-schedule n`.

[illegible]

display test schedule field descriptions

display test schedule field descriptions 1 of 2

Field	Description
Schedule	The current schedule number.
Schedule Time	The hour and minute that the test begins (24-hour time, with “00:00” being midnight). This time must be greater than the current time.
Schedule Date	Month (1 to 12), day (1 to 31), and year on which testing begins (default is the system date). This date must be equal to or greater than the current date.
Schedule Test Days	y next to the days of the week indicates which days of the week this test runs.
Interval	The length of this schedule in weeks. If 0 , the schedule runs on the specified days only once.
OTL Throttle	The number of trunk members (1 – 4) tested concurrently during a schedule. If this field is set to 1 , the OTL (originating test line) tests each trunk sequentially. If set from 2 to 4 , the specified number of trunks are tested in parallel.

1 of 2

display test schedule field descriptions 2 of 2

Field	Description
Test Type	<p>One of the following types of test to be performed on the trunk group/ members in this schedule:</p> <ul style="list-style-type: none"> ● 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

See:

[list testcalls](#) on page 609

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 Busied 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
<code>list testcalls</code>	<code>detail summary</code>	Detailed measurement report displayed Summary measurement report displayed
	<code>grp group number</code>	Measurements for a specific trunk group displayed. When used with the <code>to-grp</code> option, this option is the starting trunk group in a range of user-specified trunk groups.
	<code>to-grp group number</code>	Measurements for all trunk groups from 1 to the specified "to-grp" trunk group are displayed. When used with the <code>grp</code> option, this option is the ending trunk group in a range of user-specified trunk groups.
1 of 2		

Action/Object	Qualifiers/Options	Qualifier/Option description
	<i>mem member number</i>	Measurements for a specific trunk group member displayed. When used with the <i>to-mem</i> option, this option is the starting trunk group member in a range of user-specified trunk group members.
	<i>to-mem member number</i>	Measurements for all trunk group members from 1 to the specified “to-mem” trunk group member displayed. With <i>mem</i> , this option is the ending trunk group member in a range of user-specified trunk group members.
	<i>port location</i>	Measurements for a specific trunk circuit (port) displayed
	<i>result identifier</i>	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.
	<i>not-result identifier</i>	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.
	<i>count 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										Page	1	SPE A
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
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.
1 of 2	

list testcalls detail report field descriptions 2 of 2

Field	Description
Test Date	The month and day this trunk was tested.
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 dBmC: 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 dBmC.
C-ntch Noise	Maximum signal-dependent noise interference on a line between 34 and 74 dBmC.
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									
SPE A									
ATMS MEASUREMENT SUMMARY REPORT									
Trk	Num	Last	Last	Trunks	Trunks	Trunks			
Grp	Of	Test	Test	Passed	Failed	Failed	Trks	Trks	Busied
Num	Trks	Date	Time	Transm	Marginal	Unaccept	In-	Not	Out
				Test	Threshld	Threshld	Use	Test	Trunks
80	19			0	0	0	0	19	19

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

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See:
[change tftp-server](#) on page 614
[display tftp-server](#) on page 614

change tftp-server

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Use `change tftp-server` to copy a firmware image from the FTP file server into Communication Manager memory.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>change tftp-server</code>					

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

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`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 549.

time

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See:

[display time](#) on page 615

[set time](#) on page 616

display time

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`display time [print | 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	Login	Default	Feature Interaction
<code>display time</code>	<code>print</code> <code>schedule</code>	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: 19              Year: 1999

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 1 of 2

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.
1 of 2	

display time field descriptions 2 of 2

Field	Description
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.
2 of 2	

set time**S8700 series****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: Sunday

Month: October

Day of the Month: 24

Year: 1999

TIME

Hour: 8 Minute: 16 Second: 31

Type: Standard

Daylight Savings Time Rule: 0

WARNING: Changing the date or time will impact BCMS, CDR 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

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.
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.

tone-clock

S8700 series

See:

[set tone-clock](#) on page 617

[test tone-clock](#) on page 618

set tone-clock

S8700 series

`set tone-clock UUC [override]`

On port networks not controlled by an IPSI, use `set tone-clock` to force a Tone-Clock interchange.


Maintenance SAT Commands

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.

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
set tone-clock	UUC PC override	Cabinet number 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.	init inads craft	1
		Examples: set tone-clock 01c override set tone-clock a		

test tone-clock

S8700 series

```
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 \(Tone-Clock Circuit\)](#), [TONE-PT \(Tone Generator\)](#), and [TDM-CLK \(TDM Bus Clock\)](#) in *Maintenance Alarms for Avaya Communication Manager, Media Gateways and Servers 3.1.x, (03-300430) (formerly 03-300190)*.

trace

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[list trace](#) on page 619

list trace

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

```
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.

See:

[list trace media-gateway](#) on page 621

[list trace ras](#) on page 621

[list trace station](#) on page 623

[list trace tac](#) on page 625

list trace command options 1 of 2

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list trace			init inads craft cust		
	advocate				
	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 is blocked when Tenant Partitioning is enabled.			
	media-gateway	Trace media-gateway registration messages. See list trace media-gateway on page 621.			
	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 621			
	station ext	Trace calls originating from and terminating to a specific station extension. See list trace station on page 623.			
	tac tac#	Trace calls entering and leaving the server on a specific trunk group number. See list trace tac on page 625.			
	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 627.			
	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 628.			
1 of 2					

list trace command options 2 of 2

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
		Examples: list trace attendant 12345 list trace previous list trace media-gateway <i>ip-address</i>			
					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.

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 server 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 server 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 server 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 server 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 netrqn 3 ext 50505	
11:38:41	hear annnc ext 55526	
11:38:41	TRACE COMPLETE station 51001 cid 516	

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:

<i>q</i>	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.
<i>d</i>	Requests trace data on calls made over a specified trunk group.
<i>a</i>	Requests ATM-specific trace data for specified trunk.

Examples

```
list trace tac 48
list trace tac *14/q
list trace tac 284/dqa
```

Maintenance SAT Commands

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 3.1 Call Vectoring and Expert Agent Selection (EAS) Guide, 07-300477 (formerly 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 3.1 Call Vectoring and Expert Agent Selection (EAS) Guide, 07-300477 (formerly 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
```

trace-route

[S8700 series](#) | [S8500](#)

See:

[trace-route](#) on page 629

trace-route

S8700 series | S8500

```
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 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) CLAN board
- TN802B Medpro board
- TN2302 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.

Maintenance SAT Commands

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	Where IP address is www.xxx.yyy.zzz	init inads craft cust	primary ip address
	ip-address node-name node-name board board clan-port clan-port source schedule	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.		
		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 CLAN-sourced pings should reflect control information transport performance.

The following shows an example output for a CLAN **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

Field	Description
clan-port	Port on the CLAN board from which trace-route is issued. Note: If no CLAN 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 CLAN board.
Hop	The node number (in sequence). The 0 node is the address from which traceroute is issued.
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: <ul style="list-style-type: none"> ● ! 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.

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

S8700 series | S8500 | S8400 | S8300

See:
[monitor traffic](#) on page 632

monitor traffic

S8700 series | S8500 | S8400 | S8300

`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
<code>monitor traffic trunk-groups</code>	<code>starting-group#</code>	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.		
<code>monitor traffic hunt-groups</code>	<code>starting-group#</code>	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 G3-MT DEC 31 2002					
#	S	A	Q	W	LCIQ	#	S	A	Q	W	LCIQ		
1	15	10	10	0	20	17							
2						18							
3						19							
4						20							
5						21							
6						22							
7						23							
8						24	10	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: Q Length; 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 G3-MT DEC 31, 2002
#  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 hunt-groups and monitor traffic trunk-groups 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

S8700 series | S8500 | S8400 | S8300

See:

[save translation](#) on page 634

save translation

S8700 series | S8500 | S8400 | S8300

```
save translation [ all | ess ]
```

Note:

Save 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 back up translations of the database to the server. It either completes or fails.

Use **save translation all** to save translations to all ESSs, local survivable processors, and the main server pair.

Use **save translation ess** from the Media Server to send changed translations from the main server to the administered ESSs.

Action/Object	Qualifier	Qualifier Description	Login	Default
save translation		<ul style="list-style-type: none"> back up translations of the database to the server On ESS, saves translation changes only on the main server pair 		
	all	On ESS, saves translation changes only on the main server pair		
	ess	From the Media Server, send changed translations from the main server to the administered ESSs.		

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. **Save translation** will not run if translation data is being changed by an administration command.

On a duplicated system, when a SAT user issues **save translation**, 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**".

For [S8400](#) | [S8300](#) configured as an LSP, translations are received from the primary server. The **save translation** command is disabled.

Run **save translation** as part of scheduled background maintenance or on demand. See [change system-parameters maintenance](#) on page 590 for more information

The following display shows a typical result for **save translation**.

save translation				SAVE TRANSLATION
Processor	Command	Completion	Status	Error Code
SPE-A	Success			0
Command Successfully Completed				

save translation field descriptions

save translation field descriptions

Field	Description
Processor	Identifies the processor carrier where translation data is saved. (SPE-A)
Command Completion Status	Identifies the success or failure of the command.

tti-ip-stations

See:

[list tti-ip-stations](#) on page 636

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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[busyout trunk](#) on page 637

[monitor trunk](#) on page 637

[release trunk](#) on page 638

[status trunk](#) on page 639

[test trunk](#) on page 644

busyout trunk

S8700 series | S8500 | S8400 | S8300

`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	Default	Feature Interaction
<code>busyout trunk</code>	<code>group#</code> <code>member#</code>	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

S8700 series | S8500 | S8400 | S8300

`monitor trunk group# / member#`

Use `monitor trunk` to see same information as [status trunk](#) on page 639. `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	Default	Feature Interaction
<code>monitor trunk</code>	<code>trunk-groups</code> <code>hunt-groups</code>		init inads craft cust rcust bcms browse	none	none

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

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.
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).

release trunk

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

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	Default	Feature Interaction
release trunk	group member	trunk group number trunk group member number	init inads craft		

status trunk

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

status trunk group# [/ member#] [print]

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.

- 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.
- 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.

See [monitor trunk](#) on page 637, which shows the same information as **status trunk** and updates the screen automatically every minute or on demand.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status trunk	group#	Status all members of the trunk group.	init inads craft cust rcust bcms browse		
	group#/ group#/ group#/ member#	Status member number 1. Status a specific member of a trunk group.			
	print	See Common Input Parameters on page 25. Examples: status trunk 78 status trunk 80/2 print			

Maintenance SAT Commands

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.
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 3.1.x, (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.
1 of 2	

status trunk on S8700 IP-PNC field descriptions 2 of 2

Field	Description
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	

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                      Per Call Info
          0                               0
          0                               0                      Out of Order Counter:  0
          0                               0                      SSRC Change for Call:  0
          0                               0                      Last Rx Sequence #: 0x1D64
          0                               0                      Last Tx Sequence #: 0x1D1B
          0                               0
          0                               0
          0                               0
          0                               0
          0                               0

SUMMARY
Worst Case this Call (ms):  0           Worst Case this Call:  0
Average this Call (ms):  0             Average this Call:  0
Current Buffer Size (ms):  30

```

status trunk field descriptions

status trunk 1 of 2

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.

1 of 2

status trunk 2 of 2

Field	Description
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.
2 of 2	

test trunk

S8700 series | S8500 | S8400 | S8300

```
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
test trunk	group number	Administered group number	init inad s craft cust	short 1
	member number	Administered number identifying a particular trunk within a trunk group See Common Input Parameters on page 25.		
	short	Examples: test trunk 78 1 test trunk 80/1 sh r 2 test trunk 78/2 1 r 25 test trunk 78 r 4 test trunk 78 c		
	long			
	repeat n			
	clear			

trunk group

S8700 series | S8500 | S8400 | S8300

See:

[list trunk group](#) on page 645

list trunk group

S8700 series | S8500 | S8400 | S8300

For more information about `list trunk-group` see Trunk Groups in *Administrator Guide for Avaya Communication Manager (03-300509)*.

tsc-administered

S8700 series | S8500 | S8400 | S8300

See:

[status tsc-administered](#) on page 645

[test tsc-administered](#) on page 647

status tsc-administered

S8700 series | S8500 | S8400 | S8300

`status tsc-administered signaling-group# [/tsc-index] [print]`

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
<code>status tsc-administered</code>	<code>signaling-group# tsc-index print</code>	Administered signaling group number. TSC number in the signaling group See Common Input Parameters on page 25.	init inads craft
		Examples: <code>status tsc-administered 1</code> <code>status tsc-administered 1/2</code> <code>print</code>	

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

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.
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.

test tsc-administered

S8700 series

```
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

S8700 series | S8500 | S8400 | S8300

See:

[status tti](#) on page 647

status tti

S8700 series | S8500 | S8400 | S8300

```
status tti [print]
```

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.

Maintenance SAT Commands

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
<code>status tti</code>	<code>print</code>	See Common Input Parameters on page 25.	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: <ul style="list-style-type: none"> • if unadministered, were translated as TTI ports • 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

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

See:

[list usage](#) on page 649

list usage

[S8700 series](#) | [S8500](#) | [S8400](#) | [S8300](#)

```
list usage [ button-type | cti-link | digit-string | extension |
holiday-table | hunt-group | integ-annc-board | ip-address | node-name
| variables | vector ]
```

Maintenance SAT Commands

Use `list usage` to see where an extension or object is used.

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
<code>list usage</code>	<code>print 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 651.			
	<code>cti-link</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 221.			
	<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>x vector</code>	List all the uses of the extension in vector steps, hunt groups, coverage paths, announcements, intercom groups, bridged appearance buttons, administered with an off-PBX telephone application, 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 651.			
	<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 328.			
	<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 652			
	<code>node-name</code>	List the forms on which the specified node-name is used. See list usage ip-address node-name on page 652.			
	<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
```

list usage ip-address screen

See [list usage ip-address field descriptions](#) on page 654.

