



Maintenance Commands Reference

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Notice

Every effort was made to ensure that the information in this document was complete and accurate at the time of printing. However, information is subject to change.

Warranty

Avaya Inc. provides a limited warranty on this product. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya's standard warranty language as well as information regarding support for this product, while under warranty, is available through the following Web site: <http://www.avaya.com/support>.

Preventing Toll Fraud

"Toll fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there may be a risk of toll fraud associated with your system and that, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

Avaya Fraud Intervention

If you suspect that you are being victimized by toll fraud and you need technical assistance or support, in the United States and Canada, call the Technical Service Center's Toll Fraud Intervention Hotline at 1-800-643-2353.

How to Get Help

For additional support telephone numbers, go to the Avaya support Web site: <http://www.avaya.com/support>. If you are:

- Within the United States, click the *Escalation Management* link. Then click the appropriate link for the type of support you need.
- Outside the United States, click the *Escalation Management* link. Then click the *International Services* link that includes telephone numbers for the international Centers of Excellence.

Providing Telecommunications Security

Telecommunications security (of voice, data, and/or video communications) is the prevention of any type of intrusion to (that is, either unauthorized or malicious access to or use of) your company's telecommunications equipment by some party.

Your company's "telecommunications equipment" includes both this Avaya product and any other voice/data/video equipment that could be accessed via this Avaya product (that is, "networked equipment").

An "outside party" is anyone who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf. Whereas, a "malicious party" is anyone (including someone who may be otherwise authorized) who accesses your telecommunications equipment with either malicious or mischievous intent.

Such intrusions may be either to/through synchronous (time-multiplexed and/or circuit-based) or asynchronous (character-, message-, or packet-based) equipment or interfaces for reasons of:

- Utilization (of capabilities special to the accessed equipment)
- Theft (such as, of intellectual property, financial assets, or toll facility access)
- Eavesdropping (privacy invasions to humans)
- Mischief (troubling, but apparently innocuous, tampering)
- Harm (such as harmful tampering, data loss or alteration, regardless of motive or intent)

Be aware that there may be a risk of unauthorized intrusions associated with your system and/or its networked equipment. Also realize that, if such an intrusion should occur, it could result in a variety of losses to your company (including but not limited to, human/data privacy, intellectual property, material assets, financial resources, labor costs, and/or legal costs).

Responsibility for Your Company's Telecommunications Security

The final responsibility for securing both this system and its networked equipment rests with you - Avaya's customer system administrator, your telecommunications peers, and your managers. Base the fulfillment of your responsibility on acquired knowledge and resources from a variety of sources including but not limited to:

- Installation documents
- System administration documents
- Security documents
- Hardware-/software-based security tools
- Shared information between you and your peers
- Telecommunications security experts

To prevent intrusions to your telecommunications equipment, you and your peers should carefully program and configure:

- Your Avaya-provided telecommunications systems and their interfaces
- Your Avaya-provided software applications, as well as their underlying hardware/software platforms and interfaces
- Any other equipment networked to your Avaya products

TCP/IP Facilities

Customers may experience differences in product performance, reliability and security depending upon network configurations/design and topologies, even when the product performs as warranted.

Standards Compliance

Avaya Inc. is not responsible for any radio or television interference caused by unauthorized modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by Avaya Inc. The correction of interference caused by such unauthorized modifications, substitution or attachment will be the responsibility of the user. Pursuant to Part 15 of the Federal Communications Commission (FCC) Rules, the user is cautioned that changes or modifications not expressly approved by Avaya Inc. could void the user's authority to operate this equipment.

Product Safety Standards

This product complies with and conforms to the following international Product Safety standards as applicable:

Safety of Information Technology Equipment, IEC 60950, 3rd Edition including all relevant national deviations as listed in Compliance with IEC for Electrical Equipment (IECEE) CB-96A.

Safety of Information Technology Equipment, CAN/CSA-C22.2 No. 60950-00 / UL 60950, 3rd Edition

Safety Requirements for Customer Equipment, ACA Technical Standard (TS) 001 - 1997

One or more of the following Mexican national standards, as applicable: NOM 001 SCFI 1993, NOM SCFI 016 1993, NOM 019 SCFI 1998

The equipment described in this document may contain Class 1 LASER Device(s). These devices comply with the following standards:

- EN 60825-1, Edition 1.1, 1998-01
- 21 CFR 1040.10 and CFR 1040.11.

The LASER devices operate within the following parameters:

- Maximum power output: -5 dBm to -8 dBm
- Center Wavelength: 1310 nm to 1360 nm

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Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposures. Contact your Avaya representative for more laser product information.

Electromagnetic Compatibility (EMC) Standards

This product complies with and conforms to the following international EMC standards and all relevant national deviations:

Limits and Methods of Measurement of Radio Interference of Information Technology Equipment, CISPR 22:1997 and EN55022:1998.

Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement, CISPR 24:1997 and EN55024:1998, including:

- Electrostatic Discharge (ESD) IEC 61000-4-2
- Radiated Immunity IEC 61000-4-3
- Electrical Fast Transient IEC 61000-4-4
- Lightning Effects IEC 61000-4-5
- Conducted Immunity IEC 61000-4-6
- Mains Frequency Magnetic Field IEC 61000-4-8
- Voltage Dips and Variations IEC 61000-4-11
- Powerline Harmonics IEC 61000-3-2
- Voltage Fluctuations and Flicker IEC 61000-3-3

Federal Communications Commission Statement

Part 15:

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Part 68: Answer-Supervision Signaling

Allowing this equipment to be operated in a manner that does not provide proper answer-supervision signaling is in violation of Part 68 rules. This equipment returns answer-supervision signals to the public switched network when:

- answered by the called station,
- answered by the attendant, or
- routed to a recorded announcement that can be administered by the customer premises equipment (CPE) user.

This equipment returns answer-supervision signals on all direct inward dialed (DID) calls forwarded back to the public switched telephone network. Permissible exceptions are:

- A call is unanswered.
- A busy tone is received.
- A reorder tone is received.

Avaya attests that this registered equipment is capable of providing users access to interstate providers of operator services through the use of access codes. Modification of this equipment by call aggregators to block access dialing codes is a violation of the Telephone Operator Consumers Act of 1990.

REN Number

For MCC1, SCC1, CMC1, G600, and G650 Media Gateways:

This equipment complies with Part 68 of the FCC rules. On either the rear or inside the front cover of this equipment is a label that contains, among other information, the FCC registration number, and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

For G350 and G700 Media Gateways:

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the rear of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. The digits represented by ## are the ringer equivalence number (REN) without a decimal point (for example, 03 is a REN of 0.3). If requested, this number must be provided to the telephone company.

The REN is used to determine the quantity of devices that may be connected to the telephone line. Excessive RENs on the telephone line may result in devices not ringing in response to an incoming call. In most, but not all areas, the sum of RENs should not exceed 5.0. To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company.

REN is not required for some types of analog or digital facilities.

Means of Connection

Connection of this equipment to the telephone network is shown in the following tables.

For MCC1, SCC1, CMC1, G600, and G650 Media Gateways:

Manufacturer's Port Identifier	FIC Code	SOC/RE N/ A.S. Code	Network Jacks
Off/On premises station	OL13C	9.0F	RJ2GX, RJ21X, RJ11C
DID trunk	02RV2-T	0.0B	RJ2GX, RJ21X
CO trunk	02GS2 02LS2	0.3A 0.3A	RJ21X RJ21X
Tie trunk	TL31M	9.0F	RJ2GX
Basic Rate Interface	02IS5	6.0F, 6.0Y	RJ49C
1.544 digital interface	04DU9-BN	6.0F	RJ48C, RJ48M
	04DU9-IKN	6.0F	RJ48C, RJ48M
	04DU9-ISN	6.0F	RJ48C, RJ48M
120A3 channel service unit	04DU9-DN	6.0Y	RJ48C

For G350 and G700 Media Gateways:

Manufacturer's Port Identifier	FIC Code	SOC/RE N/A.S. Code	Network Jacks
Ground Start CO trunk	02GS2	0.5A	RJ11C
DID trunk	02RV2-T	AS.0	RJ11C
Loop Start CO trunk	02LS2	0.5A	RJ11C
1.544 digital interface	04DU9-BN	6.0Y	RJ48C
	04DU9-DN	6.0Y	RJ48C
	04DU9-IKN	6.0Y	RJ48C
	04DU9-ISN	6.0Y	RJ48C
Basic Rate Interface	02IS5	6.0F	RJ49C

If the terminal equipment (for example, the media server or media gateway) causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment, for repair or warranty information, please contact the Technical Service Center at 1-800-242- 2121 or contact your local Avaya representative. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. It is recommended that repairs be performed by Avaya certified technicians.

The equipment cannot be used on public coin phone service provided by the telephone company. Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

This equipment, if it uses a telephone receiver, is hearing aid compatible.

Canadian Department of Communications (DOC) Interference Information

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

DECLARATIONS OF CONFORMITY

United States FCC Part 68 Supplier's Declaration of Conformity (SDoC)

Avaya Inc. in the United States of America hereby certifies that the equipment described in this document and bearing a TIA TSB-168 label identification number complies with the FCC's Rules and Regulations 47 CFR Part 68, and the Administrative Council on Terminal Attachments (ACTA) adopted technical criteria.

Avaya further asserts that Avaya handset-equipped terminal equipment described in this document complies with Paragraph 68.316 of the FCC Rules and Regulations defining Hearing Aid Compatibility and is deemed compatible with hearing aids.

Copies of SDoCs signed by the Responsible Party in the U. S. can be obtained by contacting your local sales representative and are available on the following Web site: <http://www.avaya.com/support>.

All Avaya media servers and media gateways are compliant with FCC Part 68, but many have been registered with the FCC before the SDoC process was available. A list of all Avaya registered products may be found at: <http://www.part68.org> by conducting a search using "Avaya" as manufacturer.

European Union Declarations of Conformity



Avaya Inc. declares that the equipment specified in this document bearing the "CE" (*Conformité Européenne*) mark conforms to the European Union Radio and Telecommunications Terminal Equipment Directive (1999/5/EC), including the Electromagnetic Compatibility Directive (89/336/EEC) and Low Voltage Directive (73/23/EEC). This equipment has been certified to meet CTR3 Basic Rate Interface (BRI) and CTR4 Primary Rate Interface (PRI) and subsets thereof in CTR12 and CTR13, as applicable.

Copies of these Declarations of Conformity (DoCs) can be obtained by contacting your local sales representative and are available on the following Web site: <http://www.avaya.com/support>.

Japan

This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may occur, in which case, the user may be required to take corrective actions.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

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Write: Globalware Solutions
200 Ward Hill Avenue
Haverhill, MA 01835 USA
Attention: Avaya Account Management

E-mail: totalware@gwsmail.com

For the most current versions of documentation, go to the Avaya support Web site: <http://www.avaya.com/support>.

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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.

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, "S8100 Global Administration Subsystem Commands"](#), describes the command line interface for administration and maintenance functions in **S8100** that are not supported in other applications.
- [Chapter 4, "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 5, "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.

Conventions

Table 1: Explanation of typefaces

To represent...	This typeface and syntax are shown as...	For example...
Specific component information	- Avaya component model number - Indented lines set apart extended information intended for a specific system component.	S8700: Ensure that the duplication link is securely connected. G650 Ensure that Media Module is securely seated and latched in the carrier.
SAT commands	- Bold for commands - Bold italic for <i>variables</i> - Square brackets [] around optional parameters “ ” between exclusive choices	refresh ip-route [all location]
SAT screen input and output	- Bold for input - Constant width for output (screen displays and messages)	Set the Save Translation field to daily. The message Command successfully completed should appear .
Linux commands	- Constant-width bold for literals - Constant-width bold italics for <i>variables</i> - Square brackets [] around optional arguments “Or” sign between exclusive choices	testmodem [-s] [-t arg]

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Table 1: Explanation of typefaces

To represent...	This typeface and syntax are shown as...	For example...
Linux output	Constant width	Linux returns the message almdisplay 4: Unable to connect to MultiVantage.
Web interface	• 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.

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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 TN790 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 Guide 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

This table shows some of the terms used in this book, and relates them to 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

This document makes references to the following documents:

[Table 2, Additional document resources](#), on page 25 lists additional documentation that is available for you, and which is referenced within this document.

Table 2: Additional document resources

Document	Number
<i>Administrator's Guide for Avaya Communication Manager</i> , 555-233-506	555-233-506
<i>Administration for Network Connectivity for Avaya Communication Manager</i> , 555-233-504	555-233-504
<i>ATM Installation, Upgrades, and Administration using Avaya™ Communication Manager</i> , 555-233-124	555-233-124
<i>Avaya Call Vectoring and Expert Agent Selection (EAS) Guide</i> , 555-230-521	555-230-521
<i>Avaya™ Call Center Software Call Vectoring and Expert Agent Selection (EAS) Guide</i> , 555-230-714	555-230-714
<i>Getting Started with the Avaya S8700 Media Server with an Avaya G600 Media Gateway</i> , 555-233-140	555-233-140
<i>Getting Started with the MCC1 Media Gateway or an Avaya SCC1 Media Gateway</i> , 555-233-141	555-233-141
<i>GuestWorks® and DEFINITY® Systems Technician Handbook for Hospitality Installations</i> , 555-231-743	555-231-743
<i>Hardware Guide for Avaya Communication Manager</i> , 555-233-200	555-233-200
<i>Installation and Maintenance for Survivable Remote EPN using Avaya MultiVantage Solutions</i> , 555-233-121	555-233-121
<i>Maintenance Alarms Reference</i> , 555-245-102	555-245-102
<i>Maintenance Commands Reference</i> , 555-245-101	555-245-101
<i>Maintenance Procedures</i> , 555-245-103	555-245-103
<i>Maintenance for the Avaya™ G700 Media Gateway Controlled by an Avaya™ S8300 Media Server or an Avaya™ S8700 Media Server</i> , 555-234-101	555-234-101
<i>Overview for Avaya Communication Manager</i> , 555-233-767	555-233-767
<i>Installing the Avaya S8700 Media Server with an Avaya G600 Media Gateway</i>	Go to Communication Systems on the Product Documentation page of www.avaya.com/support
<i>Installing the Avaya S8700 Media Server with an Avaya MCC1 Media Gateway or an Avaya SCC1 Media Gateway</i>	

Technical assistance

Avaya provides the following resources for technical assistance.

Within the US

For help with:

- Feature administration and system applications, call the Avaya Helpline 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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Ensure that you mention the name and number of this book,
Maintenance Commands Reference, 555-245-101.

1 Maintenance SAT Commands

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

- [New Commands](#) on page 29
- [Replaced and Removed Commands](#) on page 31
- [SAT Command-Line Syntax](#) on page 32
- [Common Input Parameters](#) on page 32
- [Common Command Output Screens](#) on page 35
- [Busyout and Release Commands](#) on page 39
- [Common Abort and Fail Codes](#) on page 40
- [Alarm and Error Categories](#) on page 41

Many commands can be run from the media server Web interface. For more information on using the web interface, see *Administrator's Guide for Avaya Communication Manager*, 555-233-506.

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. For example, a command that is valid for both the Avaya S8700 Media Server for Multi-Connect Configurations (**S8700 MC**) and the Avaya S8700 Media Server for IP Connect Configurations (**S8700 IP**), may produce different output screens, depending on the system.

New Commands

New to Avaya Communication Manager 2.0:

- [get power-shutdown](#)
- [list configuration power-supply](#)
- [set emergency transfer](#)
- [status environment](#)

Modified Commands

Commands modified in Avaya Communication Manager 2.0:

- [change circuit-packs](#)
- [change system-parameters duplication](#)
- [list ipserver-interface](#)
- [list registered-ip-stations](#)
- [recycle carrier](#)

- [reset ip-stations](#)
- [status station](#)
- [test environment](#)

SAT commands for the IPSI circuit pack

Commands were added after DEFINITY R10 for the IP Server Interface (IPSI) circuit pack controlled by an **S8700** Media Server. The IPSI contains the DEFINITY packet interface (PKT-INT) and Tone/Clock functionality, and controls inter-port-network signaling and links.

Since the IPSI is a part of the processor complex, executing IPSI commands requires logins with maintenance-level permission. Set the **Process Circuit Packs** field 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 66
- [busyout ipserver-interface](#) on page 77
- [change ipserver-interface](#) on page 99
- [change system-parameters ipserver-interface](#) on page 107
- [display ipserver-interface](#) on page 168
- [display system-parameters ipserver-interface](#) on page 178
- [list ipserver-interface](#) on page 214
- [release ipserver-interface](#) on page 285
- [remove ipserver-interface](#) on page 291
- [reset ipserver-interface](#) on page 295
- [set ipserver-interface](#) on page 307
- [test ipserver-interface](#) on page 470

Server Commands

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

- [go shell](#) on page 197
- [test license](#) on page 473

Replaced and Removed Commands

Previously removed and replaced commands include:

Removed commands

Removed command	Notes
S8700 remove license	Now, manually delete license files from the operating system
S8700 IP emergency transfer	There is no maintenance board on an S8700 IP . Instead, there is a lead off of the IPSI board to support the power supply and fan.
S8700 IP add/change/display atm pnc change/display/list/reset/test/ busyout fiber-link recycle carrier reset/test maintenance set ipserver-interface set snc status PNC status switch-node test customer-alarm	S8700 IP The Rack Mount Cabinet (RMC) is the only cabinet type supported in this release. If this changes to allow the mixing of cabinets, these commands will become available again.

Replaced commands

Previous command	Replaced with	Notes
list configuration license	serialnumber shell	Refer to the <i>Administrator's Guide for Avaya Communication Manager</i> , 555-233-506
reset login-session	login-ID	

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 [Alphabetic Listing of SAT Commands](#) on page 63, the syntax of the command appears under the heading at the beginning of each command description. The command syntax is presented in this section as follows:

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

Command words can be abbreviated. A partially spelled word is recognized when enough letters are entered to distinguish it from other valid entries. Otherwise, the screen displays a selection of command words that match the abbreviation. For example, **test alarms step 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, if an incomplete command is entered, to show 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 22.

One type of common input parameter is for specifying a hardware location. [Table 3, Hardware Location Parameters](#), on page 32 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 3: 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
	1 of 2

Table 3: Hardware Location Parameters

Parameter	Meaning
SS	Circuit pack's slot in a carrier (1- or 2-digits)
GGG	Media gateway number
M	Media module number
V	In a slot or port location field (such as 1V4 or 233V132), indicates a G700 media module or port on a G700 media module
PN	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 .
pp or ppp	Port circuit on a circuit pack or media module (1-, 2-, or 3-digits)
	<i>2 of 2</i>

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 4, Common Command Parameters](#), on page 34 for other common input parameters.

Table 4: Common Command Parameters

Parameter	Meaning
PN#	1- or 2-digit port network number. Use list cabinet to find which port networks are in each cabinet.
print	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. S8700 S8300 S8500 S8100 - For Linux and Windows platforms: 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: - 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 - TCP "listen" port on the terminal server For more information on providing print support, see Printer translations (switch)" in <i>GuestWorks® and DEFINITY® Systems Technician Handbook for Hospitality Installations</i>, 555-231-743.
schedule	Use schedule to specify a start time for the command. The command is placed in the queue and, when executed, sends the output to the system printer. Schedule is available for display, list and test commands. Schedule used with display alarms or display errors generates a full report. The usual selection screen for error and alarm reports is suppressed so that it does not interfere with the command's execution when it is issued from the queue. Use list command-queue to see what commands are currently queued. Use remove command-queue job# to cancel a queued command. This requires that the system printer is administered on the Feature-Related System Parameters screen.
group#	1- to 3-digit trunk-group number
group#/ member#	Group number followed by a slash and a 1- to 3-digit member number of an individual trunk
extension	The extension number assigned to the port or other maintenance object. The number of digits in an extension is determined by the system dial plan. Use list and display to see extension numbers, maintenance objects, and other components.
next	Next available number
repeat#	The number of times a test sequence is to be repeated. Use with test commands.

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Table 4: Common Command Parameters

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

Common Command Output Screens

Common output can be any of the following information:

- A message or other indication that the command successfully completed, or a message giving a reason for a failure or abort. See [Common Abort and Fail Codes](#) on page 40.
- 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 32.
- 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 35.

Example Common Output Screen

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

Each line on an error report represents one test result.

Field Descriptions for Common Output Fields

Field Descriptions

Table 5: Field Descriptions for common output fields

Port	Port location identifier. See Table 3, Hardware Location Parameters, on page 32 for a description of the field. The port length differs for the various types of commands. For example: - a port circuit requires a full-length address such as 11C1502 (circuit number 2 on the circuit pack in cabinet 11, carrier C, slot 15) - a control carrier component, such as an IPSI, is designated as 01B, (the component in carrier B of cabinet 1) In critical-reliability systems, port network connectivity is duplicated as two independent sets of PNC components: A-PNC and B-PNC.
Maintenance Name	The name of the MO as it appears in the alarm and error logs.
Alt. Name	The alternate name depends upon the type of the object. For example: Station MO, Alternate Name = nnnnn (extension) Trunk MO, Alternate Name = nn/n (trunk-group#/member #) Personal CO line MO, Alternate Name = P/23 (P/ personal CO line group #)
Test No.	The number of the test run on the MO as part of a test command. Descriptions of each test and related error codes appear under each MO. Other commands such as clear firmware-counters and reset also report a test number. See <i>Maintenance Alarms Reference</i>, 555-245-102 for specific MO information.

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Table 5: Field Descriptions for common output fields

Result	One of the following results: • PASS: The command successfully completed. For a test command, no errors were detected by the test. • ABORT: The command was prevented from completing. See Table 6, Common Error Codes for Busyout, Release, Test, and Reset Commands, on page 40. • FAIL: A serious error was detected by the test. See Table 6, Common Error Codes for Busyout, Release, Test, and Reset Commands, on page 40. • NO BOARD: The system does not detect a circuit pack in the location specified on the command line. • CONFLICT: Another user was testing this maintenance object. • EPN-DOWN: The EPN holding the MO is inaccessible. The expansion archangel (EA) link may be down. • DISABLED: The MO or test was disabled by the disable command. • NOT ASSIGNED: The location specified does not have a circuit pack administered to it. • EXTRA BOARD: This can appear for: S8700: Maintenance/Test, Announcement circuit packs S8700 MC: Call Classifier, Tone Detector, Speech Synthesis circuit packs Each of these circuit packs has restrictions on how many can be in the system or a port network, depending on the system configuration. Remove the extra circuit pack(s).
Error Code	Indicates the reason for a FAIL or ABORT result. For test commands and other commands that return a test result, consult the tables of test error codes under the relevant MO in the <i>Maintenance Alarms Reference</i>, 555-245-102. For busyout, release, and reset commands, see Common Abort and Fail Codes on page 40.

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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	Meaning
Error encountered; can't complete request	The command cannot be executed, perhaps because of corrupt software. Follow normal escalation procedures.
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.
Board not inserted	The specified board is not inserted in the system.
'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.
Command resources busy; Press CANCEL to clear, and then resubmit	There is a resource problem. Restart the command.
All maintenance resources busy; try again later	Every available maintenance resource is currently in use.
Hardware-group command aborted with cancel command entered from another terminal	test hardware-group , running in the foreground, is successfully canceled with cancel hardware-group from another terminal.

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.

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

Example busyout output screen

The following screen display 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 36 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					

The following display shows a typical result for most maintenance objects for **busyout link 1**. See [Field Descriptions for Common Output Fields](#) on page 36 for field descriptions.

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

Common Abort and Fail Codes

[Table 6, Common Error Codes for Busyout, Release, Test, and Reset Commands](#), on page 40 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 6: Common Error Codes for Busyout, Release, Test, and Reset Commands

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.
1026	ABORT	The specified TDM bus cannot be busied out because the control channel or system tones are being carried on it. Use set tdm PC to switch the control channel and system tones to the other TDM bus.
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.

1 of 2

Table 6: Common Error Codes for Busyout, Release, Test, and Reset Commands

Error Code	Command Result	Description/Recommendation
	EXTRA BD	This result can appear for: S8700 Maintenance/Test, Announcement circuit packs S8700 MC 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 reset commands, the circuit pack was not successfully halted.
2	FAIL	For reset 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 Reference</i> , 555-245-102.
	PASS	The requested action successfully completed. If the command was a reset , the circuit pack is now running and should be tested.

2 of 2

Alarm and Error Categories

Use **display alarms** and **display errors** to generate reports for certain groups of maintenance objects. You can restrict the report to maintenance objects in a specific category by entering the category into the **Category** field of the input screen. See [Table 7, Alarm and Error Categories](#), on page 41. The alarm and error report can be further narrowed down by using the other fields on the screen.

[Table 7, Alarm and Error Categories](#), on page 41 is a list of the categories showing which MOs are included. [Table 8, Alarm and Error Categories \(Sorted by MO\)](#), on page 53 is sorted by MO and shows the categories containing each MO.