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			Server Node Name
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
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.

val

S8700 series

See:

[reset val](#) on page 654

reset val

S8700 series

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	Login	Default	Feature Interaction
<code>reset val</code>	<i>UUCSS</i>	Reset every administered port on the circuit pack.			

val-ip

S8700 series

See:

[status val-ip](#) on page 655

status val-ip

S8700 series

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 1C02

                                IP STATUS

Reset Time:  mm/dd/hh:mm

Incoming Received:      Octets   Datagrams   Discards   Hdr Errors
    Since reset         1         0              0           0

Outgoing Transmitted:   Octets   Datagrams   Discards   No Routes
    Since reset        65535     0           0           0

Datagrams w/o Routes    ICMP Dest Unreachables    ICMP Redirects
    Since Reset          0                                65535
```


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.

Server information

Use these commands to see information about the server.

- [acpfindvers <process>](#)
- [almdisplay \[-v\]](#)
- [corevector \[-s | -c | -? \]](#)
- [filesync \[-w, -s, -f, -t, -q, -i, -d, -e, -l, -a, -Q, -H\]](#)
- [ipsiversion \[-a | -c \]](#)
- [loginreport \[-a | -sl | -ul | -sd | -ud | -lo\]](#)
- [productid \[-p | -m \]](#)
- [serialnumber \[-l | -q | -p \]](#)
- [server \[-i | -if | -c | -b | -r \]](#)
- [statapp \[-c | -p \]](#)
- [statuslicense \[-v\]](#)
- [swversion \[-r | -v | -l \]](#)
- [systat \[-c | -d | -D | -U | -l | -s \]](#)
- [uname](#)
- [update_info](#)
- [update_show \[-a | -u | -h \]](#)

Troubleshooting the switch

Use these commands to see help troubleshoot the switch.

- [almclear \[-a\]](#)
- [almdisplay \[-v\]](#)
- [corevector \[-s | -c | -? \]](#)
- [dhelp](#)
- [dkill \[-a\]](#)
- [fasttop](#)
- [filesync \[-w, -s, -f, -t, -q, -i, -d, -e, -l, -a, -Q, -H\]](#)
- [ftpserv \[-f on/off | -a on/off\]](#)
- [modserv \[-v\]](#)
- [restartcause](#)
- [rtrenice](#)
- [topsting <*.mcd>](#)
- [vilog](#)

Troubleshooting the IPSI

Use these commands to help troubleshoot the IPSI circuit pack.

- [ipsiversion \[-a | -c\]](#)
- [pingall \[-i, -a\]](#)
- [telnet <ip_addr> 2312](#)
- [telnetenable \[-p, <ip_addr> | -d | -c \[cabinet carrier\]\]](#)

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 [-v]	serverctrl [disable boot timer]	almcall
almsuppress [-s]		almenable
environment		date
loadpwd		inventory
rmbpasswd		productid [-p -m]
rmbuseradd [-d home] [-o] [-p passwd] [-P y/n] [-s shell] [-u uid]		samp-update
rmbuserdel		testinads
rmbusermod [-d home] [-o] [-p passwd] [-P y/n] [-s shell] [-u uid]		testmodem [-s -t]
sampcmd		
sampdiag		
sampupdate <filename>		

Linux bash commands

acpfindvers <process>

Use **acpfindvers** to see the release string for an object located in /opt/ws, and where the object was built (the source code).

Example screen for acpfindvers command

```
(root@sray3-srv2 ws)# pwd
opt/ws
(root@sray3-srv2 ws)# acpfindvers pcd
pcd=>R011x.02.0.520.0:drsting1:alawint=/usr/add-on/pavlov/defty/r11.3/int/R11.pj
@12/16/02 09:50:06 PM
(root@sray3-srv2 ws)# _
```

almcall

Use **almcall** to set the telephone numbers on the modem to call the INADS alarm receivers.

- Enable or disable alarm abbreviation on INADS alarm receiver numbers.
- Set the interval between retries to the INADS alarm receiver numbers.

To run **almcall** directly on the remote maintenance board, type

```
sudo/opt/alarming/bin/almcall.
```

almclear [-a]

Use **almclear** to clear individual server alarms or all server alarms from the switch. Clear Communication Manager alarms before **almclear** clears the alarms at the Linux shell.

almdisplay [-v]

Use **almdisplay** to see current alarms on the system, including messaging, Communication Manager, and server alarms.

Example screen for almdisplay command

```

C:\WINNT\System32\telnet.exe
No MESSAGING Alarms

MultiVantage ALARMS
=====
ID   MO      Source   On Bd  Lvl  Ack  Date
1   PKT-INT  06B      y      MAJ  N    Wed Jan 8 17:44:59 2003
2   POWER    02       y      MIN  N    Wed Jan 8 17:39:55 2003
3   PKT-INT  05B      y      MAJ  N    Wed Jan 8 17:39:37 2003
4   PKT-INT  05B      y      MAJ  N    Wed Jan 8 17:39:37 2003
5   PKT-INT  08B      y      MAJ  N    Wed Jan 8 17:39:37 2003
6   PKT-INT  08B      y      MAJ  N    Wed Jan 8 17:39:37 2003
7   PKT-INT  07B      y      MAJ  N    Wed Jan 8 17:39:36 2003
8   PKT-INT  07B      y      MAJ  N    Wed Jan 8 17:39:36 2003

SERVER ALARMS
=====
ID   Source  EvtID  Lvl  Ack  Date
3   SME     1      MAJ  N    Wed Jan 8 19:42:40 2003
2   SME     1      MAJ  N    Wed Jan 8 17:34:40 2003
1   ARB     9      WRN  N    Wed Jan 8 16:30:43 2003
0   ARB     9      WRN  N    Wed Jan 8 16:30:43 2003
init@pilsner1>

```

almenable

Use `almenable` to enable and disable dial-out and SNMP alarm origination.

To run `almenable` directly on the remote maintenance board (MPC), type

```
sudo/opt/alarming/bin/almenable.
```

almnotif

Use `almnotif` to set “restart notification”, “clear alarm notification”, and “suspension threshold”.

almsnmpconf

Use `almsnmpconf` to administer SNMP alarming to INADS.

almsuppress [-s]

Use `almsuppress` to:

- suppress or unsuppress alarm origination while the user is logged in.
- check the state of alarm suppression

Use `almsuppress -s y` to suppress alarm origination for 30 minutes.

To run `almsuppress` directly on the remote maintenance board, type

`sudo/opt/alarming/bin/almsuppress.`

cnc [on | off | status]

S8700 series

Use `cnc` to enable, disable, or status Control Network C on [S8700 series](#) media 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 media servers.
	off	Disables Control Network C on S8700 series media servers.
	status	Determine whether Control Network C on S8700 series media server is enabled or disabled.

corevector [-s | -c | -?]

Use `corevector` to request core files of flagged processes, or to clear core dump requests. Use `corevector -?` for detailed information.

Remember that core file generation is expensive, and can cause interchanges under circumstances that would normally not cause an interchange.

date

Use **date** to see the date and time or to change the clock. For more information, type **man date**.

You can run **date** directly on the remote maintenance board (MPC).

dhelp

Use **dhelp** to list popular Linux commands for the servers that are running Communication Manager.

dkill [-a]

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.

dsat

See [sat](#) on page 682.

environment

Use **environment** to see reports for environmental sensors such as temperature, fan speed, and voltage.

fasttop

Use **fasttop** to see occupancy results for Communication Manager processes running on the server. Default is 5 seconds.

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@srav3-srv2 defty]#

```

filesync [-w, -s, -f, -t, -q, -i, -d, -e, -l, -a, -Q, -H]

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 2

command	option	option description
filesync	-w filegroup	Wait for a response before returning. Specify filegroup, or a11 for all groups.
	-s filegroup	Silent file synchronization. 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.
	-t filegroup	Timestamp-based synchronization for the specified filegroup to the duplicate server. Check the timestamps on all files in the specified sets, and synchronize the file/remote server when: <ul style="list-style-type: none"> the file's timestamp is more recent than the last synchronization the last synchronization attempt for the set failed Specify filegroup, or a11 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. Specify filegroup, or a11 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.
	-v	Verbose output, applies to -q.
	-l filegroup	Send files for the specified filegroup to LSPs and duplicate server. Specify filegroup, or a11 for all groups.
	-a <ip addr> filegroup	Send files for the specified filegroup to the LSP or duplicate server at the specified ip address. Specify filegroup, or a11 for all groups.

1 of 2

filesync command options 2 of 2

command	option	option description
	-Q <TYPE> <NUM>	Query the status of the translation synchronization number to specified servers. Shows status for save trans , filesync trans , or nightly maintenance. Default synchronization number is the most recent synchronization. Server type: dup , lsp , all
	-H <TYPE>	Show the history of the last 25 translation synchronizations to specified server types. Shows history for save trans , filesync trans , or nightly maintenance. Server type: dup , lsp , all
2 of 2		

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:

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	Some error occurred during file synchronization.
8	Some local error occurred.

ftpserv [-f on/off | -a 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**.

inventory

S8700 series | S8500

Use `inventory` to

- see the rmb (MPC) manufacturing information
- verify that the rmb (MPC) is connected and working correctly

ipsisession

S8700 series | S8500

`ipsisession [-d] [-k] -c cab#carrier | -p IP_address | -?`

Use `ipsisession` (CLI command) 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 525 and [ssh-keygen](#) on page 762.

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.

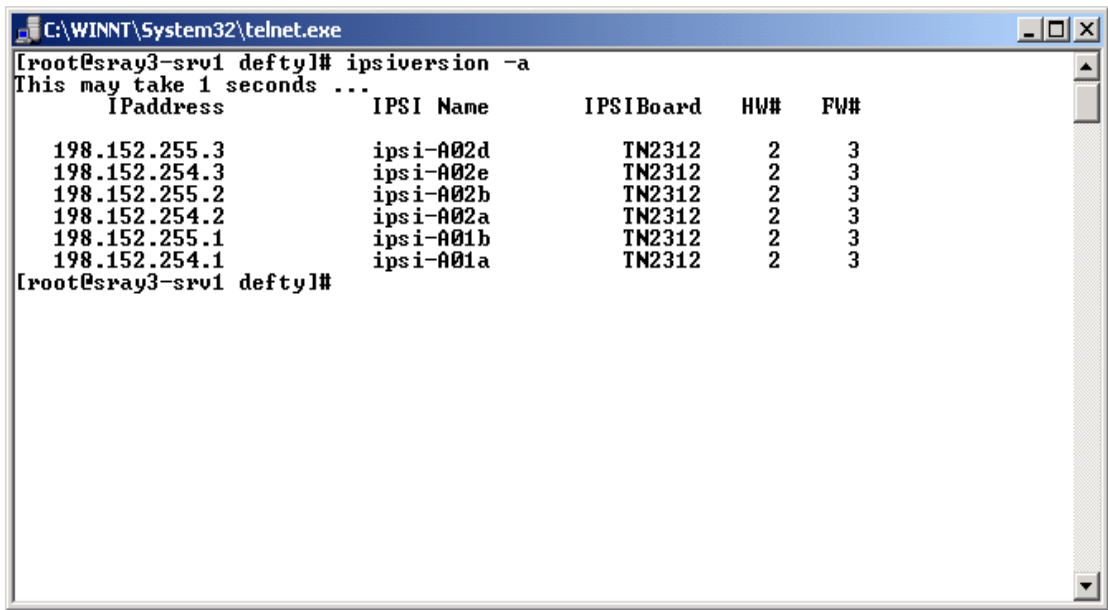
If neither of these conditions has occurred, then it is likely that another server is posing as the IPSI (rogue server, aka man-in-the-middle attack).

Action/Object	Qualifier	Qualifier Description
<code>ipsisession</code>	<code>-k</code>	Remove known hosts file and enable SSH on IPSI circuit packs that have changed dynamic host keys. (reset the ssh host public key).
	<code>-d</code>	Disable the telnet server. Default is enable the telnet server.
	<code>-c cab@carrier</code>	The target ipsi board with the specified cabinet number and carrier ID.
	<code>-p IP_address</code>	The IP address of the target ipsi board.
	<code>-?</code>	Print help message.

ipsiversion [-a | -c]

Use `ipsiversion` to query each IPSI to determine its TN code, and the hardware and firmware vintages running on the system. `ipsiversion -a` shows all IPSIs, `ipsiversion -c` shows a specific IPSI.

Example screen for ipsiversion command



loadlicense

Use `loadlicense` to run a command-line version of the utility to load the license file.

Error Messages

The following error messages can occur when executing the 'loadlicense' command:

loadlicense error messages 1 of 4

	loadlicense error messages	description
1	Command failed: License file entries out of sync	
2	Command failed: License File 'offer category' invalid	
3	Command failed: Offer category mismatch	
1 of 4		

loadlicense error messages 2 of 4

	loadlicense error messages	description
4	Command failed: License file invalid	
5	Command failed: Deleted Registration entry in use	
6	Command failed: Registration administration failed	
7	Command failed: System usage exceeds license limit for VALUE_PORT	Entry in Customer Options Maximum Ports field
8	Command failed: System usage exceeds license limit for VALUE_STA	Entry in Customer Options Stations field
9	Command failed: System usage exceeds license limit for VALUE_LOGGIN	
10	Command failed: System usage exceeds license limit for VALUE_ADVOCATE	
11	Command failed: System usage exceeds license limit for VALUE_IPA	
12	Command failed: System usage exceeds license limit for VALUE_IP_TRK	
13	Command failed: System usage exceeds license limit for VALUE_RO_TRK	
14	Command failed: System usage exceeds license limit for VALUE_RO_STN	
15	Command failed: System usage exceeds license limit for VALUE_IP_STA	
16	Command failed: System usage exceeds license limit for VALUE_VC_H323	
17	Command failed: System usage exceeds license limit for VALUE_VC_IPSP	
188	Command failed: System usage exceeds license limit for VALUE_IP_ATTD_CO	
19	Command failed: System usage exceeds license limit for VALUE_XMOB_NUM	
20	Command failed: System usage exceeds license limit for VALUE_DS1_ECHO	
21	Command failed: System usage exceeds license limit for VALUE_MGA_SRC	
2 of 4		

loadlicense error messages 3 of 4

	loadlicense error messages	description
22	Command failed: System usage exceeds license limit for REGISTRATION FEATURE	
23	Command failed: System usage exceeds license limit for VALUE_SIP_TRK	
24	Command failed: System usage exceeds license limit for VALUE_EC500	
25	Command failed: System usage exceeds license limit for VALUE_OPT_OPS	
26	Command failed: System usage exceeds license limit for VALUE_OPT_SSE	
27	Command failed: System usage exceeds license limit for VALUE_EMMC_PORTS	
28	Command failed; System usage exceeds license limit for VALUE_2602_VC	
29	Command failed: License not compatible with system configuration	
30	Command failed: Combination of allocation and standard product-ids exceeds type 3 limit	
31	Command failed: System usage exceeds license limit for VALUE_UNAUTH_EPT	
32	Admin failed, rc = XXXXX *	
33	Command failed: Reference IPSI not responding	
34	Command failed: Serial Number Mismatch	
35	Command failed: Application Not Found in License	
36	Command failed: Platform Type/Offer Type Mismatch	
37	Command failed: Platform Type Does Not Match Hardware	
38	WARNING: Valid Allocation License must be installed. Command failed: No Valid Allocation License Installed	
3 of 4		

loadlicense error messages 4 of 4

	loadlicense error messages	description
39	Unknown Lic Error - 0x%lx (%ld)	0x00008000 = the License file is invalid (corrupt)
40	<p>Certificate chain in license file is not valid. The time stamp in the License file Certificate is newer than the time on the server. To resolve:</p> <ol style="list-style-type: none"> 1. Check the time (date) on the server, if not set correctly, set it. 2. Check the time zone on the server, if not set correctly, set it. 3. Wait 5 minutes and try to load the license again. 4. Repeat step 3. 5. Escalate. 	
4 of 4		

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)

locktrans

Use **locktrans** to lock translations so that no save translations can be performed until you use the **unlocktrans** command. See [unlocktrans](#) on page 694.

loginreport [-a | -sl | -ul | -sd | -ud | -lo]

Use `loginreport` to see a report on Linux logins.

Table 38: loginreport command options

command	option	description
<code>loginreport</code>	<code>-a</code>	all login reports
	<code>-s</code>	successful Linux logins
	<code>-ul</code>	unsuccessful Linux logins
	<code>-sd</code>	successful Communication Manager logins
	<code>-ud</code>	unsuccessful Communication Manager logins
	<code>-lo</code>	login lockouts

logv logc logw

[-c | -ls | -w | -v | -l | -clear]

[all | lm | lxboot | lxcron | lxsys | lxsec | lxx | wd | ipevt]
[app | time]

Use `logv` to normalize and view various log files.