Table 7: Alarm and Error Categories

Error Category	Maintenance Objects
adm-conn	ADM-CONN
announce	ANN-PT ANN-BD ANNOUNCE

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Table 7: Alarm and Error Categories

Error Category	Maintenance Objects
bri/asai	ASAI-ADJ ASAI-BD ASAI-PT ASAI-RES ABRI-PORT BRI-BD BRI-PORT BRI-SET LGATE-AJ LGATE-BD LGATE-PT
cdr	CDR-LNK
data-mod	BRI-DAT DAT-LINE DT-LN-BD PDMODULE TDMODULE
detector	DTMR-PT DETR-BD GPTD-PT TONE-BD
di	DI-BD DI-PT
environ	AC-POWER CABINET CARR-POW DC-POWER EMG-XFER EXT-DEV

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Table 7: Alarm and Error Categories

Error Category	Maintenance Objects
	POWER RING-GEN
esm	ESM
exp-intf	AC-POWER CARR-POW DC-POWER EPN-SNTY EXP-INTF MAINT SYNC TDM-CLK TONE-BD
ext-dev	CUST-ALM
generatr	STRAT-3 SYNC TDM-CLK TONE-PT TONE-BD
inads-link	INADS
infc	EXP-INTF ISDN-LNK ISDN-SGRP
ip	MEDPRO IPMEDPRO MEDPROPT H323-SGRP H323-BCH H323-STN DIG-IP-STN

3 of 13

Table 7: Alarm and Error Categories

Error Category	Maintenance Objects
	RDIG-STA RANL-STA NR-CONN REM-FF ASAI-IP ADJLK-IP SIP-SGRP
lic-file	NO-LIC LIC-ERR
maint	MAINT

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Table 7: Alarm and Error Categories

Error Category	Maintenance Objects
misc	CONFIG ERR-LOG MIS PROC-SAN SYSTEM TIME-DAY
mmi	MMI-BD MMI-LEV MMI-PT MMI-SYNC
mnt-test	M/T-ANL M/T-BD M/T-DIG M/T-PKT
modem	MODEM-BD MODEM-PT
pkt	M/T-PKT PKT-BUS
pms/jrnl	JNL-PRNT PMS-LINK
pnc	DS1C-BD DS1-FAC EXP-INTF FIBER-LK PNC-DUP SN-CONF SNC-BD SNC-LINK SNC-REF

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Table 7: Alarm and Error Categories

Error Category	Maintenance Objects
	SNI-BD SNI-PEER
pncmaint	DS1C-BD DS1-FAC EXP-INTF FIBER-LK PNC-DUP SN-CONF SNC-BD SNC-LINK SNC-REF SNI-BD
pnc-peer	SNI-PEER
procr	PROCR
quick-st	ABRI-PT ADXDP-PT ANL-16-LINE ANL-LINE ANL-NE-LINE ANN-PT ANNOUNCE ASAI-ADJ AUDIX-PT AUX-TRK BRI-PT BRI-SET CDR-LINK CLSFY-PT CO-DS1

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Table 7: Alarm and Error Categories

Error Category	Maintenance Objects
	CO-TRK
	CONFIG
	DAT-LINE
	DID-DS1
	DID-TRK
	DIG-LINE
	DIOD-TRK
	DS1-FAC
	DS1C-BD
	DTMR-PT
	EPN-SANITY
	EXP-INTF
	EXP-PN
	FIBER-LNK
	GPTD-PT
	HYB-LINE
	ISDN-LNK
	ISDN-TRK
	JNL-PRNT
	MAINT
	MET-LINE
	MODEM-PT
	OPS-LINE
	PDATA-PT
	PDMODULE
	PKT-BUS
	PKT-INT
	PMS-LINK
	PMS-PRNT
	7 of 13

Table 7: Alarm and Error Categories

Error Category	Maintenance Objects
	PNC-DUP PRI-CDR S-SYN-PT SN-CONF SNC-BD SNC-LNK SNC-REF SNI-BD SNI-PEER SYS-PRNT SYSLINK SYSTEM TDM-BUS TDM-CLK TDMODULE TIE-DS1 TIE-TRK TONE-BD TTR-LEV
sch-adj	SCH-ADJ
s-syn	S-SYN-BD S-SYN-PT
stabd	ABRI-PORT ADXDP-BD ADXDP-PT ANL-16-LINE ANL-BD ANL-BD ANL-LINE

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Table 7: Alarm and Error Categories

Error Category	Maintenance Objects
	ANL-NE-LINE ASAI-ADJ AUDIX-BD AUDIX-PT BRI-BD BRI-PORT BRI-SET DIG-BD DIG-LINE HYB-BD HYB-LINE MET-BD MET-LINE
stacr	ADXDP-PT ANL-LINE ANL-16-LINE ANL-NE-LINE AUDIX-PT DIG-LINE HYB-LINE MET-LINE OPS-LINE
stations	ABRI-PORT ADXDP-PT ANL-16-LINE ANL-LINE ANL-NE-LINE ASAI-ADJ AUDIX-PT

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Table 7: Alarm and Error Categories

Error Category	Maintenance Objects
	BRI-PORT BRI-SET DIG-LINE HYB-LINE MET-LINE OPS-LINE
sys-link	SYS-LINK
sys-prnt	SYS-PRNT
tdm	TDM-BUS
tone	CLSFY-BD CLSFY-PT DETR-BD DTMR-PT GPTD-PT STRAT-3 SYNC TDM-CLK TONE-BD TONE-PT TTR-LEV
trkbd	AUX-BD AUX-TRK CO-BD CO-DS1 CO-TRK DID-BD DID-DS1 DID-TRK DIOD-BD

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Table 7: Alarm and Error Categories

Error Category	Maintenance Objects
	DIOD-TRK DS1-BD ISDN-TRK PE-BCHL TIE-BD TIE-DS1 TIE-TRK UDS1-BD WAE-PT
trkcrk	AUX-TRK CO-DS1 CO-TRK DID-DS1 DID-TRK DIOD-TRK ISDN-LNK ISDN-TRK TIE-DS1 TIE-TRK
trunks	CO-TRK AUX-TRK CO-DS1 DID-DS1 DID-TRK DIOD-TRK ISDN-LNK ISDN-TRK PE-BCHL TIE-DS1

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Table 7: Alarm and Error Categories

Error Category	Maintenance Objects
	TIE-TRK WAE-PORT
vc	VC-BD VC-DSPPT VC-LEV VC-SUMPT
vsp	MMI-BD MMI-PT MMI-LEV MMI-SYNC VC-LEV VC-BD VC-SUMPT VC-DSPPT VP-BD VP-PT VPP-BD VPP-PT DI-BD DI-PT MEDPRO IPMEDPRO MEDPROPT
wide-band	PE-BCHL WAE-PORT
wireless	RC-BD RFP-SYNC WFB CAU

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Table 7: Alarm and Error Categories

Error Category	Maintenance Objects
	WT-STA
13 of 13	

Table 8: Alarm and Error Categories (Sorted by MO)

Maintenance Object	Error Categories
ABRI-PORT	bri/asai quick-st stabd stations
AC-POWER	environ exp-intf
ADJLK-IP	ip
ADM-CONN	adm-conn
ADXCL-BD	
ADXCL-PT	
ADXCL-RS	
ADXDP-BD	quick-st stabd
ADXDP-PT	quick-st stabd
ADXDP-RS	
ANL-16-L	quick-st sta-bd stacrk stations
ANL-BD	stabd
ANL-LINE	quick-st stabd stacrk
1 of 11	

Table 8: Alarm and Error Categories (Sorted by MO)

Maintenance Object	Error Categories
	stations
ANN-BD	announce
ANN-PT	announce quick-st
ANNOUNCE	quick-st announce
ASAI-ADJ	bri/asai quick-st sta-bd stations
ASAI-IP	ip
AUDIX-BD	quick-st sta-bd
AUDIX-PT	quick-st stabd stacrk stations
AUDIX-RES	
AUX-BD	trkbd
AUX-TRK	quick-st trkbd trckrk trunks
BRI-BD	bri/asai sta-bd
BRI-DAT	data-mod quick-st
BRI-PORT	bri/asai quick-st

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Table 8: Alarm and Error Categories (Sorted by MO)

Maintenance Object	Error Categories
	stabd stations
BRI-SET	bri/asai quick-st stabd stations
CABINET	environ
CARR-POW	environ exp-intf
CAU	wireless
CDR-LNK	cdr quick-st
CLSFY-BD	tone
CLSFY-PT	tone quick-st
CO-BD	trkbd
CO-DS1	quick-st trkbd trkcrk trunks
CO-TRK	quick-st trkbd trkcrk trunks
CONFIG	misc quick-st
CUST-ALM	ext-dev
DAT-LINE	data-mod quick-st

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Table 8: Alarm and Error Categories (Sorted by MO)

Maintenance Object	Error Categories
DC-POWER	environ exp-intf
DETR-BD	detector tone
DI-BD	di vsp
DID-BD	trkbd
DI-PT	di vsp
DID-DS1	quick-st trkbd trckrk trunks
DID-TRK	quick-st trkbd trckrk trunks
DIG-BD	sta-bd
DIG-IP-STN	ip
DIG-LINE	quick-st stabd stacrk stations
DIOD-BD	trkbd
DIOD-TRK	quick-st trkbd trckrk trunks
DS1-BD	trkbd

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Table 8: Alarm and Error Categories (Sorted by MO)

Maintenance Object	Error Categories
DS1-FAC	pnc pncmaint quick-st
DS1C-BD	pnc pncmaint quick-st
DT-LN-BD	data-mod
DTMR-PT	detector tone quick-st mbus
EMG-XFER EPN-SNTY	environ exp-intf quick-st
ERR-LOG	misc
ESM	esm
EXP-INTF	exp-intf infc pnc pncmaint quick-st
EXP-PN	quick-st
EXT-DEV	environ ext-dev
FIBER-LK	pnc pncmaint quick-st
GPTD-PT	detector quick-st

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Table 8: Alarm and Error Categories (Sorted by MO)

Maintenance Object	Error Categories
	tone
H323-SGRP	ip
H323-BCH	ip
H323-STN	ip
HYB-BD	stabd
HYB-LINE	quick-st stabd stacrk stations
INADS	inads
IPMEDPRO	ip vsp
ISDN-LNK	infc quick-st trkcrk trunks
ISDN-SGR	infc
ISDN-TRK	quick-st trkbd trkcrk trunks
JNL-PRNT	quick-st
LIC-ERR	lic-file
MAINT	exp-intf maint quick-st
MEDPRO	ip vsp
MEDPROPT	ip

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Table 8: Alarm and Error Categories (Sorted by MO)

Maintenance Object	Error Categories
	vsp
MET-BD	stabd
MET-LINE	quick-st stabd stacrk stations
MIS	misc
MMI-BD	vsp
MMI-LEV	vsp
MMI-PT	vsp
MMI-SYNC	vsp
MODEM-BD	modem
MODEM-PT	modem quick-st
M/T-ANL	mnt-test
M/T-BD	mnt-test
M/T-DIG	mnt-test
M/T-PKT	mnt-test pkt
NO-LIC	lic-file
NR-CONN	ip
OPS-LINE	quick-st stacrk stations
PDATA-BD	
PDATA-PT	quick-st
PDMODULE	data-mod quick-st
PE-BCHL	trunkbd

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Table 8: Alarm and Error Categories (Sorted by MO)

Maintenance Object	Error Categories
	trunks wideband
PKT-BUS	pkt
	quick-st
PKT-INT	quick-st
PMS-LINK	pms/jrnl quick-st
PMS-PRNT	quick-st
PNC-DUP	pnc pncmaint quick-st
POWER-AC	
POWER-DC	
PRI-CDR	quick-st
PROC-SAN	misc
RANL-STA	ip
RC-BD	wireless
RDIG-STA	ip
RFP-SYNC	wireless
REM-OFF	ip
RING-GEN	environ
S-SYN-BD	quick-st
S-SYN-PT	quick-st s-syn
SCH-ADJ	sch-adj
SIP-SGRP	ip
SN-CONF	pnc pncmaint quick-st

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Table 8: Alarm and Error Categories (Sorted by MO)

Maintenance Object	Error Categories
SNC-BD	pnc pncmaint quick-st
SNC-LINK	pnc pncmaint quick-st
SNC-REF	pnc pncmaint quick-st
SNI-BD	pnc pncmaint quick-st
SNI-PEER	pnc pnc-peer quick-st
STRAT-3	generatr tone
SVC-SLOT	
SYNC	exp-intf generatr tone
SYS-LINK	sys-link
SYS-PRNT	quick-st sys-prnt
SYSTEM	misc quick-st
TDM-BUS	quick-st tdm
TDM-CLK	exp-intf

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Table 8: Alarm and Error Categories (Sorted by MO)

Maintenance Object	Error Categories
	generatr quick-st tone
TDMODULE	data-mos quick-st
TIE-BD	trkbd
TIE-DS1	quick-st trkbd trckrk trunks
TIE-TRK	quick-st trkbd trckrk trunks
TIME-DAY	misc
TONE-BD	detector exp-intf generatr quick-st tone
TONE-PT	generatr tone
TSC-ADM	
TTR-LEV	quick-st tone
UDS1-BD	trkbd
VD-BD	vsp
VC-LEV	vsp
VC-DSPPT	vsp

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Table 8: Alarm and Error Categories (Sorted by MO)

Maintenance Object	Error Categories
VC-SUMPT	vsp
VP-BD	vsp
VP-PT	vsp
VPP-BD	vsp
VPP-PT	vsp
WAE-PORT	trunkbd trunks wideband
WFB	wireless
WT-STA	wireless

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Alphabetic Listing of SAT Commands

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

add atm pnc

S8700 MC

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	Feature Interaction
add atm pnc	<i>n</i> next	The number to assign to the ATM PNC Next available number Examples: add atm pnc 23 add atm pnc next	init inads craft		

Output

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:
```

Field Descriptions

Location	<i>UUCSS</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

add cabinet

S8700

add cabinet <*cabinet*>

Use **add cabinet** to administer cabinets.

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

Output

The following is an example of **add cabinet**.

add cabinet 20		CABINET		Page	1 of	1
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				
E	not-used					
D	not-used					
C	not-used					
B	not-used					
A	G650-port					

Field descriptions for add cabinet

CABINET DESCRIPTION	
Cabinet	Number assigned to cabinet
Cabinet Layout	Description of the layout type of cabinet / stack: G650-rack-mount-stack G650-port not-used cmc-carrier-stack (available when the IP -PNC field is y on the system-parameters customer-options screen)
Cabinet Type	Description of the type of cabinet: cmc-port (available when IP-PNC is y on the system-parameters customer-options screen) 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.
Location	
Rack	appears when Cabinet Layout is G650-rack-mount-stack or rack-mount-stack
Room, Floor, Building	The physical location of the equipment

CARRIER TYPE

Carrier Letter designation of the carrier

Carrier Type When Cabinet Layout is **G650-rack-mount-stack**, Carrier Type for Carrier A is **G650-port** and is display-only.

add ipserver-interface

S8700

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	<i>n</i>	Port network Examples: add ipserver-interface 10			

Output

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

Output

```
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
```

```
Host: ipsi-A01a
```

```
DHCP ID: ipsi-A01a
```

```
-----
```

```
Call Control 802.1p: 4
```

```
Call Control DiffServ: 42
```

```
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**.