Use `logc` to merge and output (cat) various log files to standard output.

Use `logw` to watch the requested log file.

Use options to modify command operations: [-c | -ls | -w | -v | -l | -clear]

Use log variables to define the logs: [all | lm | lxboot | lxcron | lxsys | lxsec | lxx | wd | ipevt]

Use filters to specify particular events: [app | time]

Table 39: logv, logc, logw command options 1 of 2

command	option	description
<code>logv</code> <code>logc</code> <code>logw</code>		
	<code>-c</code>	Cat (output) logs.
1 of 2		

Table 39: logv, logc, logw command options 2 of 2

command	option	description
	-ls	List the names and sizes of log files.
	-w	Watch the log (print to screen or email).
	-v	Show the version of the command.
	-l	Search only the latest file in the log. (Default is all files.)
	clear	Clear the log files.
	all	All possible logs.
	lm	Logmanager debug trace (default).
	lxboot	Linux boot messages.
	lxcron	Linux cron (scheduling) daemon.
	lxsys	Linux syslog.
	lxsec	Linux access security log.
	lxx	Linux file transfer log.
	wd	Watchdog logs.
	ipevt	IP events log (IP connections and disconnections, including trace-route results). The IP events log is a subset of the tracelog.
	app	filter events for a specific application or process (for example, audit, NW)
	time	filter events for a specific date/time
2 of 2		

mo [-h | -? | -c [v] | -l [v] | [-v] -g <filename> [-o <filename>]]

Use **mo** when the MOST tool is connected during migration from G3r to Linux, to perform maintenance related to the magneto-optical (MO) drive on **S8700 series** platforms.

Table 40: mo command options

command	option	description
mo	-c	check the MO drive
	-d <name>	device name of magneto-optical (MO) drive
	-g <name>	get a file from the drive
	-h	this usage formation
	-l	list the contents of the MO drive
	-o <name>	generate this output file
	-v	verbose output
	-?	this usage information

modserv [-v]

Use **modserve** to see if a modem is detected, and its status. Use when there is no remote access to the switch.

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]# _
```

patch_apply

Use **patch_apply** to apply an “installed” patch to Communication Manager. In Communication Manager 2.0 and later, use [update_activate](#). Some early versions of Communication Manager require **sudo patch_apply**.

patch_info

Use `patch_info` to see information about a patch that is already installed. In Communication Manager 2.0 and later, use [update_info](#).

patch_install

Use `patch_install` to install a patch into the system. In Communication Manager 2.0 and later, use [update_unpack](#). Some early versions of Communication Manager require `sudo patch_install`.

patch_remove

Use `patch_remove` to remove a previously activated patch on the system. In Communication Manager 2.0 and later, use [update_remove \[-a\]](#). Some early versions of Communication Manager require `sudo patch_remove`.

patch_show

Use `patch_show` to see a list of patches that are installed on the system. In Communication Manager 2.0 and later, use [update_show \[-a | -u | -h\]](#).

patch_uninstall

Use `patch_uninstall` to install a patch from the target machine. In Communication Manager 2.0 and later, use [update_deactivate](#). Some early versions of Communication Manager require `sudo patch_uninstall`.

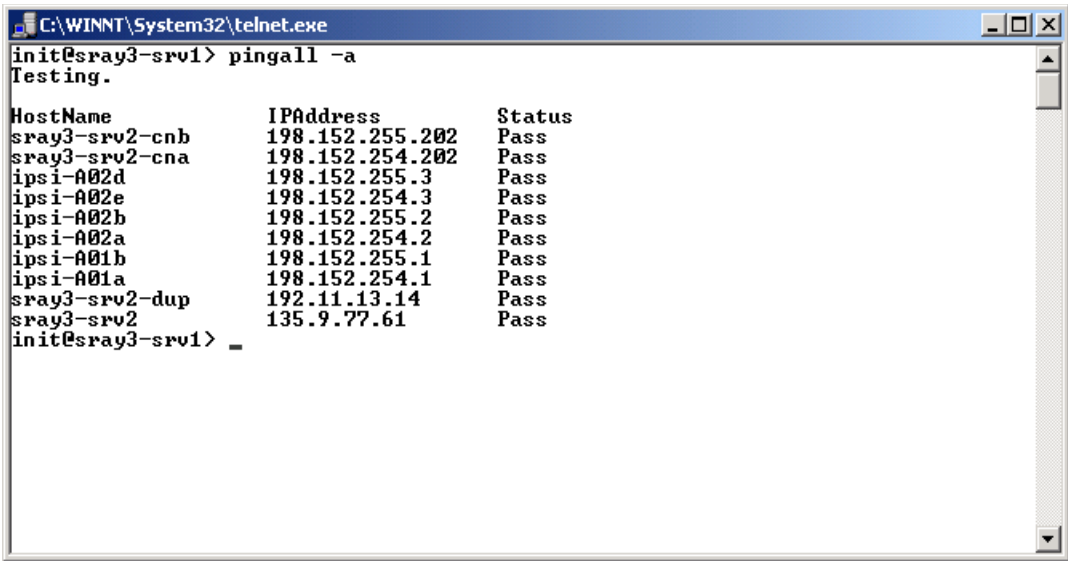
pingall [-i, -a]

Use `pingall` to establish basic connectivity. You can ping all IPSIs [-i] or everything in the system based on /etc/hosts file [-a].

pingall command options

command	option	description
<code>pingall</code>	<code>-a</code>	ping all IPSI circuit packs
	<code>-a</code>	ping everything in the system based on /etc/hosts/file, including servers, routers, and IPSI circuit packs.

Example screen for pingall command



productid [-p | -m]

Use `productid` to query or set the Product ID for Communication Manager (`productid -p`) or Messaging products (`productid -m`) for alarms.

To run `productid` directly on the remote maintenance board, type `sudo/opt/alarming/bin/productid`.

resetipsi command options

command	option	description
productid	-p	query or set the Product ID for Communication Manager
	-m	query or set the Product ID for Messaging products

resetipsi [-a | -c]

[S8700 series](#) | [S8500](#)

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	Reset a specific IPSI circuit pack.
	-d	Display all scheduled resets.
	-r	Remove all scheduled resets.
	-i	Interval in minutes between two resets. Default = 10. Max = 15.
	-s	Start time for reset in mmddyyyyhh:ii format.
	-T	Stop time for reset in mmddyyyyhh:ii format.
	-F	Fork background process to do resets.
	-S	Suffix of ipsi boards to reset.
	-?	Display help message.

restartcause

Use **restartcause** to see a list of all telephony application server restarts, their causes, and the actions taken. Use **restartcause** to help determine when an interchange or reload took place.

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 1 of 2

Field	Description
Cause	<p>The reason for the restart.</p> <p>Initialized = The system was initialized.</p> <p>Craft request = A user logged in as craft requested the restart and selected the level through an administration session on the server.</p> <p>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.</p> <p>Software request = Typically, software detected an error and automatically requested a restart.</p>
Action	<p>The level of the restart.</p> <p>1 (Warm) = Communication Manager is restarted, and active calls remain up.</p> <p>2 (Cold) = Communication Manager is restarted, translations are reloaded, and all calls are dropped.</p> <p>4 (Reload) = Communication Manager software is completely reloaded. All calls are dropped, the translations are reloaded, and the hardware is reinitialized.</p>
1 of 2	

restartcause field descriptions 2 of 2

Field	Description
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 would show a 2 in the Action column and a yes in the Escalated column.
Mode	State of the server at the time of the restart. Look for a change of mode to help determine when an interchange occurred. Active (All Simplex servers or earlier always show Active) Standby BUSYOUT
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.
2 of 2	

rtrenice

Use **rtrenice** to change the current login's priority. Useful, but dangerous on a high occupancy customer switch.

Example for rtrenice

```
rtrenice -r 99 $$ (as root)
```

remaster [-? -u -y]

Use **remaster** to recover from an aborted data restore after remastering a hard drive. Use **remaster -?** for help, **remaster -u** to undo, **remaster -y** to answer yes to all prompts.

Before you use **remaster**, you must have:

- an Avaya Communication Manager installation CD to be loaded in a CDROM drive at bootup
- 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 re0imaging.

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.

rmbpasswd

Use **rmbpasswd** to change passwords for remote maintenance board (MPC) logins.

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 home	Identify a home directory for a particular login on the remote maintenance board. Default is home/login where login 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.

rmbuserdel

Use **rmbuserdel** to delete existing customer-created logins on the remote maintenance board. Craft and rasaccess logins cannot be deleted with **rmbuserdel**.

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.

sat

Use **sat** to run a Communication Manager SAT (system access terminal) session.

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:

- test the communication path to the remote maintenance board (MPC)
- 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	<ul style="list-style-type: none"> • If the IP address cannot be determined, check for problems with the remote maintenance board. • 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 <filename>

Use **sampupdate** 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.

save_trans [lsp]

Use **save_trans** to save translations to the standby server. Equivalent to **save translations (save trans)** on the SAT.

save_trans command options

command	option	description
save trans	lsp	run filesync (save translations) to the standby server and all LSPs

serialnumber [-l | -q | -p]

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	-l	report the serial number from the license file
	-q	force a query of IPSIs or G700s for the serial numbers
	-p	report the serial number of the TN8400AP Media Server circuit pack

server [-i | -if | -c | -b | -r]

Use **server** to see the status and health of the server pair, including information on duplication, connectivity status, shadowing, and how long the servers have been up since the last restart.

server command options

command	option	description
server	-i	perform an interchange between active and standby servers
	-if	force an interchange
	-c	continuous looping of status updates
	-b	busyout the server
	-r	release the server from busyout

Example screen for server command

```

C:\WINNT\System32\telnet.exe
init@pilsner1> server

                        SERVER STATUS

        Duplicated? yes
        Standby Busied? no
        Standby Refreshed? yes
        Standby Shadowing: on
        Duplication Link: up
        Elapsed Time since Init/Interchange: 0d 19:34:50

        pilsner1                                pilsner2

        Mode: Active                               Mode: Standby
        Major Alarms: yes                           Major Alarms: yes
        Minor Alarms: yes                           Minor Alarms: no
        Control Network: ? / ?                       Control Network: ? / ?
        Server Hardware: okay                         Server Hardware: okay
        Processes: okay                               Processes: okay
init@pilsner1>

```

serverctrl [disable boot timer]

Use **serverctrl** on the MPC to see the status of the boot timer on the MPC.

Linux Bash Commands

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 121 of the *Maintenance Procedures for Avaya Communication Manager 3.1.x, Media Gateways and Servers (03-300432) (formerly 03-300192)*.

Example screen for serverctrl

```

      .
     .M
    .MM
   .MM M  | _ _
  .MM M  | | ( )
 .MM      | | _ _ _ _ _
MMM MMMMMM | | | ' _ \ | | \ \ / /
MMM M      | | | | | | | | | | > <
MMMM 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  | | ( )
  MMM MMMMMM | | | ' _ \ | | | \ \ / /
  MMM      M | | | | | | | _ | | > <
  MMMM      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 [-q <interface>]

Use `setnic -q <interface>` to set the speed and duplex 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.

start [-a | -c]

Use `start <process name>` to start a process. For example, use `start Communication Manager` to start Communication Manager processes.

start command options

command	option	description
<code>start</code>	<code>-a</code>	start all processes
	<code>-c</code>	continuous update of output

statapp [-c | -p]

Use `statapp` to see how many processes are running on the system. See [systat \[-c | -d | -D | -U | -I | -s \]](#) on page 691.

statapp command options

command	option	description
<code>statapp</code>	<code>-c</code>	
	<code>-p</code>	shows which processes in Communication Manager are down

Example screen for statapp command

```
craft@sv-st2-1> statapp
Watchdog      19/19 UP
TraceLogger   3/ 3 UP
ENV           1/ 1 UP
LicenseServer 3/ 3 UP
SME           9/ 9 UP
MasterAgent   4/ 4 UP
MIB2Agent     1/ 1 UP
MVSubAgent    1/ 1 UP
LoadAgent     1/ 1 UP
FPAgent       1/ 1 UP
INADSAlarmAgen 1/ 1 UP
GMM           4/ 4 UP
SNMPManager   1/ 1 UP
arbier        2/ 2 UP
filesyncd     8/ 8 UP
fupmgr        1/ 1 UP
MCD           1/ 1 UP
CommunicaMgr  84/81 UP
```

statuslicense [-v]

Use **statuslicense** to see the status of the license. Use **statuslicense -v** (for verbose) for more license file information, including the serial number and location of the IPSI.

Example screen for statuslicense command

```
craft@sv-st10-1> statuslicense -v
CommunicaMgr License Mode: Normal
checking application CommunicaMgr version R013x.00.0.327.0
License is OK
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@sv-st10-1craft@sv-st10-1S>
```

statusserver

See [server \[-i | -if | -c | -b | -r\]](#) on page 685.

stop [-a | -c | -f]

Use **stop** to stop processes.

stop command options

command	option	description
stop	-a	stop all processes
	-c	continuous update of output
	-f	force a process to shutdown

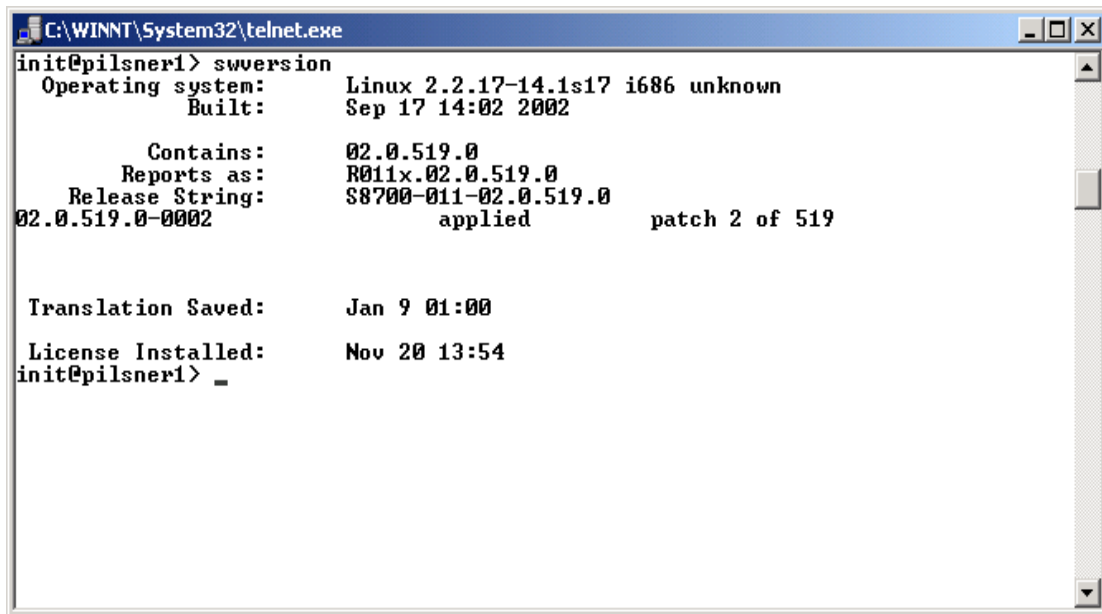
swversion [-r | -v | -l]

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	-r	see the software version of Communication Manager running on the standby partition
	-v	see the software version string of Communication Manager
	-l	see the load string of Communication Manager
	-a	see all fields on the swversion screen

Example screen for swversion command



```

C:\WINNT\System32\telnet.exe
init@pilsner1> swversion
  Operating system:  Linux 2.2.17-14.1s17 i686 unknown
    Built:          Sep 17 14:02 2002

    Contains:       02.0.519.0
    Reports as:     R011x.02.0.519.0
    Release String: S8700-011-02.0.519.0
02.0.519.0-0002      applied          patch 2 of 519

  Translation Saved: Jan 9 01:00
  License Installed: Nov 20 13:54
init@pilsner1> _

```

sudo

Use **sudo**, from a login that is not root, to temporarily run some commands as root.

systat [-c | -d | -D | -U | -l | -s]

Use **systat** to see an update of the processes that are running on Communication Manager.

systat command options

command	option	description
systat	-c	continuous update of output
	-d	list all applications that are not functioning
	-D	exit continuous update when no processes are functioning
	-U	exit continuous update when all processes are functioning
	-l	list the status of applications given
	-s	show the status of only the named application

telnet <ip_addr> 2312

Use `telnet` to telnet into an IPSI board.