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

Page 1 of 1

Socket Encryption? y
Enable QoS? y

Primary IPSI

Location: 2A02
Host: 170.20.20.170
DHCP ID: ipsi-A02a

QoS Parameters

Call Control 802.1p: 6
Call Control DiffServ: 46

Field Descriptions for add ip-server interface

IP Control	y/n y = All port networks have an IPSI that provides control. - display-only, if IP-PNC is y on the display system-parameters customer-options screen - A DS1C circuit pack cannot be added to a port network when IP Control is y. n = This IPSI is used only for Tone Clock / Tone Detector functions - the remaining fields on this administration screen are not shown if IP Control is n and IP-PNC is n on the display system-parameters customer-options screen - this field is n if the port network contains a DS1 Converter (DS1C) circuit pack.
Socket Encryption	Enter y to turn on socket encryption for the S8700 and IPSI link. Socket Encryption appears on S8700 IP .
Enable QoS	Enter y to turn on quality of service (QoS) from the S8700 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 appear 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)
Socket Encryption	S8700 and IPSI link: Enter y to turn on socket encryption Appears on S8700 IP .

add media-gateway

S8300 | **G700**

add media-gateway [*x* | next]

Use **add media-gateway** from the **G700** Media Gateway Primary Server to add a **G700** Media Gateway to the system.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
add media-gateway	x	number to assign to the media gateway			
	next	next available number			

Input screen for add media-gateway

add media-gateway x

MEDIA-GATEWAY

Page 1 of 1

Number:

Type:

Name:

Serial No:

Network Region:

Registered?

Slot

Module

Type

V1: #

V2:

V3:

V4:

V8: messaging-analog

V9: gateway-announcements

IP Address:

FW Version/HW Vintage:

MAC Address:

Encrypt Link?

Location:

Controller IP Address:

Site Data:

Name

ICC MM

ANA MM

DCP MM

DS1 MM

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

Field Descriptions for add media-gateway

Number	
IP Address	Display only. IP Address of the media gateway. Blank until the Media Gateway registers for the first time. Once the G700 has registered, that IP address always appears, even if the G700 becomes unregistered, until a G700 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
FW Version/ HW Version	
Name	Use for the customer to identify the gateway
MAC Address	Display only. MAC Address of the media gateway. Blank until the G700 registers for the first time. Once the G700 has registered, that MAC Address appears, even if the G700 becomes unregistered, until a G700 with a different MAC Address is validly registered with the same administered identifier.
Serial No	Use for the controller to identify the gateway
Encrypt Link	
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
Registered	y/n Display-only. y indicates that a G700 Media Gateway is currently registered with the primary server.
Controller IP Address	CLAN or NIC address
Site Data	General site information

Slot	Slot number for the identified Media Module. Slots V8-V9, for virtual media modules, are listed after Slots V1-V4.
Module Type	Type of Avaya Media Module in the slot: V1-V4 allow: analog bri dcp icc (S8300 and LSPs, both processor-type Media Modules) voip ds1 (also referred to as T1/E1) V8 accepts only messaging-analog V9 accepts only gateway-announcements If an administered Media Module is in conflict with the inserted Media Module, a pound sign (#) appears to the left of the 'Module Type' field on the Media Gateway screen.
Name	

add station

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

add station *extension* | *next*

Use **add station** to administer a new station.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
add station	<i>extension</i>	Extension number of the new station			
	<i>next</i>	Assigns the next available extension number to the new station			

Output

The following screens show the Station screen. For field descriptions, see *Administrator's Guide for Avaya Communication Manager*, 555-233-506.

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_

Data Module? n

Message Lamp Ext: 67403

Media Complex Ext: __

IP SoftPhone? n

Remote Office Phone? y

add station 2000

Page 2 of 4

STATION

FEATURE OPTIONS

LWC Reception: spe

Auto Select Any Idle Appearance? n

LWC Activation: y

Coverage Msg Retrieval? y

LWC Log External Calls? n

Auto Answer: none

CDR Privacy? n

Data Restriction? n

Redirect Notification? y

Idle Appearance Preference? n

Per Button Ring Control? n

Restrict Last Appearance? y

Bridged Call Alerting? n

Active Station Ringing: single

H.320 Conversion? y

Per Station CPN - Send Calling Number?

Service Link Mode: as-needed

Audible Message Waiting? n

Multimedia Mode: enhanced

Display Client redirection? n

Audix Name:

Select Last Used Appearance? n

Messaging Server Name:

Coverage After Forwarding? s

IP Emergency Calls: extension

Direct IP-IP Audio Connections? n

Emergency Location Ext: 2000

IP Audio Hairpinning? n

add station 2000

Page 3 of 4

STATION

SITE DATA

Room:

Headset? n

Jack:

Speaker? n

Cable:

Mounting: d

Floor:

Cord Length: 0

Building:

Set Color:

ABBREVIATED DIALING

List1:

List2:

List3:

BUTTON ASSIGNMENTS

1: call-appr

6:

2: call_appr

7:

3:

8:

4:

9:

5:

10:

add station 2000

STATION

Page 4 of 4

SFTKEY BUTTON ASSIGNMENTS

1: lwc-store

2: lwc-cancel

3: auto-cback

4: timer

5: call-fwd Ext:

6: call-park

7: date-time

8: priority

9: abr-prog

10: abr-spchar Char: ~p

11: abr-spchar Char: ~m

12: abr-spchar Char: ~w

busyout access-endpoint

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

busyout access-endpoint *extension*

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

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

For more information, see [Common Input Parameters](#) on page 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout board

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

busyout board *location*

Use **busyout board** to busyout all the ports associated with the specified access endpoint.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
busyout board	location	board address (PCSSPP) Example: busyout board 01c11	init inads craft		

For more information, see [Common Input Parameters](#) on page 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout cdr-link

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 395](#) for more information about links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
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 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout cti-link

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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. On **S8100**, the LAN interface is provided by the TN2314 Ethernet interface and/or by the C-LAN TN799 circuit pack.

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
busyout cti-link	link	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 74.

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 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout data-module

[S8700](#) | [S8500](#) | [S8100](#)

busyout data-module *extension*

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

[S8100](#)

On a system with the duplication option, a busyout of a Network Control Data Channel (DATA0CHL) or a Processor Interface Port Data Channel (PI-PT) are preserved across SPE interchanges. Release the data channel extension to return the data channel back into service.

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

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
busyout data-module	extension	Extension number per dial plan. Example: busyout data-module 31300			

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

Type	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 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout ds1-facility

S8700

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.

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 unless the override qualifier is used. When the override is used, all packet and circuit traffic on the packet facility is switched to one of the other three facilities; 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. Use of the override command 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. To busyout a facility on the standby PNC, the standby PNC must first be busied out by **busyout pnc**.

For more information, see [Common Input Parameters](#) on page 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout fiber-link

S8700 MC

busyout fiber-link *fiber#* [**a-pnc** | **b-pnc**]

Use **busyout fiber-link** to put a fiber link into a maintenance busy state on **S8700 MC**. 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 39. For more information about fiber links, see [FIBER-LK \(Fiber Link\)](#) on page 994 of the Maintenance Alarms Reference, 555-245-102. See [Common Command Output Screens](#) on page 35 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 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout ipserver-interface

S8700

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 EI is the AA, and the PKT-INT functionality is moved to an IPSI in another port network. If the IPSIs are duplicated in the port network, the active IPSI cannot be busied out IPSI also busies out the standby Tone-Clock. The required argument is a cabinet/carrier.



CAUTION:

S8700 IP: Busying out an IPSI board takes down the port network.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
busyout ipserver-interface	Uc	Cabinet and carrier you want to test. Example: busyout ipserver-interface 6b			

For more information, see [Common Input Parameters](#) on page 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout journal-printer

S8700

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. Busying out the link will prevent re-setup attempts.

For more information, see [Common Input Parameters](#) on page 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

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 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout link

S8700

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 39.



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 395](#) for more details on links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
busyout link	link#	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 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout mis

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

busyout mis

Use **busyout mis** to busyout a management information system.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
busyout mis		Example: busyout mis	init inads craft cust rcust		

For more information, see [Common Input Parameters](#) on page 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout port

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

busyout port *location*

Use **busyout port** to busyout a specified port on a circuit pack.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
busyout port	<i>location</i>	port address (PCSS) marked port: PPSSpp Examples: busyout port 01c1101 busyout port 02c1501	init inads craft		

For more information, see [Common Input Parameters](#) on page 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout pms-link

[S8700](#)

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 403.

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 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout pri-endpoint

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

busyout pri-endpoint extension

Use **busyout pri-endpoint** to busyout all PRI endpoint ports (B-channels) associated with the specified PRI endpoint.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
busyout pri-endpoint	location	PRI endpoint extension number Example: busyout pri-endpoint 25012	init inads craft mms	No default.	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 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout processor-ip-interface

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout sp-link

[S8700](#)

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.

For more information, see [Common Input Parameters](#) on page 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout station

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout tdm

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

busyout tdm *pn# bus*

Use **busyout tdm** to busyout a specified tdm bus.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
busyout tdm	<i>pn#</i> <i>bus a</i> <i>bus a</i>	TDM bus Port Network number default control bus default tone bus (Each 512 timeslot TDM bus configures as 2 duplicate 256 time slot buses. This division allows duplication of control channels and dedicated tone time slots.) Example: busyout tdm 1a	init inads craft		Move dedicated tone time slots to another bus (the other half of the duplicated bus) before you busyout a particular bus.

For more information, see [Common Input Parameters](#) on page 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

busyout trunk

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
busyout trunk	group#	Trunk group number	init inads craft		
	member#	Number of particular trunk in a group Examples: busyout trunk 78 busyout trunk 78/1			

For more information, see [Common Input Parameters](#) on page 32, [Common Command Output Screens](#) on page 35, and [Busyout and Release Commands](#) on page 39.

cancel hardware-group

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

cancel hardware-group

Action/Object	Qualifier	Qualifier Description	Login	Default	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 the **cancel hardware-group** is entered, then the hardware group test is canceled and for security reasons, the MT running the hardware group test will be logged off. However, after logging back on the system, you can still restart the canceled hardware-group test command with **resume hardware-group** command.

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.

Status Hardware-Group

The state of a canceled **test hardware-group** appears by the **test hardware-group** command and the state shows up as 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**.

Output

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.

change atm pnc

S8700 MC

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

Output

The following example shows the output for **change atm pnc 2** on **S8700 MC**.

```
change atm pnc 2                                     Page 1 of 1

                                ATM PNC
                                Connection Number: 2

    Location: 01D01
      Name: dup atm pnc
Address Format: ICD ATM
      AFI: 47
      ICD: 0005
    H0-DSP: 80FFE1000000F21C31D4
      ESI: 000000010D01
      SEL: 00
```

Field Descriptions

Name 16-character alpha-numeric characters for identification

See [add atm pnc](#) on page 63 for additional field descriptions.

change cabinet

S8700

change cabinet *n*

Use **change cabinet** to administer cabinets.

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

Output

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

change cabinet 1	CABINET			Page 1
CABINET DESCRIPTION				
Cabinet: 1				
Cabinet Layout: five-carrier				
Cabinet Type: expansion-portnetwork				
Number of Portnetworks: 1				
Survivable Remote EPN? n				
Location: 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	

change circuit-packs

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#) | [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	Feature Interaction
change circuit-packs	<i>UU</i>	The number of the cabinet containing the circuit packs to be modified. On an S8700 IP , 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 [Field Descriptions for change circuit-packs](#) on page 90.

change circuit-packs

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**.

change circuit-packs

Page 2 of 5

CIRCUIT PACKS

Cabinet: 1
Cabinet Layout: five-carrier

Carrier: B
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.

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

```
change circuit-packs                                     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](#).

```
change circuit-packs                                     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](#).

```
change circuit-packs                                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:
02: TN573  B        SWITCH NODE INTF          11:
03: TN573  B        SWITCH NODE INTF          12: TN572          SWITCH NODE CLOCK
04: TN573  B        SWITCH NODE INTF          13:
05: TN573          SWITCH NODE INTF          14:
06: TN573  B        SWITCH NODE INTF          15:
07: TN573  B        SWITCH NODE INTF          16:
08: TN573  B        SWITCH NODE INTF          17:
09: TN573  B        SWITCH NODE INTF          18:
10: TN572          SWITCH NODE CLOCK          19:
                                           20:
                                           21:

'#' indicates circuit pack conflict.
```

Output [S8700 IP](#)

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

```
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.
```

Field Descriptions for change circuit-packs

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 (an IP-connected port network)
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.

change ds1-echo-cancellation

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Default	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_

```

Field descriptions

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

change fiber-link

S8700 MC

change fiber-link *fiber#*

Use **change fiber-link** to change the translation data associated with an existing fiber link on **S8700 MC**. 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.

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

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			

Output

The following display shows a typical result for **change fiber-link 1** on a standard- or high-reliability system (unduplicated PNC and CSS) on **S8700 MC**.

change fiber-link 1	Page 1 of 1
FIBER LINK ADMINISTRATION	
Fiber Link #: 1	
ENDPOINT-1 (A-PNC)	ENDPOINT-2 (A-PNC)
Board Location: 01E01	Board Location: 01E02
Board Type: ei	Board Type: sni
Fiber Translation: converter?	Converter?
Type of Tranceivers:	Converter Type:
Is one endpoint remotored via DS1 Converter Complex? n	

Field descriptions for change-fiber link page 1

Fiber Link	Display-only. Identifying number of the fiber link.
Board Location	The physical address (cabinet-carrier-slot) of the circuit packs comprising the two endpoints (ENDPOINT-1 and ENDPOINT-2) of the fiber link.
Board Type	Display-only. Shows the type of circuit pack administered at each endpoint, ei or sni
DS1 Converter	y indicates that a DS1C converter complex is used on this link to remotely locate a port network. If this is the case, a second page appears for administration of the DS1C complex attributes.

Fiber Translation	multi-mode or single-mode Use for faster remote diagnosis.
Converter	y/n Use for faster remote diagnosis.
Type of Transceivers	A/B Use for faster remote diagnosis.
Converter Type	Avaya/other. Appears when Converter on the Fiber Link Administration screen is y .

Field descriptions for change-fiber link page 2

S8700 MC 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.

Board Location	This field under the heading DS1C-1 is used to define the physical location of the converter board connected to ENDPOINT-1. It is a data entry field consisting of the board's physical address by cabinet-carrier-slot. 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	The fields under this heading define 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.

Table 9: 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

S8700 MC 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 the above for ENDPOINT-2 of the DS1 CONV complex.
Zero Code Suppression	zcs/b8zs specifies the line coding format for each facility. There are 2 line coding options supported by the DS1 Interfaces to meet the density requirements in the data stream. Zero Code Suppression (ZCS) line coding is in place following an initialization until changed by administration. Either line coding option may be used on the DS1 Interface that carries the packet time slots.
Framing Mode	esf/d4 specifies the data framing format used on the facility. When esf , an automatic selection process is executed until the DS1 Interface is brought into frame, or until an Options CCMS message is received by the framing options master. Once options are set by administration, they remain fixed on the framing option master until the board is again initialized, reset, or sent new options. The framing option on the framing option slave converter board can change to track the framing option master's option.

change firmware download

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 1034 in the *Maintenance Alarms Reference*, 555-245-102. 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 firmware download](#) after scheduling a download but before the download begins.

NOTE:

If you receive an error message asking you to use [test firmware download](#), there was a problem with a previous firmware download. Run the test before proceeding.

Output

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:

Schedule Download? y

Start Date/Time: / /

Suffix:

Firmware Vintage:

Remove Image File After Successful Download? y

: Stop Date/Time: / /

Target Location	Target Location	Target Location	Target Location	Target Location
1.	11.	21.	31.	41.
2.	12.	22.	32.	42.
3.	13.	23.	33.	43.
4.	14.	24.	34.	44.
5.	15.	25.	35.	45.
6.	16.	26.	36.	46.
7.	17.	27.	37.	47.
8.	18.	28.	38.	48.
9.	19.	29.	39.	49.
10.	20.	30.	40.	50.

Field Descriptions for change firmware-download

Source Board Location	The board location (UUCSS/PPCSS) 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.
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 (UUCSS or PPCSS) of the boards that will receive the download file image. For a self-download, the target location is the same as the source location.

change ip-codec set

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
change ip-codec-set	<i>n</i>	codec set number			

Output

This is an example screen from **change ip-codec-set**.

change ip-codec-set 7				Page 1 of 1
Codec Set: 7		IP Codec Set		
Audio Codec	Silence Suppression	Frames Per Pkt	Packet Size(ms)	
1: G.711MU	n	2	20	
2:				
3:				
4:				
5:				
6:				
7:				
Media Encryption				
1: aes				
2: aea				
3: none				

Field Descriptions for change ip-codec-set

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
Silence Suppression	y/n
Frames Per Pkt	
Packet Size (ms)	
Media Encryption	The options for each codec set apply to all codecs defined in that set. Enter the options in the order of preference. Enter aes in one of the fields to add AES Media Encryption. Enter aes for Advanced Encryption Standard encryption, standard used by U.S. government to protect sensitive (unclassified) information. Reduces circuit-switched to IP call capacity by 25%. Enter aea for Avaya Encryption Algorithm. Not as secure as AES. Use to encrypt: - all endpoints (except Avaya 46x4 IP Telephones) within a network region using this codec set - all endpoints communicating between two network regions and using this codec set Enter none for an unencrypted media stream. Prevents encryption when using this codec set. Default value when Media Encryption Over IP is y for the first time on the Special Applications screen. Appears when Media Encryption Over IP is y on the Customer Options screen. Or leave blank

change ip-network-region

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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.

Output

```

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

AUDIO PARAMETERS
  Codec Set: 2
  UDP Port Min: 2048
  UDP Port Max: 65535
  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

DIFFSERV/TOS PARAMETERS
  Call Control PHB Value: 43
  Audio PHB Value: 46
  BBE PHB Value: 43
  AUDIO RESOURCE RESERVATION PARAMETERS
  RSVP Enabled? y
  RSVP Refresh Rate(secs): 15
  802.1P/Q PARAMETERS
  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 Interval (sec):
  Keep-Alive Interval (sec):
  Keep-Alive Count:

```

See *Administration for Network Connectivity for Avaya Communication Manager, 555-233-504* for field descriptions.

```

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

Inter Network Region Connection Management

src rgn	dst rgn	codec-set	direct-WAN	WAN-BW-limits	intervening-regions
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:

change ipserver-interface

S8700 | S8500

change ipserver-interface *n*

Use **change ipserver-interface *n*** to change the QoS parameters and the IPSI board on **S8700 MC**, and the QoS parameters, the IPSI board and the socket encryption on an **S8700 IP**.

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

Output

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
 Host: ipsi-A02a
 DHCP ID: ipsi-A02a

 Call Control 802.1p: 6
 Call Control DiffServ: 46

Secondary IPSI

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

Output

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

```

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

```

Field Descriptions for change ipserver-interface

IP Control	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. 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.
Socket Encryption	Enter y to turn socket encryption on for the S8700 media server and IPSI link. Appears only on S8700 IP.
Enable QoS	Enter y to turn on or off quality of service (QoS) from the S8700 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 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)

change media-gateway

S8300 | G700

change media-gateway [x | next]

Use **change media-gateway** to change the administration of a G700 Media Gateway.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
change media-gateway	x	number assigned to media gateway			
	next	next available number			

See [add media-gateway](#) on page 68 for screen display and an explanation of field descriptions.

change station

S8700

change station *extension*

Output

The following screens show examples of the Station screen. For field descriptions, see *Administrator's Guide for Avaya Communication Manager, 555-233-506*.

Maintenance SAT Commands

change station

change station 2000

Page 1 of 4

STATION

Extension: 2000	Lock Messages? n	BCC: 0
Type: 8410D__	Security Code: 1234__	TN: 1
Port: X__	Coverage Path 1: __	COR: 1
Name: ip-softphone1__	Coverage Path 2: __	COS: 1
	Hunt-to Station: __	

STATION OPTIONS

Loss Group: 2_	Personalized Ringing Pattern: 1
Data Module? n	Message Lamp Ext: 2000
	Mute Button Enabled? y
	Media Complex Ext: __
	IP SoftPhone? y
	Remote Office Phone? y

change station 2000

Page 2 of 4

STATION

FEATURE OPTIONS

LWC Reception: spe	Auto Select Any Idle Appearance? n
LWC Activation: y	Coverage Msg Retrieval? y
LWC Log External Calls? n	Auto Answer: none
CDR Privacy? n	Data Restriction? n
Redirect Notification? y	Idle Appearance Preference? n
Per Button Ring Control? n	Restrict Last Appearance? y
Bridged Call Alerting? n	
Active Station Ringing: single	
H.320 Conversion? y	Per Station CPN - Send Calling Number?
Service Link Mode: as-needed	
Multimedia Mode: enhanced	
Audix Name:	Audible Message Waiting? n
Messaging Server Name:	Display Client redirection? n
	Select Last Used Appearance? n
	Coverage After Forwarding? s
IP Emergency Calls: extension	Direct IP-IP Audio Connections? n
Emergency Location Ext: 2000	IP Audio Hairpinning? n

change station 2000

Page 3 of 4

STATION

SITE DATA

Room:
Jack:
Cable:
Floor:
Building:

Headset? n
Speaker? n
Mounting: d
Cord Length: 0
Set Color:

ABBREVIATED DIALING

List1:
List2:
List3:

BUTTON ASSIGNMENTS

1: call-appr
2: call_appr
3:
4:
5:

6:
7:
8:
9:
10:

change station 2000

Page 4 of 4

STATION

SOFTKEY BUTTON ASSIGNMENTS

1: lwc-store
2: lwc-cancel
3: auto-cback
4: timer
5: call-fwd Ext:
6: call-park
7: date-time
8: priority
9: abr-prog
10: abr-spchar Char: ~p
11: abr-spchar Char: ~m
12: abr-spchar Char: ~w

change synchronization

[S8700](#) | [S8500](#) | [S8100](#)

change synchronization *cabinet#*

The *cabinet#* option appears on [S8700 IP](#)

Use **change synchronization** to change the synchronization source for the system. After running **change synchronization**, clocks may momentarily lose synchronization.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
change synchronization	cabinet#	the cabinet number, required on S8700 IPs	init inads craft cust rcust bcms		DS1 interface, BRI trunk, or UDS1 board selected as either a primary or secondary synch source cannot be removed on the DS1 circuit pack administration form or the regular circuit pack administration form.

Output

This is an example of **change synchronization 1** on **S8700 IP**.

```

change synchronization 1                                     Page 1 of 2
                                SYNCHRONIZATION PLAN
                                CABINET 1
                                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  GERT<>Lulu    n
01A08    DS1  Gertrude <> 5E  y
01A09    DS1  GERT Loop 414  y
01B02    DS1  gertrude <> st1 y

NOTE: DS1 and BRI TRUNK sources result in stratum 4, type II synchronization

```

This is an example of **change synchronization 1** on **S8700 MC**.

change synchronization

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
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

Field Descriptions for change synchronization

Stratum S8700 MC	Enter 3 for stratum-3 clocking or 4 for stratum 4 clocking on S8700 MC .
Primary	First choice system synchronization source. Blank means no synchronization. Enter 5-character board location on any system S8700 MC : Enter atm-switch . If atm-switch : ATM PNC port networks can only get synchronization from the ATM switch. Entering a circuit pack location only monitors that pack for errors. S8700 IP : Sync source must be in the cabinet being administered.
Secondary	Enter the 5-character board location for second choice system synchronization source. Blank means no synchronization. S8700 IP : 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)
Name	User-defined name for the DS1 circuit pack (blank = no user-defined name assigned)
Slip	If DS1 circuit pack has slip alarm, y ; if not, n
Port Network	Display-only field specifying the port network that supplies synchronization through the tone clock circuit pack (valid for stratum 3 synchronization)

change system-parameters duplication

S8700 MC

change system-parameters duplication

Use **change system-parameters duplication** to enable or disable PNC and/or IPSI duplication on **S8700 MC**. TN2312BP IPSI duplication is not supported when either a CMC1 or G600 media gateway is present in the system.

If only IPSI duplication is satiable, 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 have both primary and secondary IPSI boards. Disabling IPSI duplication requires that all primary IPSI boards be active.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
change system-parameters duplication			init super-user inads craft dadmin		

Output

```
change system-parameters duplication
      DUPLICATION RELATED SYSTEM PARAMETERS

      Enable Operation of PNC Duplication? y
      Enable Operation of IPSI Duplication? y
```

Page 1 of 1

Field descriptions for change system-parameters duplication

Enable Operation of PNC Duplication

Enable Operation of IPSI Duplication defaults to **n** if a CMC1 or **G600** media gateway exists

change system-parameters ipserver-interface

S8700

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**.

Output

```
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
```

change system-parameters maintenance

S8700 | S8500 | S8300 | S8100

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	Feature Interaction
change system-parameters maintenance			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 the Start Time field to a time after the session ends. If daily Scheduled Maintenance is running and needs to be deactivated, set the Stop Time field to one minute after the current time.
- 5 Press Enter and verify that the screen displays 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.