Use `telnetenable` before telneting into an IPSI board. At the prompt, type `dc` to enter command mode, then type `IPSI` to show board status. See the example under [telnetenable \[-p, <ip_addr> | -d | -c \[cabinet carrier\]\]](#) on page 692.

telnetenable [-p, <ip_addr> | -d | -c [cabinet carrier]]

Use `telnetenable` to configure the telnet port on the IPSI board at the IP address `<ip_addr>`. Use `telnetenable` before telneting into an IPSI board. In Communication Manager 3.0 and later, use [ipsisession](#).

telnetenable command options

command	option	description
telnetenable	-p <ipaddress>	target an IPSI board using its IP address
	-d	disable telnet service
	-c [cabinet carrier]	target an IPSI board with cabinet number and carrier ID

testdupboard [-s | -l | -t arg | -?]

Use `testdupboard` to perform maintenance on the duplication memory card (DAJ1/DAJ2) on the [S8700 series](#) server.

testdupboard command options

command	option	option description
testdupboard	-s	short test, performs read_err_reg test (default)
	-l	performs short tests and local loop test
	-t arg read_err_reg	specify test to perform
	-t arg localloop	
	-?	usage

testinads

Use `testinads` to test the functionality of alarm processing between the system and INADS. `Testinads` generates a test alarm and sends it to INADS.

To run `testinads` directly on the remote maintenance board, type

```
sudo/opt/alarming/bin/testinads.
```

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

testmodem [-s | -t]

Use `testmodem` to test the connection of the modem that is connected to:

- the server that is running Communication Manager
- the remote maintenance board

testmodem command options

command	option	option description
testmodem	-s	run the handshake and the offhook tests
	-t	test a specific component

topsting <*.mcd>

Use `topsting` to pull information from a mini-core dump. Mini-core dump are located in `/var/log/defty/dumps`, and are created after traps or buffer exhaustion in the system.

uname

Use **uname** to print system information. Use **uname -a** to print all information, including the kernel and the node name.

unlocktrans

Use **unlocktrans** to unlock the “locked” translations and allow successful translation saves.

update_activate

Use **update_activate** to activate a previously unpacked update on the server. In Communication Manager 1.3 and earlier, use [patch_apply](#).

update_deactivate

Use **update_deactivate** to deactivate a previously activated update on the server. In Communication Manager 1.3 and earlier, use [patch_uninstall](#).

update_info

Use **update_info <update-id>** to see information about a specified software update (patch) that is already installed. In Communication Manger 1.3 and earlier, use [patch_info](#).

update_remove [-a]

Use **update_remove <update-id>** to permanently remove a “deactivated” update from the server. Use **update_remove -a** to remove all updates. In Communication Manager 1.3 and earlier, use [patch_uninstall](#).

Communication Manager must be stopped for **update_remove** to complete successfully.

update_show [-a | -u | -h]

Use **update_show** to see information about a specified software update. In Communication Manager 1.3 and earlier, use [patch_show](#). Use **-a** to see activated updates only. Use **-u** to see unpacked updates only. Use **-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. In Communication Manager 1.3 and earlier, use [patch_install](#).

vilog

Use `vilog` to run vi and to open current Communication Manager log files.

Chapter 3: G700 MGP CLI Commands

Introduction

This chapter is the Command Line Interface reference for the Avaya G700 Media Gateway Processor (MGP).

Note:

The Layer 2 Switching Processor on the G700 Media Gateway has its own set of CLI commands. These commands are used primarily in the management of the media gateway stack, if one is present. For information and a complete list of these command line interface commands, see the “*Avaya P330 User’s Guide*” (available at <http://www.avaya.com/support>).

CLI Categories and commands

In this section, Media Gateway CLI commands are grouped into the functional categories of Administration, Processor, Call Controller (CC), Quality of Service (QoS), Network, Maintenance, and E1/T1 CSU.

Administration

Use these commands for general administration on the G700 Media Gateway Processor.

Administration commands for the G700 Media Gateway Processor 1 of 2

clear screen	Clears the screen and homes the cursor
clear sync interface	Disassociates an interface as a sync source
configure	Permits the use of set commands
dir	Shows list of downloadable files
exit	Exit the session or current mode
help	Shows mode-specific command help
1 of 2	

Administration commands for the G700 Media Gateway Processor 2 of 2

<u>hostname</u>	Places 'hostname' in the command prompt
<u>nvrn initialize</u>	Clears NVRAM and reload factory defaults
<u>reset</u>	Resets a specified system resource
<u>retstatus</u>	Shows pass/fail status of last command
<u>sat</u>	Sets up a SAT session
<u>set hostname</u>	Places 'hostname' in the command prompt
<u>set logout timeout</u>	Sets idle time for auto-logout
<u>set sync interface</u>	Permits sync configuration changes
<u>set sync source</u>	Specifies the stratum clock source
<u>set sync switching</u>	Sets automatic switching of sync source
<u>set system contact</u>	Sets the site contact name
<u>set system location</u>	Sets the name of the site location
<u>set system name</u>	Sets the system name
<u>set timeout logout</u>	Sets idle time for auto-logout
<u>show hostname</u>	Shows the current prompt string
<u>show logout timeout</u>	Shows the auto-logout time
<u>show mg list_config</u>	Shows installed MG equipment
<u>show mm</u>	Shows MG Media Module info
<u>show post</u>	Shows Power On Self Test results
<u>show sync timing</u>	Shows state of clocking sources
<u>show system</u>	Shows system ID information
<u>show timeout logout</u>	Shows the auto-logout time
<u>tech</u>	Changes to a mode for access to tech level commands
<u>terminal length</u>	Sets the number of terminal lines
<u>terminal width</u>	Sets or displays the number of characters per line
<u>tree</u>	Shows available commands
2 of 2	

Processor

Use these commands to work on the G700 Media Gateway processor.

Processor commands for the G700 Media Gateway

set mgp bootimage	Specifies boot image source
set mgp icc-monitoring	Enables/Disables heartbeat monitoring of an S8300 /LSP
set mgp reset times	Sets the MGP recovery process timers
show mgp bootimage	Identifies memory bank used for mgp boot
show mgp icc-monitoring	Displays the current state of the S8300 monitoring watchdog
show mgp recovery	Shows the MGP monitoring and recovery setup
show restart-log	Retrieves raw restart log entries

CC

Use these commands to set, change, or display the IP address list of the Media Gateway Call Controller. Use `show mediaserver` to display the active MG controller state and setup.

IP list commands for the Media Gateway Call Controller

clear mgc list	Removes one or all entries within the MGC list
set mediaserver	Sets up media server management ports
set mgc list	Adds one or more entries to the MGC list
show mediaserver	Shows media server management ports
show mgc	Currently active MGC state and setup parameters
show mgc list	Lists available MGCs

QoS

Use these commands to set, change, or display the parameters associated with the bearer-related QoS for the MGP and VoIP engines.

Bearer-related QoS commands for MGP and VoIP engines

set qos bearer	Sets QoS bearer configuration
set qos control	Defines source of QoS parameters
set qos rsvp	Establishes RSVP parameter settings
set qos rtcp	Sets RTCP operation mode and parameters
set qos signal	Sets the DSCP or 802.1Q priority value
show qos-rtcp	Shows QoS parameters
show voip-parameters	Shows a VoIP engine's setup and state

Network

Use these commands to set, display, and change IP parameters associated with the MGC and VoIP engines.

IP parameter commands for the MGP and VoIP engines 1 of 2

clear arp-cache	Deletes all ARP cache entries
clear ip route	Removes entry(ies) from routing table
netstat	Displays all active connections on IP sockets
ping	Tests network path to target IP address
session	Creates a session to the MGC, SAT, or stack
set interface	Sets up IP for MGP or VoIP engine
set ip route	Adds a route to routing table
show interface	Shows defined IP interface
show ip arp	Shows the ARP cache
show ip route	Shows IP routing table
1 of 2	

IP parameter commands for the MGP and VoIP engines 2 of 2

telnet	Initiates a TELNET session
traceroute mgp	Shows route of IP packet from origin to destination
2 of 2	

Maintenance

Use these commands to perform maintenance on the MGP, including

- display voltages, faults, and temperature readings
- set, change, or display SNMP parameters
- upload and download configuration files
- display and reset ISDN links associated with Media Modules

Maintenance command for the Media Gateway Processor

busyout test release voip-dsp	Maintenance busyout a VoIP engine
test voip-dsp	Test a VoIP engine
release voip-dsp	Releases a VoIP engine from busy-out
clear snmp trap	Removes one or all trap receivers
copy mgp-config tftp	Uploads the MG configuration file
copy tftp	Downloads all configuration data to RAM
set snmp trap	Sets up SNMP trap group reporting
show faults	Shows active faults
show isdn bri link	Shows the status of all MM BRI links
show isdn link summary	Displays summary of ISDN links for MG
show isdn pri link	Displays status of MM ISDN PRI link
show snmp	Shows all SNMP trap receivers' setup
show temp	Shows CPU and DSP temperature
show tftp status	Shows TFTP command status
show voltages	Shows power supply status
test led	Tests the MG's LED operation

E1/T1 CSU

Use these commands to display CSU status conditions.

Commands to display CSU status conditions

show csu loopbacks	Shows CSU loopback status
show csu status	Shows CSU operational status

CLI Commands

The following pages contain an alphabetical listing of each of the MGP CLI commands.

busyout | test | release voip-dsp

`busyout | test | release voip-dsp voip ID`

Example: `busyout voip-dsp v1`

Use `busyout/test/release voip-dsp` to administer a VoIP engine on a VoIP media module.

Action/ Object	Object	Qualifier	Qualifier Description	Login
<code>busyout</code> <code>test</code> <code>release</code> [†]	<code>voip-dsp</code>	<code>voip ID</code>	slot number where the VoIP engine is installed <code>v0</code> to <code>v4</code> <code>v0</code> = motherboard	Configure

*. If the VoIP engine is not busied out, test runs only non-disruptive tests. Output for tests shows PASS or FAIL.

†. Release stops any test in progress and restores the engine to operational state.

Use `show mm mmID` or `show voip parameters voipID` to show the current state and most recent test results. Media module status changes create a SNMP trap.

Use SAT commands to busyout/test/release T1/Analog/BRI media modules.

For more information, see [Chapter 1: Maintenance SAT Commands: Common Input Parameters](#) on page 25, [Common Command Output Screens](#) on page 28, and [Busyout and Release Commands](#) on page 33.

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clear arp-cache

```
clear arp-cache
```

Use `clear arp-cache` to remove non-permanent entries from the ARP cache.

Action/Object	Object	Qualifier	Description	Login	Default	Notes
clear	arp-cache			All		

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clear ip route

```
clear ip route <ipaddress> <ipgateway> *
```

Example: `clear ip route *`

Use `clear ip route` to delete IP routing table entries for the MGP or for specified VoIP engine.

Action/Object	Object	Qualifier	Description	Login
clear	ip route	<i>ipaddress</i> <i>ipgateway</i> *	ip address default gateway clears all routes from the routing table	Privileged

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clear mgc list

```
clear mgc list ipaddr
```

Example: `clear mgc list 132.236.73.2`

Use `clear mgc list ipaddr` to remove one or more entries on the MGC list. Multiple entries can be removed at one time provided each entry matches an entry in the table. If no arguments are provided, all entries are removed.

Action/Object	Object	Qualifier	Description	Login
clear	mgc list	<i>ipaddr</i>	INET address of an administered call controller in the MGC list	Configure

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clear screen

`clear screen`

Use `clear screen` to erase the screen, and see a welcome message showing the firmware version number.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default	Notes
<code>clear</code>	<code>screen</code>			All		

Sample output for clear screen -

```
MG-001-3>clear screen
Welcome to Media Gateway Processor
FW version 100
MG-001-3>
```

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clear snmp trap

`clear snmp trap ipaddress / all`

Examples: `clear snmp trap all`

`clear snmp trap 132.236.73.1`

Use `clear snmp trap` to remove a trap receiver table entry, or to clear all trap receiver table entries.

Action/Object	Object	Qualifier	Qualifier Description	Login
<code>clear</code>	<code>snmp trap</code>	<i>ipaddress</i> all	IP address of a trap receiver all trap receiver table entries	Configure

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clear sync interface

```
clear sync interface <primary> <secondary >
```

Use `clear sync interface` to disassociate a previously specified interface as the primary or secondary sync source.

Action/Object	Object	Qualifier	Qualifier Description	Login
clear	sync interface	primary secondary	Disassociate the primary interface before the secondary interface is disassociated.	Configure

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configure

```
configure
```

Add `configure` to a command prompt string to use a `set` command. To return to the previous mode, enter `exit`.

Action/Object	Object	Qualifier	Login
configure			Privileged: a sub-level within Privileged/Supervisor

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copy mgp-config tftp

```
copy mgp-config tftp <filename> <ipaddress>
```

Example: `copy mgp-config tftp tffs.dat 128.256.98.211`

Use `copy mgp-config tftp` to upload a customer's configuration file from NVRAM to a destination via TFTP.