Output for change system-parameters maintenance, page 1

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

      MAINTENANCE-RELATED SYSTEM PARAMETERS

SCHEDULED MAINTENANCE
      Start Time: 01 : 00
      Stop Time: 06 : 00
      Daily Maintenance: daily
      Save Translation: daily
      Command Time-out (hours): 2
      Control Channel Interchange: no
      System Clocks/IPSI Interchange: no
```

Field descriptions for change system-parameters maintenance

Operations support parameters

Product Identification	Identifies switch to an Operations Support System (OSS): 10-digit number starting with 1.
First OSS Telephone Number	Switch reports alarms first to the First OSS telephone number (for example, INADS or Trouble Tracker). The number must be obtained from the National Customer Support Center (NCSC) or the TSC. (# and * are not allowed in the telephone number.)
Abbrev Alarm Report	Enables the Abbreviated Alarm Report feature for the first OSS.
Second OSS Telephone Number	The switch reports alarms secondly to the second OSS telephone number. For example, INADS or Communication Manager The number must be obtained from the National Customer Support Center (NCSC) or the TSC. (# and * are not allowed in the telephone number.)
Abbrev Alarm Report	Enables the Abbreviated Alarm Report feature for the second OSS. (no)
Alarm Origination to OSS Numbers (previously Alarm Origination Activated)	Indicates one of four options for alarm origination (neither): both = Major and Minor alarms result in an automatic call to both administered OSS telephone numbers. first-only = Major and Minor alarms result in an automatic call to the first administered OSS number. neither = alarm origination does not occur; reports are not sent to either number. 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. If Alarm Origination is deactivated, Cleared Alarm Notification and Restart Notification deactivate, even though they may still be activated in the administration.
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 logoff 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)
Test Remote Access Port	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. 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 .
CPE Alarm Activation Level	Indicates the minimum level (Major, Minor or Warning) to activate Customer-Provided Equipment (CPE) alarm. If the level is none , the CPE does not activate for any alarm. (none) When the switch goes into Emergency Transfer, the CPE alarm activates regardless of the CPE Alarm Activation Level setting.
Customer Access to INADS Port	To prevent customer login ID access to system administration and maintenance interface control, set this field to no . Avaya services has sole access to this field.
Repeat Dial Interval (MMS)	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.
Roundtrip Propagation Delay	
Packet Loss	
Ping Test Interval	
Pings per Measured Interval	

Scheduled maintenance

An automated series of maintenance tests and operations runs daily according to the schedule and settings specified in the following fields

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.
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.
Command Time-out (hours)	Commands that block the running of daily maintenance (add, remove, change, set, and duplicate) are affected by the time-out feature. Options are blank, 1-6 hours. If blank, the time-out feature is not active.
Control Channel Interchange	Each port network has a pair of TDM busses (A and B). Each has a set of time slots dedicated to the control channel. One bus at a time carries the control channel in each PN. "Daily", days of the week, or n prevents interchanges.
System Clocks/IPSI Interchange	The days that interchanges occur (daily, days of the week, or no). n prevents interchanges. S8700 MC: for high-reliability configurations, there are duplicate IPSIs on IPSI-controlled port networks. For critical-reliability configurations, there are both duplicate Tone-Clock circuit packs on non-IPSI controlled port networks and duplicate IPSIs on IPSI-controlled port networks. When this is turned on, a system clock or IPSI interchange is automatically initiated on each port network possessing duplicated Tone-Clock circuit packs or IPSIs. Each port network interchanges in the standby system clock or IPSI for 20 seconds. During this time the newly-active circuit pack is tested and system health is monitored. Then an interchange is made back to the originally-active circuit pack. This field indicates the days that interchanges occur: daily, days of the week, or no. No prevents interchanges. Does not apply to duplex-reliability configurations since the IPSIs are not duplicated in the port networks.
SPE Interchange	The days SPE interchanges execute during scheduled maintenance, for duplicated SPE systems. (daily, days of the week, or 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.

Output (Page 2)

This is an example of page 2 of **change system-parameters maintenance**.

change system-parameters maintenance
Page 2 of 3

MAINTENANCE-RELATED SYSTEM PARAMETERS

MINIMUM MAINTENANCE THRESHOLDS (Before Notification)

TTRs: 4	CPTRs: 1	Call Classifier Ports: 0
MMIs: 0	VCS: 0	

TERMINATING TRUNK TRANSMISSION TEST (Extension)

Test Type 100:	Test Type 102:	Test Type 105:

ISDN MAINTENANCE

ISDN-PRI Test Call Extension:	ISDN-BRI Service SPID:

DS1 & MF MAINTENANCE

DS0 Loop-Around Test Call Extension:	
MF Test Call Extension:	

SPE OPTIONAL BOARDS

Packet Intf1? y	Packet Intf2? y

Field Descriptions (Page 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.
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.

1 of 3

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.
Terminating Trunk Transmission Test (Extension)	
Test Type 100	Specifies extensions assigned to receive tie-trunk calls from other switches that have test line origination capability. The system responds by sending a sequence of test tones. Test type 100 tests far-end to near-end loss and C-message by sending: • 5.5 seconds of 1004-Hz tone at 0 dB • Quiet until disconnect; disconnect is forced after 1 minute
Test Type 102	Test Type 102 tests far-end to near-end loss by sending: • 9 seconds of 1004-Hz tone at 0 dB • 1 second of quiet • This cycle is repeated until disconnect; disconnect is forced after 24 hours.
Test Type 105	Test Type 105 tests 2-way loss, gain slope, and C-message and C-notch noise by sending: • 9 seconds of 1004-Hz tone at -16 dB • 1 second of quiet • 9 seconds of 404-Hz tone at -16 dB • 1 second of quiet • 9 seconds of 2804-Hz tone at -16 dB • 30 seconds of quiet • ½ second of 2225-Hz test progress tone • approximately 5 seconds of quiet • forced disconnect
ISDN MAINTENANCE	
ISDN-PRI Test Call Extension	Indicates the extension used by far-end ISDN nodes to place calls to the system, for testing ISDN-PRI trunks between the far end and the system.
ISDN-BRI Service SPID	Shows if the link associates with the Service SPID. If the link is associated with the Service SPID. This number is the test SPID (0 – 99999) (under BRI-SET MO). Otherwise, this field is blank. Service SPID is a feature used by the system technician to check building wiring between the switch and the BRI endpoint.

DS1 & MF MAINTENANCE

DS0 Loop-Around Test Call Extension	The extension used to set up a DS0 loop-around connection for testing non-PRI DS1 trunks. The DS0 Loop-Around Test Call feature is used primarily for testing DS0 channels associated with non-PRI trunks. The loop around is activated by dialing the test extension number; multiple DS0 loop-around connections can be established by placing multiple calls to the loop-around extension. For more information, see DS0 Loop-Around test call on page 369 in <i>Maintenance Procedures, 555-245-103</i>.
MF Test Call Extension	Enter the multifrequency test call extension. To allow COs in different locations to use different DID numbers to reach the MF test call extension, administer one number as the MF test call extension. Administer additional DID numbers as x-port stations, and call forward from the x-port stations to the MF test call extension.
SPE Optional Boards	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. No change to that field is allowed. 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, a Packet Interface circuit pack may be administered by changing Packet Interface to y.

3 of 3

Output (Page 3)

These are examples of page 3 of **change system-parameters maintenance**.

```
change system-parameters maintenance
      MAINTENANCE-RELATED SYSTEM PARAMETERS
```

Page 3 of 3

```
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
      MAINTENANCE-RELATED SYSTEM PARAMETERS
```

Page 3 of 3

```
Modem Connection: external
```

Field Descriptions for change system-parameters maintenance, page 3

MAINTENANCE SAVE TRANSLATION CORRUPTION AUDIT

Avaya recommends that the translation corruption audit parameters be set at their defaults (**y**, **n**, **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. Automatic **save translation** operations are performed according to the schedule specified by the Save Translation field value on page 1 of this screen. If a translation audit detects corruption, then an error is logged in the software error log. Use **display software** to view the software error log.

Enable Translation Audit	y/n Set to y (recommended) to have a translation audit performed prior to every scheduled save translation operation. A translation audit is used to detect corruption in the translation data. y applies only when the Save Translation field on the first page of this screen is also not set to n .
Display Warning When Detected	y/n Set to y to have a warning displayed on the SAT interface if translation corruption is detected by a translation audit. This field should be set to y only when translation corruption is actively being diagnosed. n is recommended.
Alarm When Detected	y/n Set to y to have an alarm issued if translation corruption is detected by a translation audit. This field should be set to y only when translation corruption is actively being diagnosed. n is recommended.
Block Save Translation When Detected	y/n Indicates whether all “save translation” operations will be blocked if corruption is detected. This field should be set to y only when translation corruption is actively being diagnosed. n is recommended.

clear audits

Use **clear audits** to clear cumulative and/or peak hour's data collected for each data relation audit. **Clear audits** clears old data to display data collected since the last **clear audits** when **status audits** is run. See [status audits](#) on page 323.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
clear audits	cumulative	Clears data collected about the peak hour since the last reboot or clear audits cumulative	init inads	none	See below
	peak-hour	Clears peak hour data Examples: clear audits cumulative clear audits peak-hour			

Feature interactions

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.

clear errors

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
clear errors		Examples: clear errors	init inads craft	none	none

clear firmware-counters

[S8700](#)

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.

This command is useful for quickly clearing 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	Default	Feature Interaction
clear firmware-counters	UUCSS a-pnc b-pnc	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 a-pnc or b-pnc . To do so, the standby PNC must first be busied out.	init inads craft cust rcust		

For more information, see [Common Command Output Screens](#) on page 35.

clear isdnpri-testcall

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

Use **clear isdnpri-testcall** to cancel in-progress ISDN-PRI test calls. Once a running test call is cleared, another can begin.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
clear isdnpri-testcall	group number member number	Trunk group number. Member within the trunk group. Examples: clear isdnpri-testcall 80/1 clear isdnpri-testcall 78/2	init inads craft	none	none

clear link

[S8700](#)

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.

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

clear mst

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
clear mst		Examples: clear mst	init inads		

clear pkt

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
clear pkt	port network location	Physical position of the packet bus (1 - 3) Example: clear pkt port-network 1	init inads craft		

clear port

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
clear port	location	Port location: PCSSpp Example: clear port 01c1102	init inads cust nms		none

disable administered-connection

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

The **disable administered connection** command stops both scheduled and periodic testing and stops processing of in-line errors for all or selected administered connections.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
disable administered-connection	ac number all	Number of the administered connection Selects all administered connections Examples: disable administered-connection all disable administered-connection 1 disable administered-connection 12	init inads craft cust rcust mis		

disable filesystem

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
disable filesystem	PPCSS	board location			

disable firmware download

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 381 to determine how far along the current download is.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
disable firmware download	UUCSS	board location			

disable mst

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 the **disable mst** command 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
disable mst		Example: disable mat	init inads	none	none

disable suspend-alm-orig

[S8100](#)

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:

This command does not disable port entries.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
disable suspend-alm-orig	board location	Physical location of the replaced or corrected board (does not support port location) Examples: disable suspend-alm-orig 1C03 disable suspend-alm-orig 1E07	init inads craft cust rcust		

disable synchronization-switch

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

disable synchronization-switch

[all | cabinet *cab#*] parameters are available on [S8700 IPs](#).

Use **disable synchronization-switch** to disable the automatic clock-switching capability of the Synchronization Maintenance subsystem. On [S8100](#), the clock refers to the oscillator on a tone/clock or DS1 interface. The See [SYNC \(Port-Network Synchronization\)](#) on page 1803 in the *Maintenance Alarms Reference, 555-245-102* for details. 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.

S8700 IP: Specify the cabinet. The Internet Protocol (IP) PNC field on the **system-parameters customer-options** screen must be **y**.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
disable synchronization-switch			init inads craft		

disable test-number

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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		

display alarms

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
display alarms	print schedule	See Common Command Parameters on page 34.	inads cust rcust bcms init browse	All alarms are listed.	see below

Description

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 report options in this screen, and press ENTER to see the report.

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): ____/____

Field Descriptions for display alarms

Alarm Types	The type of alarm to be displayed is specified by placing a y or n in the alarm type fields. The technician can choose a combination of: • active or inactive alarms • major, minor, or warning alarms • resolved or unresolved alarms
Interval	Display alarm records for the last (m)onth, last (h)our, last (d)ay, last (w)EEK, or (a)ll. • 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 no “from” date is entered, then no checking is done. This shows 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 which is active after the From date is used.
Equipment Type	The technician can choose between seven different equipment types. If there is no input to any of these fields, the system defaults to every type. • Media Gateway: Display every alarm associated with a particular media gateway. • Cabinet: Display every alarm associated with a particular cabinet. • Port Network: Display every alarm associated with a particular port network. • Board Number: Display every alarm associated with a particular circuit pack. Alarms for a circuit pack are referenced by port location (cabinet-carrier-slot). If the cabinet number is omitted, default is 1. • Port: Display every alarm associated with a particular port on a circuit pack. Alarms for a port circuit are referenced by port location (cabinet-carrier-slot-circuit). If the cabinet number is omitted, default is 1. • Category: Alarms for a particular equipment category. • Extension: Alarms associated with an extension number. • Trunk (group/member): Display every alarm associated with a particular trunk group or trunk-group member.

Output for display alarms

For the following 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

Field Descriptions for Alarm Report

Port	The location of the alarmed object. For installed circuit packs, the location appears as cabinet-carrier-[slot]-[circuit] . For port network-related objects, the location appears as PN UU , 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 as used by the alarm log.
Maintenance Name	The logical name of the MO which has been alarmed.
On Brd	y/n If y , the fault detected was on the associated circuit pack If n , the fault is not connected to the circuit pack, but was on an off-board element connected to the circuit pack.
Alt Name	Identifies the location of the maintenance object. • Station = extension number • Trunk = Group number (78/__) or group and member numbers (78/01) • Private CO Line = private CO line (P) and group number. (P/xxx)
Alarm Type	MAJOR, MINOR, or WARNING. This is an indicator to the seriousness of the alarm.
Service State	Service state of the station and trunk ports: • 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 below indicate the acknowledged alarm state: y (yes) = alarm has been acknowledged n (no) = alarm has not been acknowledged c (cleared) = alarm was first acknowledged, then resolved and cleared [Blank] = no attempt was made to report the alarm If the user disables the alarm origination with change system-parameters maintenance, then the Ack field is blank regardless of the true acknowledged state of the alarm.
Date Alarmed	Day, hour, and minute of alarm.
Date Resolved	Day, hour, and minute of resolution. 0 for active alarms.

Feature Interactions

If the alarm origination is disabled by **change system-parameters maintenance**, the Ack field displays blanks no matter what the true acknowledge state is for the alarm.

If “second-as-backup” is administered 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 calling the first OSS telephone number becomes 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.

display atm pnc

S8700 MC

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 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	Feature Interaction
display atm pnc	n print schedule	The administered number of the ATM PNC. See Common Command Parameters on page 34.	init inads craft		

Output

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
```

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).

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 formats are: DCC ATM (Data Country Code), ICD ATM (International Code Designator), and E.164 ATM private.
AFI	Address Format Identifier. Possible values are 39 for DCC, 47 for ICD, and 45 for E.164.
DCC, ICD, or E.164	Either the 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.

display bulletin board

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

For detailed information about the Communication Manager bulletin board, refer to “Using the bulletin board” and “Bulletin Board” in *Administrator’s Guide for Avaya Communication Manager, 555-233-506*.

display capacity

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
display capacity	schedule	See Common Command Parameters on page 34.	init inads dadmi n craft cust rcust		

Output - page 1

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 12

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

Field Descriptions for display capacity, page 1

AAR/ARS	
AAR/ARS Patterns	The number of route patterns. See <i>Administrator's Guide for Avaya Communication Manager</i> , 555-233-506.
Inserted Digit Strings	Number of 12-digit strings inserted and available for AAR/ARS preferences. See <i>Administrator's Guide for Avaya Communication Manager</i> , 555-233-506.
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's Guide for Avaya Communication Manager</i> , 555-233-506.
Adjunct Switch Application Interface (ASAI)	
Active Controlling Associations	The number of station domain controls that ASAI adjuncts can request.
Notification Requests	The number of requests ASAI can make to monitor call activity at a split or VDN.
Simultaneous Active Adjunct Controlled Calls	The number of calls that can be controlled by ASAI adjuncts.

Output - display capacity page 2

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

display capacity	Page 2 of 12		
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			

Field Descriptions for display capacity, page 2

Attendant Service	
Attendant Positions	The number of administered attendants.
Queue Length	A real-time snapshot of the number of calls waiting for attendant service.
Queue/Call Status Buttons	The number of attendant queue status buttons administered on stations. There are two types of queue status buttons: • atd-qcalls (ATD - Queue Calls) • atd-qtime (ATD - Queue Time)
Authorization Codes	The number of authorization codes used for security purposes. See <i>Administrator's Guide for Avaya Communication Manager, 555-233-506</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.

Output - page 3

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

display capacity		Page 3 of 12		
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

Field Descriptions for display capacity, page 3

CALL COVERAGE	
Coverage Answer Groups	Number of Coverage Answer Groups. See <i>Administrator's Guide for Avaya Communication Manager, 555-233-506</i> .
Coverage Paths	Number of paths taken when a call goes to coverage. See <i>Administrator's Guide for Avaya Communication Manager, 555-233-506</i> .
Call Pickup Groups	Number of administered call pickup groups. See <i>Administrator's Guide for Avaya Communication Manager, 555-233-506</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 Software Call Vectoring and Expert Agent Selection (EAS) Guide, 555-230-714</i> .
Meet-me Conference VDNs per system	Number of vector directory numbers for the meet-me conference feature.

1 of 2

Total Vectors Per System	Number of vectors per system. See <i>Avaya™ Call Center Software Call Vectoring and Expert Agent Selection (EAS) Guide</i> , 555-230-714.
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 Software Call Vectoring and Expert Agent Selection (EAS) Guide</i> , 555-230-714.

2 of 2

Output - page 4

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

display capacity		Page 4 of 12		
		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				

Field Descriptions for display capacity, page 4

DATA PARAMETERS

Administered Connections	The number of connections between two access or data endpoints. See <i>Administrator's Guide for Avaya Communication Manager</i> , 555-233-506.
Alphanumeric Dialing Entries	See <i>Administrator's Guide for Avaya Communication Manager</i> , 555-233-506.

DIAL PLAN	
Extensions	This includes stations, data endpoints, hunt groups, announcements, TEGs, VDNs, common shared extensions, and code calling IDs.
Miscellaneous Extensions	Anything that is not a station, trunk, data module, or attendant. This includes, but is not limited to, PCOL groups, common shared extensions, access endpoints, administered TSCs, code calling IDs, VDNs, LDNs, hunt groups, announcements, and TEGs.
UDP Extension Records	The number of 4-digit or 5-digit extension numbers that allow a user to call from one PBX to another using that number.
Digital Data Endpoints	The number of digital serial communication devices that permit the asynchronous transfer of data. This also includes the number of analog adjuncts.
Expansion Port Networks	The number of port networks connected to the TDM bus and packet bus of a processor port network.
Facility Busy Indicators	The number of visual indicators of the busy/idle status of any particular trunk group, hunt group member, or station user. See <i>Administrator's Guide for Avaya Communication Manager</i> , 555-233-506.

Output - page 5

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

display capacity		Page 5 of 12		
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
Queue Slots Per System:		2453	22547	25000
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				

Field Descriptions for display capacity, 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.

1 of 2

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.
Queue Slots Per System	The number of hunt group queue positions.
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's Guide for Avaya Communication Manager</i> , 555-233-506.
Personal CO Line (PCOL) Trunk Groups	The number of PCOL trunk groups. See <i>Administrator's Guide for Avaya Communication Manager</i> , 555-233-506.

2 of 2

Output - page 6

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

display capacity		Page 6 of 12		
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
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				

Field Descriptions for display capacity, page 6

Recorded Announcement
Analog Queue Slots
TN2601 VAL Board
G700 VAL Sources
TEMPORARY SIGNALLING CONNECTIONS (TSC)
Administered TSCs
NCA-TSC Calls

Output - page 7

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

display capacity	Page 7 of 12		
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			

Field Descriptions for display capacity, page 7

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

Output - page 8

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

display capacity

Page 8 of 12

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

Field Descriptions for display capacity, page 8

Voice Terminals	
Station Button Memory (units)	The percentage of memory being consumed by every administered button.
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.

Output - page 9

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

display capacity

Page 9 of 12

SYSTEM CAPACITY

TOTAL SUBSCRIBED PORTS

	Used	Available	System Limit
Station and Trunk Ports:	5297	38703	44000
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

Field Descriptions for display capacity, page 9

TOTAL SUBSCRIBED PORTS	
Station and Trunk Ports	The number of subscribed ports in 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	
Off-PBX Telephone - OPS	
Off-PBX Telephone - SSE	
Off-PBX Telephone Memory (units)	

Output - page 10

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

display capacity

Page 10 of 12

CONCURRENT REGISTRATION COUNTS

CONCURRENT REGISTRATION COUNTS

	Currently Registered	Available	System Limit

IP Stations:	296	2704	3000
IP Attendant Consoles:	0	3	3
Remote Office Stations:	0	300	300

Field Descriptions, display capacity page 10

CONCURRENT REGISTRATION COUNTS	
IP Stations	The number of IP stations
IP Attendant Consoles	The number of IP attendant consoles
Remote Office Stations	The number of remote office stations

Output - page 11

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

display capacity

Page 11 of 12

CURRENT REGISTRATION COUNTS BY PRODUCT ID

ID	Rel	Regist.	Avail.	System Limit	ID	Rel	Regist.	Avail.	System Limit
IP_Agent	:	0	5000	5000	:				
IP_Phone	:	296	4704	5000	:				
IP_ROMax	:	0	300	300	:				
IP_Soft	:	0	5000	5000	:				
IP_eCons	:	0	28	28	:				
	:				:				
	:				:				
	:				:				
	:				:				
	:				:				

Field Descriptions, display capacity page 11

ID	Product identifier - IP_Agent is the identifier for IP agents. - IP_Phone is the identifier for IP phones. - IP_ROMax is the identifier for R300 remote office phones. - IP_Soft is the identifier for IP Softphones. - IP_eCons is the identifier of the IP Softconsole.
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

Output - page 12

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

display capacity	SYSTEM CAPACITY	Page 12 of 12
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		

Field Descriptions, display capacity 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 unknown/no t rans if no flash card is present. Also, if load translations were upgraded from one prior to G3V4 load 71 or early G3V5 loads, unknown/no t rans displays.
Memory Configuration	The platform on which the translations were saved. Can also be unknown if no flash card is present or translations made on old load. This is important because platforms are not always compatible.
Offer Category	The offer category that was set when the last save translation was done before upgrade or reboot. Can also be unknown if no flash card is present or translations made on old load.

display communication-interface links

S8700

display communication-interface links

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	Feature Interaction
display communication-interface links			init inads craft		

Output

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

```
display communication-interface links                                     Page 1 of 2
                                INTERFACE LINKS
Link Enable Est Ext  Type Destination DTE Conn  Name
      Conn                                     DCE Mod.
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
```

Field Descriptions for display communication-interface links

Link	Number of the administered link (data module screen).
Enable	y/n depending upon data module administration (processor interface, Ethernet, and PPP).
Est. Conn.	Establish connection data from the data module forms (processor interface and PPP).
Ext	Extension number of the local data module for this link.
Type	Protocol for this link: • ppp • ethernet
Destination Number	Destination of the link as administered on the data module forms (processor interface and PPP).
DTE/DCE	Processor interface administration from data module screen (processor interface only).
Conn. Mod.	Connected data module administration from data module screen (processor interface)
Name	Name from the data module forms (processor interface, Ethernet, and PPP)

display communication-interface processor-channel

S8700

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	Feature Interaction
display communication-interface processor-channel	<i>n</i>	Number of the processor channel Example: display communication-interface processor-channel 125	init inads craft		

Output

The following example shows the output from **list/display communication-interface processor-channel**.

PROCESSOR CHANNEL ASSIGNMENT										Page 1 of X
Proc Chan	Enable	Appl.	Gtwy To	Mode	Interface Link/Chan	Destination Node	Port	Session Local/Remote	Mach 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	___	___	___

Field Descriptions

Enable	Type y to enable a processor channel. Type n to disable a processor channel.
Appl.	Identifies the switch application used over this link. The application gateway is used for conversion between ISDN and TCP/IP. Valid entries are: audix, dcs, fp-mwi, gateway, gtwy-tcp, mis, msaamwl, msackl, msahlwc, msallwc, msamcs, qs-mwi, blank.
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.
Mode	Identifies whether the IP session is passive (client) or active (server). This field must be blank if the type of interface link is x.25 (r model) or procr-intf (si model). This field cannot be blank if the type of interface link is ethernet or ppp . Valid entries are client , 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 .
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.
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	Field ported forward from R6.
Session Remote	Field ported forward from R6.
Mach ID	Field ported forward from R6.

display dialplan

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

For information about **display dialplan**, see *Administrator's Guide for Avaya Communication Manager*, 555-233-506.

display disabled-tests

S8700 | S8500 | S8300 | S8100

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	Feature Interaction
display disabled-tests			init inads craft cust rcust		

display errors

S8700 | S8500 | S8300 | S8100

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	Login	Default	Feature Interaction
display errors	high- resolution	This specifies an error report with high resolution time stamps for the first occurrence and last occurrence of the error. The high resolution time stamp includes seconds and a sequence count within a second. The sequence count starts over for each second. See Error Log Report High Resolution on page 148.			
	schedule	See Common Command Parameters on page 34.			

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

The 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 166 for more information. Information that could not be logged during a system reset may be found [here](#).

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): /

Field Descriptions

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.

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From	Specifies error records starting from the time specified by mm/dd/hh/mm (month/day/hour/minute). If no FROM date is entered, errors from the earliest record in the log are displayed.
To	Specifies every error record up to the time specified by mm/dd/hh/mm . If no TO date is entered, every error up to the current date appears.
Equipment Type	To limit the report to a specific group of components, enter the location of a type of equipment in one of the following fields. If no entry is made, errors for the entire system are displayed. • 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: errors for a particular equipment category. See the list of alarm and error categories and their associated maintenance objects in “Alarm and Error Categories”. The HELP key displays a list of categories. • 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).

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Output

The following Hardware Error Report shows a typical result for **display errors** with default input settings.

Error Log Report Without High Resolution

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	Ac
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	

Field Descriptions

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 abbreviated name of the MO that encountered the error.
Alt Name	An alternate means of identifying the MO.

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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 Maintenance Alarms Reference, 555-245-102.
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.
Err Rt	Average hourly rate at which the error has occurred from the first occurrence to the present. The maximum entry is 999.
Rt/Hr	An approximation of the rate at which this error occurred in the last hour. The maximum entry displayed is 999.
Al St	Alarm Status – A character indicating the status of this MO in the error and alarm logs. • a — active alarm entry • r — resolved alarm entry • c — resolved alarm entry due to long clear option of test • s — resolved alarm entry due to a software-requested (non-demand) system restart • t — resolved alarm entry due to a technician-requested system restart • n — not alarmed
Ac	y/n Indicates if the maintenance object is still under active consideration by the maintenance subsystem.

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display events

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

display events [print]

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 Vectoring and Expert Agent Selection (EAS) Guide (555-230-521) to see how to interpret vectoring fields on this report.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
display events			init inads craft cust rcust	none	none

Input Form

Use the Event Report screen 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 eventsPage 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:

Field Descriptions

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.

Output

See Avaya™ Call Center Software Call Vectoring and Expert Agent Selection (EAS) Guide, 555-230-714, to see how to interpret this report. In particular, the Event Data 2 field is associated with possible causes and repair strategies for the event.

The following example shows an IP denial event report.

display events		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	

Field Descriptions for Display Events

Event Type	The event identification number that points to a specific piece of software code. See Table 10, Denied IP events , on page 152.
Event Description	A 25-character string describing the problem (see Table 10, Denied IP events , on page 152)
Event Data 1	The station UID that is attempting to register (see Table 10, Denied IP events , on page 152)
Event Data 2	The IP address of the station that is attempting to register (see Table 10, Denied IP events , on page 152)
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

[Table 10, Denied IP events](#), on page 152 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.