Action/Object	Object	Qualifier	Qualifier Description	Login
copy	mgp-config tftp	filename ipaddress	destination file name destination IP address	Configure

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copy tftp

```
copy tftp {mgp-config | [mgp-image {A | B}] | [mm-image <mmID>]}
<filename> <ipaddress>
```

Use `copy tftp` to download:

- a Media Gateway configuration from a source to NVRAM
- a firmware image from a source to flash memory for the Media Gateway Processor or the Media Modules

Action/Object	Object	Qualifier	Qualifier Description	Login
copy	tftp	mgp-config mgp-image {A B} mm-image mmID filename ipaddress	destination media module slot number origin file name source host IP address	Configure

Sample output for copy tftp -

```
MG-001-3 (configure) # copy tftp mgp-config tffs.dat 128.256.98.211

MG-001-3 (configure) # copy tftp mgp-image b MgpBuild12.bin 128.256.98.211

TFTP STATUS
-----

Module           : MGP
Source [File]    : MgpBuild12.bin
Desitnation File: BANK B
Host             : 128.256.98.211
Running State    : idle
Last Failure     : No Error
Last Warning     : null)
Progress         : [102/7089] 1%
```

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dir

dir

Use **dir** to show the files that have been downloaded to the Media Gateway per the G700 MG Download interface and the SNMP MIB.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
dir				All	

Sample output for dir -

MG-001-1 (super) # dir					
NAME	VERSION	TYPE	LOCATION	MODULE	DESCRIPTION

MGP	100	Runtime Img	Bank A	100	Avaya G700 Media Gateway
MGP	100	Runtime Img	Bank B	100	Avaya G700 Media Gateway
VoIP	58	Component	NVRAM	100	VoIP Main Board Engine
MGP	0	Runtime Cfg	NVRAM	100	Avaya G700 Media Gateway
MGP	56	Runtime Img	NVRAM	2	DCP Telephone Port Board
MGP	55	Runtime Img	NVRAM	4	T1E1 Media Module

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exit

exit

Use **exit** to leave the current mode or exit the session.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
exit				All	

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help

help [**keyword**] or **<command> help**

Example: P330-N(super)# **exit ?**

Use **help** to display a mode-specific alphabetical list of available commands and the terse help string.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
help		x	key word	All	

Sample output for help -

```
MG-014-1 (super) # help show mgp

show mgp bootimage           Identifies memory bank used for MGP reboot
show mgp icc-monitoring      Shows the state of the ICC monitoring process
show mgp recovery            Shows the MGP monitoring and recovery setup

The following command is equivalent to the previous example:
MC 014 1 (super)# show mgp ?
show mgp commands:
- - - - -
show mgp bootimage           Identifies memory bank used for MGP reboot
show mgp icc-monitoring      Shows the state of the ICC monitoring process
show mgp recovery            Shows the MGP monitoring and recovery setup

If the user request a help on a completed/full command the Usage will be displayed

MG-014-1 (super) # set ip route help
set ip route command:
- - - - -
Usage: set ip route <destination> <mask> <gateway>
<destination> - INET address for route destination
<mask> - Mask for the destination
<gateway> - INTET address of the gateway to destination

Example: set ip route 135.8.48.0 255.255.254.0 135.8.48.15

MG-014-1 (configure) # help
```

Commands:

```

-----
System help
busyout          Use 'busyout help' for more info
clear            Use 'clear help' for more info
configure        Enters to configure mode
copy             Use 'copy help' for more info
dir              Shows the list of downloadable files
exit             Close session
help             System help
hostname         Display or set the new host name
netstat          Display al active connections on IP sockets
no              Use 'no help' for more info
nvram            Use 'nvram help' for more info
ping             Use 'ping help' for more info
release          Use 'release help' for more info
reset            Use 'reset help' for more info
retstatus        Shows the return status of the last executed command
sat              Connects to SAT of the registered controller
send             Use 'send help' for more info
session          Use 'session help' for more info
set              Use 'set help' for more info
show             Use 'show help' for more info
tech             Enter tech mode
telnet           Establish a telnet connection to a host
terminal         Use 'terminal help' for more info
test             Use 'test help' for more info
traceroute       Use 'traceroute help' for more info
tree             Display command tree

```

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hostname

[no] hostname [<hostname_string>]

Use **hostname** to see the current hostname, and set the 'MG' moniker in the command line prompt with the entered string.

Action/ Object	Object	Qualifier	Qualifier Description	Login
	hostname	no <i>hostname_string</i>	prefix sets the prompt to the default string ('MG') hostname to be displayed	All

Sample output for hostname -

```
MG-001-3> hostname daffyduck
daffyduck-001-3>
daffyduck-001-3> hostname
Session hostname is 'daffyduck'
daffyduck-001-3> no hostname
MG-001-3>
```

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netstat

netstat

Use **netstat** to show all active connections on IP sockets.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
netstat				All	

Sample output for netstat -

```
MG-001-1> (configure)# netstat
```

Active Internet connections (including servers)

PCD	Proto	Recv Q	Send Q	Local Address	Foreign Address	(state)
3f13e93	TCP	0	2	135.9.41.118.12	135.9.38.63.4523	ESTABLISHED
3f14234	TCP	0	2	135.9.41.118.1025	135.9.38.63.4523	ESTABLISHED
3f1412C	TCP	0	2	0.0.0.0.5012	0.0.0.0.0	LISTEN
3f13FA0	TCP	0	2	0.0.0.0.5011	0.0.0.0.0	LISTEN
3f13F1C	TCP	0	2	0.0.0.0.5010	0.0.0.0.0	LISTEN
3f13b80	TCP	0	2	0.0.0.0.23	0.0.0.0.0	LISTEN
3f141b0	UDP	0	2	0.0.0.0.0	0.0.0.0.0	
3f140a8	UDP	0	2	0.0.0.0.2050	0.0.0.0.0	
3f14024	UDP	0	2	0.0.0.0.151	0.0.0.0.0	
3f13d90	UDP	0	2	0.0.0.0.12345	0.0.0.0.0	

```
MG-001-1 (configure)# netstat?
```

netstat command:

Description: Display all active connections on IP sockets
Usage: netstat

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nvramp initialize

nvramp initialize

Use `nvramp initialize` to clear out the NVRAM areas, and reload them with the factory default.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
<code>nvramp initialize</code>				Configure	

Sample output for nvramp initialize -

```
MG-001-1(configure)# nvramp initialize

This command will reset the MGP to Factory Default.
Do you want to continue (Y/N)? n
```

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ping

`ping {mgp | [voip <mmid>]} <ipaddress> [number]`

Use `ping` to determine if a two-way transmission path is open between the sending equipment and the target host.

Action/Object	Object	Qualifier	Qualifier Description	Login
<code>ping</code>	<code>mgp</code> <code>voip mmid</code>	<code>ipaddress</code> <code>number</code>	media module ID. v0 if none is defined. target host IP address number of packets to transmit, 5 packets if none is specified	All

Uses identical command syntax and output as Avaya Cajun P330. For VoIP, the ping returns only the statistics.

Sample output for ping -

```

MG-001-3> ping mgp 135.9.65.213 5

PING 149.49.48.1 10: 56 databytes
64 bytes from 149.49.48.1: icmp_seq=0. time=8 ms
64 bytes from 149.49.48.1: icmp_seq=1. time=8 ms
64 bytes from 149.49.48.1: icmp_seq=2. time=8 ms
64 bytes from 149.49.48.1: icmp_seq=3. time=8 ms
64 bytes from 149.49.48.1: icmp_seq=4. time=9 ms
----149.49.48.1 PING Statistics----
5 packets transmitted, 5 packets received, 0% packet loss
round-trip (ms) min/avg/max = 8/8/9

MG-014-1(develop)# ping voip v0 127.1.1.1

----127.1.1.1 PING Statistics----
5 packets transmitted, 0 packets received, 5 packet loss
round-trip(ms) min/avg/max = 0/0/0

```

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reset

reset {mgp | voip <voipID> | {mm <mmID>}}

Use **reset** to reset a specified system resource. **Reset:**

- permits a hard reset of the system resource
- returns any selectable parameters to the configuration in place before the reset
- sets all hardware and firmware to a known state.

Action/Object	Object	Qualifier	Qualifier Description	Login
reset	mgp voip mm	voipID mmID	reset the motherboard v0-v4 v1-v4 (v0 is motherboard ID, not allowed)	Configure

Sample output for reset -

```

MG-001-3(configure)# reset mgp
This command will perform a hard reset.
Do you want to continue (Y/N)? y

Connection closed by foreign host.

MG-001-3(configure)# reset voip v0

This command will perform a hard reset.
Do you want to continue (Y/N)? y

```

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retstatus

retstatus

Use **retstatus** to see if the previous CLI command was successful.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
retstatus				All	

Sample output for retstatus -

```
MG-001-2> retstatus
Succeeded

MG-01 > retstatus
Failed
```

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sat

sat

Use **sat** to access the SAT (System Administration Terminal) and perform Avaya Communication Manager translation work.

The Media Server must configure the SAT port to 5023. See [session](#) on page 714 for more information.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
sat				All	

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session

```
session {mgc [sat] | icc [sat] | stack}
```

Use **session** to establish a session with the active MGC, SAT, or the stack.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
session	mgc* icc* stack	sat[†] sat	mgc takes the user to the LINUX shell login SAT takes the user to the SAT login	All	

*. For **session mgc** and **session icc**, the Media Server should allow access to telnet port 23.

†. For **session mgc sat**, and for **session icc sat** to access the Media Server SAT terminal, the SAT port must be configured to 5023 on the Media Server.

Sample output for session -

```
MG-001-3> session icc

Login: craft
Password: *****
craft@doc-iccl> exit
MG-001-3>
```

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set hostname

```
set hostname [hostname_string]
```

Use **set hostname** to:

- place *<hostname_string>* in the command prompt
- set the 'MG' moniker in the command line prompt with the entered string.

Action/Object	Object	Qualifier	Qualifier Description	Login
set	hostname	hostname_string	enclose in quotes if >= 2 words	All

A hostname of an empty string or NULL will not change the prompt.

Enter **set hostname** to display the current hostname.

Sample output for set hostname -

```
MG-001-3> set hostname Mickey
Mickey-001-3>
```

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set interface

```
set interface [mgp <vlan> <ipaddress> <netmask> | voip <voipid>
<ipaddress>]
```

Examples: `set interface voip v2 123.23.44.21`

`set interface mgp 2 132.236.73.23 255.255.255.0`

Use `set interface` to set the local static IP addresses for the Media Gateway Processor and VoIP engines. The VoIP engines inherit the *<netmask>* defined by `set interface mgp`.

Action/ Object	Object	Qualifier	Qualifier Description	Login
set	interface	mgp vlan ipaddress netmask voip voipid ipaddress	VLAN number IP address of the interface IP netmask v0-v4, v0 = the VoIP engine on the motherboard IP address of the interface	Configure

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set ip route

`set ip route <destination / mask / gateway>`

Example: `set ip route 132.236.73.0 255.255.255.0 132.236.73.1`

Use `set ip route` to add IP addresses to the IP routing table. You can configure from one to ten default gateways.

Action/ Object	Object	Qualifier	Qualifier Description	Login
set	ip route	<i>destination</i> <i>mask</i> <i>gateway</i>	IP address of the destination destination mask IP address, gateway to the destination	Privileged

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set logout | timeout

`set [logout | timeout] <minutes>`

Use `set logout | timeout` to set the terminal inactivity timer in minutes. This sets the CLI inactivity time-out value. Either `logout` or `timeout` can be used.

Action/ Object	Object	Qualifier	Qualifier Description	Login
set	logout timeout	<i>minutes</i>	elapsed minutes for timing out the CLI connection. 0-999 * 0 for no time-out blank = 15 minute time-out	Configure

*. When the timer is set greater than 0, and if idle time is greater than the set value, the user is automatically logged out.

Sample outputs for set logout | set timeout -

```
MG-001-3(configure)# set logout 20
Sessions will be automatically timed out after 20 minutes of idle time.
```

```
MG-001-3(configure)# set timeout 0
Sessions will not be automatically timed out.
```

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show mediaserver

show mediaserver

Use **show mediaserver** to see the contents of the Media Server Table.

The Media Server Table associates the Media Server IP addresses specified in the MGC list with:

- SAT IP address and port
- TELNET IP address and port

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	mediaserver			All	

Sample output for show mediaserver - :

MG-001-3> show mediaserver					
MGC IP ADDRESS	SAT IP ADDRESS	SAT PORT	SERVER IP ADDRESS	SERVER PORT	
128.256.173.167	128.256.173.168	5023	128.256.173.128	23	
174.144.134.114	174.144.134.104	5023	174.144.134.124	23	
115.126.117.118	115.126.117.119	5023	115.126.117.128	23	
135.108.165.7	135.108.165.77	5023	135.108.117.128	23	

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set mediaserver

set mediaserver <mgcaddress / ipaddress | port-number / service-name>

Example: **set mediaserver 135.8.45.120 135.8.45.121 5023 sat**

Use **set mediaserve** to specify a SAT IP address and port, and a TELNET IP address and port, that are associated with a specified Media Server in the MGC list. The association is made by the IP address of the Media Server, which resides in both the MGC list and in the Media Server Table.

Action/Object	Object	Qualifier	Qualifier Description	Login
set	mediaserver	<i>mgcaddress</i> <i>ipaddress</i> <i>port-number</i> <i>service-name</i>	controller IP address used for registration management interface IP address service port number service type, SAT or TELNET	Configure

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set mgc list

```
set mgc list [<ipaddr1> [,<ipaddr2> [, <ipaddr3> [, <ipaddr4>]]]]
```

Example: `set mgc list 132.236.73.2`

Use `set mgc list` to create a list of valid MGC(s), up to 4 IP addresses separated by commas.

Action/ Object	Object	Qualifier	Qualifier Description	Login
set	mgc list	ipaddr1	IP address of the first call controller in the list	Configure

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set mgp bootimage

```
set mgp bootimage [a | b]
```

Example: `set mgp bootimage a`

Use `set mgp bootimage` to specify MGP bootup on either flash memory A or B.

Action/ Object	Object	Qualifier	Qualifier Description	Login
set	mgp bootimage	a b	flash memory units in the Media Gateway	All

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set mgp icc-monitoring

S8300

```
set mgp icc-monitoring [enable | disable]
```

Use `set mgp icc-monitoring [enable | disable]` to

Action/Object	Object	Qualifier	Qualifier Description	Login
set	mgp icc-monitoring	enable disable		

If **S8300**/LSP is expected to be present in slot v1 of the MG, the MGP can send a trap if the **S8300**/LSP heartbeat is not present. Use `set mgp icc-monitoring` to set the MGP to monitor or not monitor the **S8300**/LSP.

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set mgp reset times

```
set mgp reset-times {[[total-search | primary-search] <minutes>] |
[transition-point <value>]}
```

Example: `set mgp reset-times total-search 24`

Use `set mgp reset-times` to set the 3 timers that are used as part of the recovery process if the MG and MGC lose their connectivity. The timers are configuration dependant.

Action/ Object	Object	Qualifier	Qualifier Description	Login
set	mgp reset-times	total-search <i>minutes</i> primary-search <i>minutes</i> transition-point <i>value</i>	1-60 [30] minutes 1-60 [15] minutes entry number 1-10 [1]	Configure

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set qos bearer

```
set qos bearer {bbedscp | efdscp | 802p | rtpmin | rtpmax} <value>
```

Example: `set qos bearer bbedscp 43`

Use `set qos bearer` to set VoIP QoS bearer-related parameters for the MGP and VoIP engines.

Because the MGC and VoIP engines share the same setup, they are set to entered values only when `set qos control local` has been executed.

Action/ Object	Object	Qualifier	Qualifier Description	Login	Default
set	qos bearer	bbedscp <i>value</i> efdscp <i>value</i> 802p <i>value</i> rtpmin <i>value</i> rtpmax <i>value</i>	0-63 [43] 0-63 [43] 0-7 [6] 1-65533 [2048] 3-65535 [65535]	Configure	

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set qos control

```
set qos control [local | remote]
```

Use `set qos control` to define the source for QoS control parameters.

Action/Object	Object	Qualifier	Qualifier Description	Login
set	qos control	local remote	configure QoS values via the CLI QoS values come from the media gateway controller	Configure

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set qos rsvp

```
set qos rsvp {enable | disable | refresh <secs> | failure [retry | noretry] | profile [guaranteed | controlled]}
```

Examples:

```
set qos rsvp enable
set qos rsvp refresh 15
set qos rsvp failure noretry
set qos rsvp profile controlled
```

Use `set qos rsvp` to set the current value(s) for the RSVP parameters of the VoIP engines. QoS source control setup must be `local` in order to `set qos rsvp`.

These settings WILL NOT take effect unless QoS source control setup is `local`. to

Action/ Object	Object	Qualifier	Qualifier Description	Login	Default
set	qos rsvp	enable disable refresh <i>secs</i> failure retry noretry profile guaranteed profile controlled	1-99 [15] guaranteed service controlled load service	Configure	

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set qos rtcp

```
set qos rtcp [enable | disable | monip <ipaddress> | reportper
<seconds> | listenport <portno>]
```

Examples:

```
set qos rtcp monip 132.123.23.12
set qos rtcp reportper 10
set qos rtcp listenport 5000
set qos rtcp enable
```

Use `set qos rtcp` to:

- set RTCP parameters
- enable or disable RTCP reporting capability
- set the IP address of the monitor
- set the reporting period
- define the listening port number

Action/Object	Object	Qualifier	Qualifier Description	Login
set	qos rtcp	enable disable monip <i>ipaddress</i> reportper <i>seconds</i> listenport portno	IP address of the monitor reporting period, 5-30 seconds) listening port number, 1-65535 [5005]	Configure

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set qos signal

```
set qos signal [dscp | 802q] <value>
```

Example: `set qos signal dscp 43`

Use `set qos signal` to set up QoS signaling parameters (DSCP, 802.1Q) for the Media Gateway Processor.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
set	qos signal	dscp value 802q value	0-63, [34] 0-7, [7]	Configure	

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set snmp trap

```
set snmp trap <ipaddress> [enable | disable]
[ { all| power| temp| app| module| config| voice| operations } ]
```

Example: set snmp trap 132.236.73.3 enable

Use set snmp trap <ipaddress> to:

- set the IP address of the SNMP trap receiver that will receive the traps from this media gateway
- set what group's traps are sent to the specified receiver

Up to 10 trap receivers can be configured.

Action/ Object	Object	Qualifier	Qualifier Description	Login
set	snmp trap	<ipaddress> enable disable all power temp app module config voice operations	IP address of the trap receiver that will receive the designated trap(s) enable or disable all traps for the receiver	

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set sync interface

```
set sync interface [primary | secondary] [<mmID>|<portID>]
```

Examples: set sync interface primary v2

set sync interface secondary v403

Use `set sync interface` to defines a potential stratum clock source (E1/T1 MM, ISDN-BRI).

Action/ Object	Object	Qualifier	Qualifier Description	Login
<code>set</code>	<code>sync interface</code>	<code>primary</code> <code>secondary</code> <i>mmID</i> <i>portID</i>	normal failover overrides normal failover, generates a trap, and asserts a fault. Not stored in persistent storage media module ID of a MM stratum clock source For Avaya BRI MM720, <i>portID</i> is the mmID of the MM720 and the port number of the BRI port furnishing the source	Configure

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set sync source

`set sync source [primary | secondary | local]`

Use `set sync source` to:

- define the stratum clock source (E1/T1 MM, ISDN-BRI)
- unlock the referenced source and clear the alarm.

Action/ Object	Object	Qualifier	Qualifier Description	Login
<code>set</code>	<code>sync source</code>	<code>primary</code> <code>secondary</code> * <code>local</code>	normal failover override normal failover, generate a trap, assert a fault. Not stored in persistent storage. default	Configure

*. If the secondary interface is not configured, the sync source set operation fails.

A source is automatically “locked out” after 5 incidents of switching sync to an alternate source (secondary or local). When the unstable source is locked out, a MINOR alarm and SNMP trap are raised.

Also use `show sync timing` to see that the source is locked out.

Sample output for set sync source -

```
MG-001-3(configure)# set sync source secondary

Operation Failed

Cannot set the secondary clock source
to be the active clock source
```

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set sync switching

`set sync switching [enable | disable]`

Use `set sync switching` to enable or disable automatic sync source switching from active source. This switching normally occurs when the active sync source has a detectable fault.

Use `set sync switching disable` to prevent the MGP from switching the sync source. Then, when you inject jitter on the line, it will not switch to another source, and you can look at the frame.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
set	sync switching	enable disable		All	

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set system contact

`set system contact [<string>]`

Example: `set system contact "Jon Smith"`

Use `set system contact` to set a contact name for the system. Leave empty to erase the current system contact name.

Action/Object	Object	Qualifier	Qualifier Description	Login
set	system contact	string	name of the system 1 - 20 characters, use quotes if >= 2 words	All

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set system location

`set system location [<string>]`

Use `set system location` to set the name of the site location. Leave empty to erase the current location name.

Action/ Object	Object	Qualifier	Qualifier Description	Login
set	system location	<i>string</i>	name of the system 1 - 20 characters, use quotes if >= 2 words	All

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set system name

`set system name [<string>]`

Use `set system name` to set the system name. Leave empty to erase the current system name.

Action/ Object	Object	Qualifier	Qualifier Description	Login
set	system name	<i>string</i>	name of the system 1 - 20 characters, use quotes if >= 2 words	All

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set timeout | logout

See [set logout | timeout](#) on page 716.

show csu loopbacks

show csu loopbacks [<mmID>]

Use **show csu loopbacks** to see the state of the server SAT-controlled CSU loopbacks for a specified media module.

Action/Object	Object	Qualifier	Qualifier Description	Login
show	csu loopbacks	mmID	slot number where the CSU is installed, v1 - v4	All

.Sample output for show csu loopbacks -

```
MG-001-3> show csu loopbacks v4
CSU LOOPBACK STATUS
-----

Towards DTE port -
    Digital Diagnostic: OFF
Towards Network-
    Payload: OFF
    Line:      OFF
```

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show csu status

show csu status

For TI: Loss of Signal (LOS), Out-of-Frame (OOF), Excessive Error Rate (EER), Alarm Present (ALRM), Loss of Frame (LOF), Alarm Indication Signal (AIS), Yellow (YEL), Pulse Density Violation (PDV) Note: equates to "BPV", Looped (LOOPD).

For E1: Local Multiframe Alignment (LMA), Remote Multiframe Alignment (RMA), Loss of CRC Multiframe (LCM).

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	csu status			All	

Sample output for show csu status -

```
MG-001-3> show csu status v4
T1 version of csu status:
```

```
CSU NETWORK INTERFACE STATUS
```

```
-----
LOS: ON          OOF  : OFF
EER: OFF         LOOPD: OFF
AIS: OFF         PDV  : OFF
LOS: OFF         YEL  : ON
```

```
E1 version of csu status
```

```
CSU NETWORK INTERFACE STATUS
```

```
-----
LOS: ON          OOF  : OFF
EER: OFF         LOOPD: OFF
AIS: OFF         PDV  : OFF
LOS: OFF         YEL  : ON
```

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show faults

show faults [all]

Use **show faults** to see all currently active faults, traps identified as such in the SNMP MIB fault masks. For G700 Release 2, additional key words are added to help filter the output.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	faults			All	

Sample output for show faults -

```
MG-001-3> show faults
```

```
Currently Active Faults
```

```
=====
```

```
PSU Fan
```

```
CPU temperature: Warning
```

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show hostname

show hostname

Use **show hostname** to see the current command line prompt string.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	hostname			All	

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show interface

show interface [mgp | {voip <mmID>}]

Use **show interface** to see IP interface configurations.

Action/Object	Object	Qualifier	Qualifier Description	Login
show	interface	mgp voip <i>mmID</i>	media module ID of the VoIP engine v1-v4 is a VoIP engine on a media module v0=motherboard No parameters = all defined interfaces	All

Sample output for show interface -

MG-001-3> show interface					
OPERATIONAL STATE: -- Currently in use --					
INTERFACE	SRC	VLAN	IP ADDRESS	NETMASK	MAC ADDRESS
-----	---	----	-----	-----	-----
mgp	S	1	135.8.48.222	255.255.254.0	00-04-0D-02-06-68
voip-v0	S	1	135.8.48.223	255.255.254.0	00-04-0D-02-20-68
OPERATIONAL STATE: -- Pending reboot --					
INTERFACE	SRC	VLAN	IP ADDRESS	NETMASK	MAC ADDRESS
-----	---	----	-----	-----	-----
mgp	S	1	135.8.48.234	255.255.254.0	00-04-0D-02-06-68
voip-v0	S	1	135.8.48.223	255.255.254.0	00-04-0D-02-20-68

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show ip arp

`show ip arp`

Use `show ip arp` to see a list of ARP resolved MAC/IP addresses.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	ip arp			All	

Sample output for `show ip arp` -

MG-001-3> show ip arp						
LINK LEVEL ARP TABLE						
IP Address	MAC Address	flags	Refcnt	Use	Interface	
127.1.1.31	00:00:50:09:bd:b	405	0	389	motfec0	
135.8.48.1	00:30:6d:17:fc:2f	405	1	0	motfec0	
135.0.40.220	00:00:50:09:bd:b	405	1	1119	motfec0	

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show ip route

`show ip route [mvp | static | voip <mmID>]`

Use `show ip route` to see the contents of the IP routing table.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	ip route	mvp static voip <i>mmID</i>	media module identification	All	

Sample output for show ip route mgp -

```
MG-001-3> show ip route mgp
```

DESTINATION	MASK	GATEWAY	INTERFACE	(F/C/U)
0.0.0.0	0.0.0.0	135.8.48.1	motfec0	(3/2/1894)
135.8.48.0	255.255.254.0	135.8.48.222	motfec0	(101/0/0)


```
MG-001-3> show ip route voip v0
```

DESTINATION	MASK	GATEWAY
0.0.0.0	0.0.0.0	135.8.48.1

DESTINATION	MASK	MASK
0.0.0.0	0.0.0.0	135.8.48.1

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show isdn bri link

show isdn bri link [<*mmID*>]

Use **show isdn bri link** to see the current status of all BRI links in the specified Media Module.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	isdn bri link	<i>mmID</i>	Media Module ID	All	

Sample output for show isdn bri link -

```
MG-001-3> show isdn bri links {<mmID>}
```

LOCATION	TYPE	LINK ID	DLCI	SIDE	STATE
v4	BRI_BC	0x2001	0x07f	A	Link Up
	BRI_BC	0x4001	0x1ff	A	Link Up
	BRI_P2P	0x0080	0x0040	A	Recovery

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show isdn link summary

show isdn link summary

Use **show isdn link summary** to see a summary of all established links in the current Media Gateway.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	isdn link summary			All	

Sample output show isdn link summary -

MG-001-3> show isdn link summary					
LOCATION	TYPE	NO. OF LINKS UP			
-----	-----	-----			
v2	PRI_P2P	1			
v4	PRI_BC	2			
	BRI_P2P	1			

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show isdn pri link

show isdn pri link <mmID>

Example:

Use **show isdn pri link** to see the current status of all PRI links in the specified Media Module.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	isdn pri link	mmID	Media Module ID	All	

Sample output for show isdn pri link -

MG-001-3> show isdn pri links v2					
LOCATION	TYPE	LINK ID	DLCI	SIDE	STATE
-----	-----	-----	-----	-----	-----
v2	PRI_P2P	0x2001	0x07f	B	Link Up

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show logout | timeout

show [logout | timeout]

Use **show logout | timeout** to see the auto-logout time, which is the administered value of the terminal inactivity timer. Either logout or timeout can be used.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	logout timeout			All	

Sample output for show logout | timeout -

```
MG-001-3> show logout
CLI logout is 15 minutes
```

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show mediaserver

show mediaserver

Use **show mediaserver** to see the contents of the Media Server Table, which associates a SAT IP address and port, and a TELNET IP address and port, with the Media Server IP addresses specified in the MGC list.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	mediaserver			All	

Sample output for show mediaserver -

```
MG-001-3> show mediaserver

MGC IP ADDRESS   SAT IP ADDRESS   SAT PORT   SERVER IP ADDRESS   SERVER PORT
128.256.173.167  128.256.173.168  5023      128.256.173.128    23
174.144.134.114  174.144.134.104  5023      174.144.134.124    23
115.126.117.118  115.126.117.119  5023      115.126.117.128    23
135.108.165.7    135.108.165.77   5023      135.108.117.128    23
```

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show mgc

show mgc

Use **show mgc** to see the currently active Media Gateway Controller state and setup parameters.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	mgc			All	

Sample output for show mgc -

```
MG-001-3> show mgc

CALL CONTROLLER STATUS
-----
Registered           : YES
Active Controller    : 135.8.48.220
H248 Link Status     : UP
H248 Link Error Code : 0x0
MGC List Management  : Static

CONFIGURED MGC HOST
-----
135.8.48.220
--Not Available-
--Not Available-
--Not Available-
```

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show mg list_config

show mg list_config

Use **show mg list_config** to see specifications of the installed Media Gateway equipment, including current hardware and firmware configurations.

Also use **list config media-gateway** on the SAT to see similar information.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	mg list_config			All	

Sample output for show mg list_config -

```
MG-001-3> show mg list_config
```

SLOT	TYPE	CODE	SUFFIX	HW	VINTAGE	FW	VINTAGE	VOIP	FW
v0	G700	DAF1	A	00		100	(B)	58	
v1	ICC	S8300	A	72		86		N/A	
v2	DCP	MM712	A	1		56		N/A	
v3	--Not Installed--								
v4	DS1	MMY10	A	2		55		N/A	

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show mgc list

show mgc list

Use **show mgc list** to list available MGCs and their respective IP addresses.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	mgc list			All	

Sample output for show mgc list -

```
MG-001-3> show mgc list
```

CONFIGURED MGC HOST

135.8.48.220
-- Not Available --
-- Not Available --
-- Not Available --

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show mgp bootimage

show mgp bootimage

Use **show mgp bootimage** to see which flash memory bank the next boot will occur from, and which image will become active on the next mgp boot.

Use **set mgp bootimage [a | b]** to define flash memory bank for the next boot, a or b.

Use `show mg list_config` to see the currently running image source.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	mgp bootimage			All	

Sample output for set mgp bootimage -

MG-001-3> show mgp bootimage	
FLASH MEMORY	IMAGE VERSION
-----	-----
Bank A	100
Bank B	100
ACTIVE NOW	ACTIVE AFTER REBOOT
-----	-----
Bank B	Bank B

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show mgp icc-monitoring

S8300

`show mgp icc-monitoring`

Use `show mgp icc-monitoring` to see the current state of the **S8300** monitoring watchdog, enabled or disabled.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	mgp icc-monitoring			All	

Sample output for show mgp icc-monitoring -

MG-001-1> show mgp-icc monitoring	
ICC Monitoring Status: Disabled	

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show mgp recovery

show mgp recovery

Use **show mgp recovery** to see the configured values associated with the monitoring **Action/Objects** of and recovery parameters used by the MGP.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	mgp recovery			All	

Sample output for show mgp recovery -

```
MG-001-3> show mgp recovery
```

```
MGP RECOVERY TIMES
```

```
-----
```

```
Primary Search   : 2
```

```
Total Search    : 30
```

```
Transition Point: 1
```

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show mm

show mm [<mmID>]

Use **show mm** to see G700 media module information, including:

- type(s) of Media Modules installed on the Media Gateway
- serial numbers of Media Modules installed on the Media Gateway
- SNMP MIB Media Module “cmgModule...” group
- an interpretation of the MM's fault mask (faults field)

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	mm	mmID	Media Module ID blank = all media modules	All	

Sample output show mm -

```
MG-001-3> show mm v2

MEDIA MODULE DESCRIPTION: v2
-----
Type           : DS1
Description    : E1T1 Media Module
Serial Number: 01DR10387865
HW Vintage     : 2
HW Suffix      : A
FW Version     : 55
No. of Ports   : 1
Faults         : No Fault Messages

This is an ACP controlled Media Module, check
the ACP for additional status information.
```

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show post

show post

Use **show post** to see the results of the Power On Self Test (POST) for the G700 Media Gateway Firmware.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	post				

Sample output for show post -

MG-001-3> show post					
NCE0 DIAGNOSTICS			NCE1 DIAGNOSTICS		
-----			-----		
NCE Reset	PASS		NCE Reset	PASS	
Internal RAM	PASS		Internal RAM	PASS	
F1F0 Loop Around	PASS		F1F0 Loop Around	PASS	
Internal CH Loopback	PASS		Internal CH Loopback	PASS	
TDM Bus Master LB	PASS		TDM Bus Master LB	PASS	
External CH Loopback	PASS		External CH Loopback	PASS	
DSP DIAGNOSTICS			SPITFIRE DIAGNOSTICS		
-----			-----		
DSP Memory	PASS		FIFOs	PASS	
DSP Memory Download	PASS		SPI Loopback	PASS	
DSP Checksum	PASS				
ENV DIAGNOSTICSS			MISC DIAGNOSTICS		
-----			-----		
Fan #1	PASS		Ethernet Local LB	PASS	
Fan #2	PASS		Ethernet Phys LB	PASS	
Fan #3	PASS		HDLC	PASS	
Fan #4	PASS		Port I/O Read	PASS	
Main Power Supply	PASS				
Aux Power Supply	PASS				
ADC	PASS				

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show qos-rtcp

qos-rtcp

Use `qos-rtcp` to see the locally configured and downloaded QoS parameters.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	qos-rtcp			All	

Sample output for show qos-rtcp -

```

MG-001-3> show qos-rtcp
PARAMETERS IN EFFECT: --Downloaded --

```

QOS PARAMETERS	LOCALLY SET	DOWNLOADED
-----	-----	-----
Signal 802 Priority:	7	7
Signal DSCP :	34	34
Bearer 802 Priority:	6	6
Bearer BBE DSCP :	43	43
BEarer EF DSCP :	46	46
Minimum RTP Port :	2048	2048
Maximum RTP Port :	65535	65535
RSVP PARAMETERS	LOCALLY SET	DOWNLOADED
-----	-----	-----
State :	Enabled	Enabled
Retry on Failure :	Yes	Yes
Refresh Rate(secs) :	15	15
Service Profile :	Guaranteed	Guaranteed
RTCP MON PARAMETERS	LOCALLY SET	DOWNLOADED
-----	-----	-----
State :	Enabled	Enabled
IP Address :	0.0.0.0	0.0.0.0
Listening Port :	5005	5005
Report Period(secs):	5	30

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show restart-log

show restart-log

Use **show restart-log** to retrieve raw restart data.

The MGP creates a log of 'reasons for restart' stored in flash memory that is different than the trap log. The trap log might not contain a restart entry if the logging process was non-functional during an insanity cycle. This command retrieves raw restart data.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	restart-log			All	

Sample output for show restart-log -

```
MG-001-3> show restart-log
RESET ID MM/DD-hh:mm:ss.hs STR
-----
0000000596 02/02-19:33:38.67 User reboot
0000000595 02/02-19:33:31.67 MSY-TRPCRINO-0042 REBOOT from Recovery-Engine
Utlty::reboot()
0000000594 02/01-21:35:13.08 MSY-TRPCRINO-0042 REBOOT from Recovery-Engine
Utlty::reboot()
0000000593 02/01-20:02:20.55 MSY-TRPCRINO-0042 REBOOT from Recovery-Engine
Utlty::reboot()
0000000592 02/01-19:50:55.88 User reboot
0000000591 02/01-19:50:41.88 MSY-TRPCRINO-0042 REBOOT from Recovery-Engine
Utlty::reboot()
0000000590 02/01-13:32:16.36 User reboot
0000000589 02/01-13:32:09.36 MSY-TRPCRINO-0042 REBOOT from Recovery-Engine
Utlty::reboot()
0000000588 01/31-12:53:01.67 User reboot
0000000587 01/31-12:52:54.67 MSY-TRPCRINO-0042 REBOOT from Recovery-Engine
Utlty::reboot()
0000000586 01/31-08:04:27.94 User reboot
0000000585 01/31-18:04:20.94 MSY-TRPCRINO-0042 REBOOT from Recovery-Engine
Utlty::reboot()
```

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show snmp

show snmp

Use **show snmp** to see the community strings and trap targets for each configured trap receiver, one page per trap receiver.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	snmp			All	

Sample output for show snmp -

```

MG-001-3> show snmp
COMMUNITY ACCESS      COMMUNITY STRING
-----
read-only             public
read-write            public
trap                  public

TRAP RECEIVER        RECEIVER STATUS      TRAP ENABLED
-----
11.3.4.5              Enabled              P,T,M,C,O,A
11.3.4.6              Enabled              P,T,M,C,O,A

TRAP CODE/NAMES REFERENCE
-----
P=Power      T=Temp      A=Application
M=Module     C=Config    O=Operations
V=Voice

```

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show sync timing

`show sync timing`

Use `show sync timing` to see the status of the primary, secondary, and the local clock sources.

Status can be:

- **Active**
- **Standby**
- **Not Configured** when the clock source has not been defined, as in when there are no T1 cards installed.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
<code>show</code>	<code>sync timing</code>			All	

Sample output for show sync timing -

MG-001-3> show sync timing			
SOURCE	MM	STATUS	FAILURE
-----	----	-----	-----
Primary		Not Configured	
Secondary		Not Configured	
Local	v0	Active	None

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show system

`show system`

Use `show system` to see the uptime, system name, system location, and contact name for the system.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
<code>show</code>	<code>system</code>			All	

Sample output for show system -

```

MG-001-1 <super># show system

Uptime<d,h:m:s>: 01, 01:07:57

System Name      : --Empty --
System Location:  --Empty --
System Contact   : --Empty --
MAC Address      : 00-04-0D-02-06-CA
Serial No        : 01DR12310260
Model No         : G700
HW Vintage       : 00
HW Suffix        : A
FW Vintage       : 20.15.0

Media Gateway Power Supplies
                VOLTAGE<V> ACUTAL<V>  STATUS
                -----
DSP Complex      3.4          3.380      OK
MGP              5.1          5.090      OK
Media Modules    -48.0        -47.990   OK
VoIP DSP         1.0          1.570      OK
VoIP CPU         2.5          2.480      OK

```

If VoIP CPU is 8260, Voltage is 2.5. If CPU is 8270, Voltage is 1.5.

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show temp

show temp

Use **show temp** to see the current temperature of the CPU and DSP complex in degrees Celsius and the thresholds for warning and shutdown.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	temp			All	

Sample output for show temp -

```

MG-001-3> show temp
CPU                                DSP
-----
Temperature:      22C              Temperature:      21C
Warning          :      52C        Warning          :      52C
Shutdown         :      60C        Shutdown         :      60C

```

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show tftp status

`show tftp [download | upload] [software {<mmID>} | config] status`

Example: `show tftp download mg013.sft status`

Use `show tftp status` to see the status of the current TFTP file copy process into/from the device.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	tftp status	download upload software <i>mmID</i> config	Media Module ID	All	

Sample output for show tftp download status -

```
MG-001-3> show tftp download mg013.sft status
```

```
TFTP Status
```

```
-----
Module           : MGP
Source File      : mg01_3.com
Destination File : BANK B
Host             : 0.0.0.0
Running State    : idle
Last Failure     : No Error
Last Warning     : (null)
Progress        : [0/0]  0%
```

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show timeout | logout

See [show logout](#) | [timeout](#) on page 732.

show voip-parameters

show voip-parameters [<mmID>]

Use **show voip-parameters** to see information on the specified VoIP engine, including:

- MAC address
- static/DHCP IP addresses
- RTP port
- whether the VoIP engine setup is controlled via DHCP

Action/ Object	Object	Qualifier	Qualifier Description	Login
show	voip-parameters	mmID	Media Module ID blank = motherboard VoIP engine	All

Sample output for show voip-parameters -

```
MG-001-1 <super># show voip-parameters

VOIP ENGINE PARAMETERS
-----
Slot Number           : v0
Current IP Address    : 135.9.41.119
Static IP Address     : 135.9.41.1119
DHCP Used             : No
DSP Firmware Version: 12
MAC Address           : 00-04-0D-02-20-CA
Fault Status          : No Fault Messages
Additional Status      : No Status Messages

CURRENT STATE
-----
In Use                : 0 channels, 0 of 64 resources
DSPs State            : Idle
Admin State           : Release
```

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show voltages

show voltages

Use **show voltages** to see the status of power supply voltages, and whether the voltage is within predefined limits.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
show	voltages			All	

Sample output for show voltages -

MG-001-3# show voltages			
	VOLTAGE (V)	ACTUAL (V)	STATUS
DSP Complex	3.4	3.369	OK
MGP	5.1	5.090	OK
Media Modules	-48.0	-47.990	OK
VoIP DSP	1.6	1.590	OK
VoIP CPU	2.5	2.190	OK

If VoIP CPU is 8260, Voltage is 2.5. If CPU is 8270, Voltage is 1.5.

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tech

tech

Use **tech** to change to the tech mode where additional tech-related commands are available.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
tech				Privileged	

Sample output for tech -

MG-001-3# tech			
Password:			
MG-001-3 (tech) #			

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telnet

telnet [<hostname>] [<port-number>]

Example: telnet 135.9.41.121

Use **telnet** to initiate a login session via TELNET to a network host.

Action/Object	Object	Qualifier	Qualifier Description	Login
telnet		hostname port-number	IP address of the target host TELNET port number, 23 is the default	All

Sample output for telnet -

```
MG-001-3# telnet 135.9.41.121

login:
```

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terminal length

terminal length [<lines>]

Use **terminal length** to set the terminal length, expressed in the number of lines per screen. If blank, shows the current terminal length.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
terminal length		lines	terminal length measured in lines per screen, 3-200 [24] If blank, shows the current terminal length	All	24

Sample output terminal length -

```
MG-001-3> terminal length 24

MG-001-3> terminal length

terminal length: 24
```

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terminal width

terminal width [*<chars>*]

Use **terminal width** to set the terminal width in characters. If blank, shows the current terminal width.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
terminal width		<i>chars</i>	terminal width in characters, 10-200 [80] If blank, shows the current terminal width.	All	80

Sample output terminal width -

```
MG-001-3> terminal width 80

MG-001-3> terminal width

terminal width: 80
```

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test led

test led

Use **test led** to illuminate the box-level LED on the Media Gateway.

Communication Manager controls the LEDs on the Media Modules, and the Layer 2 Switching Processor controls the others. The LED self-extinguishes.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
test	led			All	

Sample output for test led -

```
MG-001-3> test led

Box-level LED should be ON for 5 seconds.
```

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traceroute mgp

`traceroute mgp <ipaddress>`

Use `traceroute mgp` to diagnose IP routing and network performance. Output includes:

- TTL
- address of the gateway
- round trip time (in milliseconds) for each of 3 probes

`traceroute mgp` is useful for locating slow routers and for finding IP routing problems.

Action/Object	Object	Qualifier	Qualifier Description	Login
traceroute	mgp	<i>ipaddress</i>	IP address of the targeted host	All

Sample output for traceroute -

```
MG-001-1 <super># traceroute mgp 135.9.1.76

traceroute to 135.9.1.76 (135.9.1.76): 30 hops max, 16 data bytes
 1  135.8.48.1 (135.8.48.1)  5 ms  0 ms  5 ms
 2  135.8.2.1 (135.8.2.1)   0 ms  0 ms  5 ms
 3  198.152.3.35 (198.152.3.35) 0 ms  5 ms  0 ms
 4  198.152.8.22 (198.152.8.22) 55 ms 55 ms 50 ms
 5  198.152.2.134 (198.152.2.134) 45 ms 45 ms 50 ms
 6  135.9.3.105 (135.9.3.105) 45 ms 45 ms 45 ms
 7  135.9.1.76 (135.9.1.76) 45 ms * 45 ms
```

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tree

tree

Use **tree** to see an alphabetical list of the commands in the CLI hierarchy available at your location.

Action/Object	Object	Qualifier	Qualifier Description	Login	Default
tree				All	

Sample output for tree -

```
MG-001-3> tree

clear screen
session
show dhcp
show interface
terminal length
terminal width
```

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Chapter 4: 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 S8700 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, or from the S8700 MC server, 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 754.

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 S8700 MC 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 763
- [exit \(or quit\)](#) on page 754
- [logout](#) on page 755

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 754
- [help \(or ?\)](#) on page 755
- [ipsilogin](#) on page 755
- [show firmware version](#) on page 759
- [show servers](#) on page 761
- [telnet](#) on page 763

Basic diagnostic commands

These are the most commonly used IPSI and network diagnostic commands.

- [reset](#) on page 755
- [show control interface](#) on page 759
- [show control stats](#) on page 759
- [ping](#) on page 755

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 S8700 MC 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 756
- [set control gateway](#) on page 756

Additional IPSI / network diagnostic commands

Most of the following diagnostic utilities were derived from VxWorks.

- [show arp](#) on page 759
- [show host](#) on page 759
- [show network stats](#) on page 760
- [show internet stats](#) on page 760
- [show ip stats](#) on page 760
- [show route](#) on page 761
- [show route stats](#) on page 761
- [show tcp stats](#) on page 762
- [traceroute](#) on page 763

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 758
- [set services gateway](#) on page 758
- [set port negotiation](#) on page 757
- [set port speed](#) on page 758
- [set port duplex](#) on page 757
- [set port flowcontrol](#) on page 757
- [show port](#) on page 760
- [show services interface](#) on page 761
- [show services stats](#) on page 761

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 5: SAT Command Parameters

This chapter lists Avaya Communication Manager 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, 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. Some qualifiers are not available on all systems. For example, on an Avaya S8300 Media Server with Avaya G700 Media Gateway, the **print** qualifier is supported on Linux and Windows platforms only when the command has been entered on a 4410-emulation terminal type. Entering **print** using emulation of any other terminal type will result an error message: “**pr not supported by platform.**”

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 [<i>min n</i>]
change ars analysis	<i>digits 0 to 9</i> * x X [location (<i>n</i> all)] [<i>min n</i>]
display aar analysis	<i>digits 0 to 9</i> * x X [<i>min n</i>] [<i>print</i> <i>schedule</i>]
display ars analysis	<i>digits 0 to 9</i> * x X [location (<i>n</i> all)] [<i>min n</i>] [<i>print</i> <i>schedule</i>]
list aar analysis	[start string] [count <i>n</i>] [route (<i>n</i> r1-r32)] [node <i>n</i>] [to-node <i>n</i>] [<i>print</i> <i>schedule</i>]
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>] [<i>schedule</i>]
1 of 2	

Action/Object	Qualifier
list aar route-chosen	dialed number [location (<i>n</i> all)] [partition <i>n</i>] [print schedule]
list aar route-chosen	dialed number [location (<i>n</i> all)] [partition <i>n</i>] [schedule]
2 of 2	

AAR and ARS Digit Conversion Table

Action/Object	Qualifier
change aar digit-conversion	<i>digits 0 to 9</i> * x X
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 [print schedule]
display ars digit-conversion	<i>digits 0 to 9</i> * x X [location (<i>n</i> all)] [print schedule]
list aar digit-conversion	[start <i>matching pattern</i>] [count <i>n</i>] [print schedule]
list ars digit-conversion	[start <i>matching pattern</i>] [count <i>n</i>] [location (<i>n</i> all)] [print 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) [print 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> [print schedule]
list abbreviated-dialing group	[number <i>n</i>] [to - number <i>n</i>] [count <i>n</i>] [print 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) [print schedule]
list abbreviated-dialing personal	[ext <i>n</i>] [to-ext <i>n</i>] [count <i>n</i>] [print schedule]

Action/Object	Qualifier
add abbreviated-dialing system	
change abbreviated-dialing system	
display abbreviated-dialing system	[print schedule]
remove abbreviated-dialing system	

Action/Object	Qualifier
add abbreviated-dialing 7103A-buttons	
change abbreviated-dialing 7103A-buttons	
display abbreviated-dialing 7103A-buttons	[print 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> [print schedule]
duplicate access-endpoint	<i>extension</i>
remove access-endpoint	<i>extension</i>
list access-endpoint	<i>extension</i> (starting) [count <i>n</i>] [print 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 [print 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>] [print schedule]

Administration Change Notification

Action/Object	Qualifier
notify history	

Alias Station

Action/Object	Qualifier
change alias station	
display alias station	[print schedule]

Alphanumeric Dialing Table

Action/Object	Qualifier
change alphanumeric-dial-table	[<i>entry name</i>] [next]
display alphanumeric-dial-table	[<i>entry name</i>] [print schedule]

Announcement Group Board Usage

Action/Object	Qualifier	Purpose
list usage integ-annc-board	<i>board location</i> [schedule]	list or print 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> [print schedule]	
1 of 2		

SAT Command Parameters

Action/Object	Qualifier	Purpose
display integrated-annc-boards	[print schedule]	
disable announcement-board	<i>n</i>	
enable announcements	<i>n</i>	
erase announcements	board <i>location</i> gateway <i>location</i>	
list usage audio-group	<i>n</i> (1-max) [schedule]	list or print all extensions that refer to the audio group
list integrated-annc-boards	board <i>location</i> gateway <i>location</i> [schedule]	
copy announcements	[SPE-A SPE-B] [target device [disk removable-media]]	
restore announcements	to cabinet location [disk removable-media] [to cabinet location]	
save announcements	[SPE-A SPE-B active standby either both] [disk removable-media] [from cabinet location] [spe-active spe-standby] [from cabinet location]	
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) [print schedule]

ATM Board

Action/Object	Qualifier
status atm board	board <i>location</i> [print]

Attendant Console

Action/Object	Qualifier
add attendant	<i>n</i>
change attendant	<i>n</i>
display attendant	<i>n</i> [print 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 or print 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 or print 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> [print schedule]
list authorization-code	[start code] [count <i>n</i>] [cor <i>x</i>] [to-cor <i>x</i>] [print 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> [print schedule]
list best-service-routing	<i>starting number</i> [count <i>n</i>] [print schedule]
remove best-service-routing	<i>n</i>

Boot Image

Action/Object	Qualifier
get boot-image	board <i>location</i> [print]
set boot-image	board <i>location</i> [image 1 image 2]

Bulletin Board

Action/Object	Qualifier
change bulletin-board	
display bulletin-board	[print schedule]

Button Type

Action/Object	Qualifier
list usage button-type	[print 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> [print schedule]

CAMA Numbering Format

Action/Object	Qualifier
change cama-numbering	
display cama-numbering	[print schedule]

CDR System Parameters

Action/Object	Qualifier
change system-parameters cdr	
display system-parameters cdr	[print 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 [print schedule]
list cor	[cor n] [to-cor n] [print schedule]

Class of Service

Action/Object	Qualifier
change cos	
display cos	[print schedule]

Code Calling IDs

Action/Object	Qualifier
change paging code-calling-ids	
display paging code-calling-ids	[print schedule]

Command Permission Categories

Action/Object	Qualifier
change permissions	<i>login-id</i>
display permissions	<i>login-id</i> [print schedule]

Console-Parameters

Action/Object	Qualifier
change console-parameters	
display console-parameters	[print 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> [print schedule]
list coverage answer-group	[number <i>n</i>] [to- number <i>n</i>] [name <i>x</i>] [count <i>n</i>] [print 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> [print schedule]
list coverage path	[path <i>n</i>] [to-path <i>n</i>] [count <i>n</i>] [print 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> [print 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> [print schedule]
list cti-link	[<i>cti-link number n</i>] [count <i>n</i>] [print schedule]
list usage cti-link	[<i>cti-link number n</i>] [print 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> [print schedule]
list data-module	[ext <i>n</i>] [to-ext <i>n</i>] [name <i>x</i>] [count <i>n</i>] [print schedule]

Date and Time

Action/Object	Qualifier
set time	
display time	[print schedule]

Daylight Savings Rules

Action/Object	Qualifier
change daylight-savings-rules	
display daylight-savings-rules	[print schedule]

DCS to QSIG TSC Gateway

Action/Object	Qualifier
change isdn dcs-qsig-tsc-gateway	
display isdn dcs-qsig-tsc-gateway	[print schedule]

Dial Plan Analysis Table

Action/Object	Qualifier
change dialplan analysis	
display dialplan analysis	[print schedule]

Dial Plan Parameters

Action/Object	Qualifier
change dialplan parameters	
display dialplan parameters	[print schedule]

Digit Absorption

Action/Object	Qualifier
change digit-absorption	0-4
display digit-absorption	0-4 [print schedule]

Digit String

Action/Object	Qualifier
list usage digit-string	<i>string</i> (0-9, +?*#~prwWms) [print schedule]

Display-Messages Button Labels

Action/Object	Qualifier
change display-message button-labels	
display display-message button-labels	[print schedule]

DLG CTI Link

Action/Object	Qualifier
status dlg cti-link	[print]

DLG Interface

Action/Object	Qualifier
status dlg interface	[print]

DS1 Circuit Pack

Action/Object	Qualifier
add ds1	board <i>location</i>
change ds1	board <i>location</i> [print schedule]
display ds1	board <i>location</i> [print schedule]
list measurements ds1 summary	board <i>location</i> [local carrier-local remote] [print schedule]
list measurements ds1 log	board <i>location</i> [local carrier-local remote] [print 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>] [print]
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> [print schedule]
list extended-pickup-group	[number <i>n</i>] [to- number <i>n</i>] [count <i>n</i>] [print schedule]

Extension

Action/Object	Qualifier
list usage extension	<i>extension</i> [vector] [print 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>] [print schedule]

Feature Access Code

Action/Object	Qualifier
change feature-access-codes	
display feature-access-codes	[print schedule]

Feature-Related System Parameters

Action/Object	Qualifier
change system-parameters features	
display system-parameters features	[print 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> [print 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>] [print schedule]

Holiday Table

Action/Object	Qualifier
change holiday-table	<i>n</i>
display holiday-table	<i>n</i> [print schedule]
list usage holiday-table	<i>n</i> [print schedule]

Hospitality

Action/Object	Qualifier
change system-parameters hospitality	
display system-parameters hospitality	[print 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>] [print 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>] [print schedule]
remove hunt-group	<i>n</i>
list usage hunt-group	group <i>n</i> [vector] [print 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>] [print 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	[print 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> [print schedule]
list intercom-group	[number <i>n</i>] [to-number <i>n</i>] [count <i>n</i>] [print schedule]
remove intercom-group	<i>n</i>

Inter-Exchange Carrier (IXC) codes

Action/Object	Qualifier
change ixc-codes	
display ixc-codes	[print 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> [print schedule]
list intra-switch-cdr	<i>extension</i> [count <i>n</i>] [print schedule]

IP Address

Action/Object	Qualifier
list usage ip-address	<i>IP address</i> [print schedule]

IP Codec Set

Action/Object	Qualifier
change ip-codec-set	<i>n</i>
display ip-codec-set	<i>n</i> [print 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	[print schedule]

IP Network Regions

Action/Object	Qualifier
change ip-network- region	region number <i>n</i>
display ip-network- region	<i>n</i> [print schedule]
status ip-network- region	<i>n</i> [print schedule]

IP Node Name

Action/Object	Qualifier
change node-name ip	<i>node name</i>
list-usage node-name	<i>node name</i> [print schedule]

IP Options System Parameters

Action/Object	Qualifier
display system-parameters ip-options	<i>n</i> [print 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> [print schedule]

IP Services

Action/Object	Qualifier
change ip-services	
display ip-services	[print 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	[print schedule]

ISDN Numbering Public/ Unknown

Action/Object	Qualifier
change isdn public-unknown-numbering	
display isdn public-unknown-numbering	[print 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> [print 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	[print schedule]
change display-messages call-identifiers	
display display-messages call-identifiers	[print schedule]
change display-messages date-time	
display display-messages date-time	[print schedule]
change display-messages leave-word-calling	
display display-messages leave-word-calling	[print schedule]
change display-messages malicious-call-trace	
display display-messages malicious-call-trace	[print schedule]
change display-messages miscellaneous-features	
display display-messages miscellaneous-features	[print schedule]
change display-messages property-management	
display display-messages property-management	[print schedule]
change display-messages softkey-labels	
display display-messages softkey-labels	[print schedule]
change display-messages time-of-day-routing	
display display-messages time-of-day-routing	[print schedule]
change display-messages transfer-conference	
display display-messages transfer-conference	[print schedule]
change display-messages view-buttons	
display display-messages view-buttons	[print schedule]

Listed Directory Numbers

Action/Object	Qualifier
change listed-directory-numbers	
display listed-directory-numbers	[print schedule]

Locations

Action/Object	Qualifier
change locations	
display locations	[print schedule]

Location Parameters

Action/Object	Qualifier
change location-parameters	<i>n</i>
display location-parameters	<i>n</i>

Login Administration

Action/Object	Qualifier
add login	<i>login-id</i>
change login	<i>login-id</i>
display login	<i>login-id</i> [print schedule]

Local Survivable Processor

Action/Object	Qualifier
change lsp	
display lsp	

Loudspeaker Paging

Action/Object	Qualifier
change paging loudspeaker	
display paging loudspeaker	[print schedule]

Measurements Announcements

Action/Object	Qualifier
list measurements announcements all	[yesterday-peak today-peak last-hour] [print schedule]
list measurements announcements integ-all	[yesterday-peak today-peak last-hour] [print schedule]
list measurements announcements board	[to cabinet <i>location</i> gateway <i>location</i>] V9 [yesterday-peak today-peak last-hour] [print 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> [print schedule]
remove media-gateway	<i>n</i>

Medpro

Action/Object	Qualifier
set medpro ucss	[lock unlock override]

Mode Code Related System Parameters

Action/Object	Qualifier
change system-parameters mode-code	
display system-parameters mode-code	[print]

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> [print schedule]
list modem-pool num	[print 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> [print 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>] [print 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>] [print schedule]
remove pickup-group	[<i>n</i>]

Port

Action/Object	Qualifier
display port	port <i>n</i> [print 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> [print schedule]
list pri-endpoint	<i>extension</i> [count <i>n</i>] [print 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	[print schedule]

Remote Access

Action/Object	Qualifier
change remote-access	[<i>n</i>]
display remote-access	[print 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> [print schedule]
list remote-office	[print schedule]
remove remote-office	<i>n</i>
status remote-office	<i>n</i> [print]

RHNPA Table

Action/Object	Qualifier
change rhnpa	RHNPA and code n:xxx <i>nn</i> x(0-MAX) x(0-MAX) x(0-MAX)
display rhnpa	RHNPA and code n:xxx <i>nn</i> x(0-MAX) x(0-MAX) x(0-9) [print schedule]

Route Pattern

Action/Object	Qualifier
change route-pattern	<i>n</i>
display route-pattern	<i>n</i> [print schedule]
list route-pattern	[trunk <i>n</i>] [<i>service /feature name-string</i>] [print schedule]

Security-Related System Parameters

Action/Object	Qualifier
change system-parameters security	
display system-parameters security	[print schedule]

Session

Action/Object	Qualifier	Purpose
enable session	[board <i>location</i>]	In Communication Manger 2.2 and earlier, use enable filesystem
disable session	[board <i>location</i>]	

Signaling Group

Action/Object	Qualifier
add signaling-group	<i>n</i> next
change signaling-group	<i>n</i>
display signaling-group	<i>n</i> [print schedule]
list signaling-group	<i>n</i> [print schedule]
remove signaling-group	<i>n</i>

Site Data

Action/Object	Qualifier
change site-data	
display site-data	[print 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>] [print schedule]
duplicate station	<i>extension</i> [start extension] [<i>board location</i> <i>x</i> <i>w</i> <i>l</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>] [print schedule]
status station	<i>extension</i> [print]

System Parameters Call Coverage/Call Forwarding

Action/Object	Qualifier
change system-parameters coverage-forwarding	
display system-parameters coverage-forwarding	[print schedule]

System Parameters Country-Options

Action/Object	Qualifier
display system-parameters country-options	[print schedule]

System Parameters Crisis Alert

Action/Object	Qualifier
change system-parameters crisis-alert	
display system-parameters crisis-alert	[print schedule]

System Parameters Customer-Options

Action/Object	Qualifier
display system-parameters customer-options	[print schedule]

System Parameters IP Options

Action/Object	Qualifier
change system-parameters ip-options	
display system-parameters ip-options	[print 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	[print schedule]

Tenant

Action/Object	Qualifier
change tenant	<i>n</i>
display tenant	<i>n</i> [print 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> [print 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>] [print schedule]
remove term-ext-group	<i>n</i>

TFTP Server

Action/Object	Qualifier
change tftp-server	[print schedule]
display tftp-server	[print 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> [print 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> [print 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] [print schedule]
list toll toll-list	[start <i>dialed-string</i>] [count <i>n</i>] [location (<i>n</i> all)] [print schedule]
list toll all	[start <i>dialed-string</i>] [count <i>n</i>] [location (<i>n</i> all)] [print schedule]
list toll restricted-call	[start <i>dialed-string</i>] [count <i>n</i>] [location (<i>n</i> all)] [print schedule]
list toll unrestricted-call	[<i>n</i>] [start <i>dialed-string</i>] [count <i>n</i>] [location (<i>n</i> all)] [print 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> [print schedule]
list trace data-module	[ext <i>n</i>] [to-ext <i>n</i>] [name <i>x</i>] [count <i>n</i>] [print 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>) [print]
list trace tac	<i>Trunk access code n</i> tac/a (atm) ac/d (digits) q (qsig) [print]
list trace vdn	<i>extension</i> [print 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>] [print 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>] [print 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> [print schedule]
list uniform-dialplan	[start <i>matching-pattern</i>] [<i>len</i> (3-7)] [insert (0-MAX)] [net <i>x</i>] [node <i>n</i>] [to-node <i>n</i>] [count <i>n</i>] [print schedule]

Usage CTI-Link

Action/Object	Qualifier
list usage cti-link	<i>link number</i> [print schedule]

Usage extension

Action/Object	Qualifier
list usage <i>extension</i>	<i>extension</i> [vector] [print 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> [print 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 [print schedule]

*Partial string of a cell telephone number followed by the wildcard "**".

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