Table 10: Denied IP events

Event Type	Event Description	Explanation	Event Data 1	Event Data 2
1907	IP RRJ-Invalid RAS addr	Registration Rejected because the RAS address in the RRQ is invalid.	0	IP address that sent the RRQ
1908	IP RRJ-Invld call SigAddr	IP Registration Rejection because signaling address in the RRQ is invalid.	0	IP address
1909	IP RRJ-RemoteOfc misadmin	Registration rejected because: 1. Remote Office is enabled on the Signaling Group screen, but the RRQ is not from a supported Remote Office product. 2. The RRQ is from a supported Remote Office product, but Remote Office not enabled on the Signaling Group screen. 3. Remote Office is enabled on the Signaling Group screen, but the Terminal Type in the RRQ is not valid.	0	IP address
1910	IP RRJ-H323 UserObj undef	Registration rejected because there is no H323 User Object.	0	IP address

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Table 10: Denied IP events

Event Type	Event Description	Explanation	Event Data 1	Event Data 2
1911	IP RRJ-Exceed max endpts	Registration rejected because the capacity for either registered endpoints or Remote Office endpoints is exceeded. Check maximum allowed in the system on page 1 of the System Parameters Customer Options screen.	0	1st part: # of RO stations; 2nd part: # of IP stations, respectively
1912	IP RRJ-Exceed ProdID/Ver	Registration rejected because the maximum number of registered endpoints of a specific product ID and version is exceeded. Check the limit on the System Parameters Customer Options screen.	T/S: IP Product from the System Parameters Customer Options screen	1st part: registered limit; 2nd part: actual count, respectively
1913	IP RRJ-Invalid ProdID/Ver	Registration rejected because invalid Product ID / Version. Registering Application's product ID is not administered or no Product ID in RRQ message.	T/S: Product ID of the registering application	Major version number
1914	IP RRJ-ProdID search fail	Registration rejected because the search for registering application's Product ID failed.	T/S: Product ID of the registering application	Major version number
1915	IP RRJ-Invalid endpt/Ver	Registration rejected because the endpoint version is not compatible with the gatekeeper version.	IP address	Major version number in 2nd byte; minor version number in low byte
1916	IP RRJ-No H323 NonStdData	Registration rejected; non-standard data are missing in the RRQ from authenticating application.	0	IP address
1917	IP RRJ-Invld H323 ObjID	Registration rejected; Object ID in the RRQ is invalid.	Object ID	IP address
1918	IP RRJ-Invld H225 NSData	Registration rejected; cannot decode H225 non-standard data (NSD) message.	0	IP address
1919	IP RRJ-Bad H225 NSDchoice	Registration rejected; unexpected NSD message received from registering application.	NSD choice	IP address

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Table 10: Denied IP events

Event Type	Event Description	Explanation	Event Data 1	Event Data 2
1920	IP RRJ-TTI: new LM fail	Registration rejected; failure in creating new Login Manager. Possible causes are: - No available heap memory to create LoginMgr - Cannot start LoginMgr timer - Clock not set	UID	IP address
1921	IP RRJ-IP-TTI port fail	Registration rejected; failure when inserting IP TTI port.	UID	IP address
1922	IP RRJ-TTI or RO inactive	Registration for an IP set with TTI service rejected. Possible causes: - TTI is not enabled on the System Parameters Customer Options screen. - Remote Office is not enabled on the System Parameters Feature Options screen.	0	IP address
1923	IP RRJ-No E164 number	Registration rejected; no valid E.164 phone number available. The extension is not administered.	UID	IP address
1924	IP RRJ-No GRQ msg rcvd	Registration rejected; did not receive a Gatekeeper Request message	UID	IP address
1925	IP RRJ-RQ: new LM fail	Registration rejected; failure creating a new Login Manager. Possible cause: - No available heap memory to create LoginMgr - Cannot start LoginMgr timer - Clock not set	UID	IP address
1926	IP RRJ-Authentication fail	Registration rejected: authentication failure. The password that the user entered and the administered password on the station screen do not match.	UID	IP address
1927	IP RRJ-Invld station type	Registration rejected: - invalid set type - no Remote Office or IP Softphone administration on the station screen	UID	Type

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Table 10: Denied IP events

Event Type	Event Description	Explanation	Event Data 1	Event Data 2
1928	IP RRJ-StnTyp/Protocl err	Registration rejected: inconsistent station type and call-signaling protocol. An IP Softphone should be assigned as one of the following: • DCP extension, with call control set to IP Softphone • H.323 extension, with call control set to none	UID	Endpoint type (3rd and 2nd nyble); call signaling protocol (low nyble)
1929	IP RRJ-No idx for MMCmplx	Registration rejected: user record for dual-connected DCP set is missing the index for the multimedia complex.	UID	IP address
1930	IP RRJ-No voice path spec	Registration rejected: endpoint has neither an associated multimedia extension nor a specified voice path, hence, no audio path. Either: • add a Media Complex extension on the station screen or • register as a telecommuter.	UID	IP address
1931	IP RRJ-H323 ext is MMCmpx	Registration rejected: this H.323 extension is administered as a Media Complex extension on a non-H.323 (for example, a DCP) set.	UID	IP address
1932	IP RRJ-Ext has data modl	Registration rejected: the extension is administered as a data module.	UID	IP address
1933	IP RRJ-IP addr mismatch	Registration rejected: the H.323 application is not at the same IP address as the authenticating application.	UID	IP address of registering endpoint
1934	IP RRJ-Ext already reg	Registration rejected: extension is already registered.	UID	IP address
1935	IP RRJ-Not Remote Ofc ext	Registration rejected: Remote Office is not administered for this extension on the station screen.	UID	IP address
1936	IP RRJ-Invld RO anlg stn	Registration rejected: invalid analog station type.	UID	IP address
1937	IP RRJ-RemOfc not admin	Registration rejected: Remote Office endpoint • is not administered or • is of unknown station type	UID	IP address

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Table 10: Denied IP events

Event Type	Event Description	Explanation	Event Data 1	Event Data 2
1938	IP RRJ-Immediate re-reg	Immediate re-registration is rejected when a registration or unregistration is in progress for an extension.	UID	IP address
1939	IP RRJ-Failure moving ext	Registration rejected: failure while trying to force the unregistration of an extension in the process of moving it to another port.	UID	IP address
1940	IP RRJ-Duplicate ext	Registration rejected as a duplicate extension.	UID	IP address
1941	IP KA-from invld endpt ID	Keep Alive registration request rejected: invalid endpoint identifier.	Endpoint UID	IP address
1942	IP KA-from unreg user	Keep Alive registration request rejected: unregistered extension.	Endpoint UID	IP address
1943	IP-KA-from unreg SigGrp	Keep Alive registration request rejected: unregistered signaling group.	Endpoint UID	IP address
1944	IP RRJ-PSA merge failure	Registration rejected: PSA merge failure (internal software error).	UID	IP address
1945	IP RRJ-New IP user fail	Registration rejected: failure to construct new H.323 or IP Softphone user (internal software error.) First value is NULL. Second value is IP address.	0	IP address
1946	IP RRJ-PSA merge failure	Registration rejected: PSA merge operation failed (internal software error).	0	IP address
1947	IP RRJ-PSA unmerge fail	Registration rejected: PSA unmerge operation failed (internal software error).	UID	IP address
1948	IP RRJ-Complete pend reg	Registration rejected: failure to obtain a station user record (internal software error – corrupt translation).	UID	IP address
1949	IP RRJ-Build KARCF msg	Registration rejected: failure to build a KeepAlive Registration Confirm (KARCF) message (internal software error).	0	IP address
1950	IP RRJ-Build RCF msg	Registration rejected: failure to build a Registration Confirm (RCF) message (internal software error).	0	IP address
1951	IP GRJ-Invld IP addr/port	Gatekeeper request rejected: invalid destination IP address and port in the GRQ.	0	IP address

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Table 10: Denied IP events

Event Type	Event Description	Explanation	Event Data 1	Event Data 2
1952	IP GRJ-Invld gatekeeperID	Gatekeeper request rejected: message is not for this gatekeeper. First value is gatekeeper ID. Second value is IP address.	Gatekeeper ID	IP address
1953	IP GRJ-Invld auth capblty	Gatekeeper request rejected: the gatekeeper supports a capability that the registering endpoint does not.	0	IP address
1954	IP GRJ-Invld auth algrthm	Gatekeeper request rejected: no compatible authentication algorithm exists between the endpoint and the gatekeeper.	0	IP address
1955	IP GRJ-Bld GCF:Gateway/MCU	Gatekeeper request rejected: failure to build a GateKeeper Confirm (GCF) message for a GateWay/MCU (internal software error).	0	IP address
1956	IP GRJ-Bld GCF:TTI	Gatekeeper request rejected: failure to build a GateKeeper Confirm (GCF) message for an un-named endpoint registration (internal software error).	0	IP address
1957	IP GRJ-GK will not host	Gatekeeper request rejected: gatekeeper is unwilling to host endpoint because: - no alias address has been provided - TTI is in incorrect state (for example, TTI is not enabled for voice)	TTI state	IP address
1958	IP GRJ-Invalid extension	Gatekeeper request rejected: extension is not administered.	Either extension number or 0	IP address
1959	IP GRJ-No stn user record	Gatekeeper request rejected: no station user record exists for registering this user (internal software error).	UID	IP address

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Table 10: Denied IP events

Event Type	Event Description	Explanation	Event Data 1	Event Data 2
1960	IP GRJ-GRQ: new LM fail	Gatekeeper request rejected because of failure to create new LoginMgr. Possible causes - No available heap memory to create LoginMgr - Cannot start LoginMgr timer - Clock not set	UID	IP address
1961	IP GRJ-Build GCF msg	Gatekeeper request rejected: failure to build a GateKeeper Confirm (GCF) message (internal software error).	UID	IP address
1962	IP LRJ-No H323 sig group	Location Request rejected: no H.323 signaling group administered.	UID	IP address
1963	IP LRJ-Build LCF msg	Location Request rejected: failure to build a Location Request Confirm (LCF) message (internal software error).	UID	IP address
1964	IP DRJ-Null UserID	Disengage Request rejected: the endpoint ID could not be converted to a UID.	UID	IP address
1965	IP DRJ-Bld DCF:Gateway/MCU	Disengage Request rejected: failure to build Disengage Request Confirm (DCF) message for a gateway or MCU (internal software error).	UID	IP address
1966	IP DRJ-Endpt not reg	Disengage Request rejected: endpoint is not registered.	UID	IP address
1967	IP DRJ-Build DCF msg	Disengage Request rejected: failure to build a Disengage Request Confirm (DCF) message for a non-gateway or MCU user (internal software error).	UID	IP address
1968	IP BRJ-Null UserID	Bandwidth Request rejected: invalid endpoint ID was received.	0	IP address
1969	IP BRJ-Bld BCF:Gateway/MCU	Bandwidth Request rejected: failure to build a Bandwidth Request Confirm (BCF) message for a Gateway or MCU (internal software error).	UID	IP address
1970	IP BRJ-Endpt not reg	Bandwidth Request rejected: the endpoint is not registered.	UID	IP address

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Table 10: Denied IP events

Event Type	Event Description	Explanation	Event Data 1	Event Data 2
1971	IP BRJ-Build BCF msg	Bandwidth Request rejected: failure to build a Bandwidth Request Confirm (BCF) message for a non-Gateway or MCU user (internal software error).	UID	IP address
1972	IP BRJ-No H323 user	Bandwidth Request rejected: H.323 user object does not exist (internal software error).	UID	IP address
1973	IP BRJ-Call non-existent	Bandwidth Request rejected: request is made for a non-existing call.	UID	IP address
1974	IP BRJ-Bandwidth rqst fail	Bandwidth Request rejected: because of unexpected return code from bandwidth request.	UID	IP address
1975	IP ARJ-Null UserID	Admission Request rejected: received invalid endpoint ID.	NIL UID	IP address
1976	IP ARJ-Endpt not reg	Admission Request rejected: the endpoint is not registered.	UID	IP address
1977	IP ARJ-No avail B-channel	Admission Request rejected: no B channel is available for the call.	UID	IP address
1978	IP ARJ-Bld ACF:Gateway/MCU	Admission Request rejected: because of failure to build an Admission Request Confirm (ACF) message for a Gateway or MCU (internal software error).	UID	IP address
1979	IP ARJ-Not an H323 user	Admission Request rejected: request was received from a non-H.323 user.	UID	IP address
1980	IP ARJ-Stn not in service	Admission Request rejected: station is not in service.	UID	IP address
1981	IP ARJ-Build ACF msg	Admission Request rejected: failure to build an Admission Request Confirm (ACF) message for a non-Gateway or MCU user (internal software error).	UID	IP address
1982	IP ARJ-No H323 user	Admission Request rejected: H.323 user object does not exist (internal software error).	UID	IP address
1983	IP ARJ-CRV already in use	Admission Request rejected: call reference value (CRV) is already in use by another call.	UID	IP address

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Table 10: Denied IP events

Event Type	Event Description	Explanation	Event Data 1	Event Data 2
1984	IP ARJ-CRV does not exist	Admission Request rejected: this call reference value (CRV) does not exist.	UID	IP address
1985	IP ARJ-CRV already in use	Admission Request rejected: call reference value (CRV) is already in use by another call. An ARQ has been received while an earlier one is still pending.	UID	IP address
1986	IP ARJ-Insuff bandwidth	Admission Request rejected: insufficient bandwidth available to support this call.	UID	IP address
1987	IP ARJ-Admissn rqst fail	Admission Request rejected: unexpected return code from Admission Request (internal software error).	UID	IP address
1988	IP URJ-Null UserID	Unregistration Request rejected: received invalid endpoint ID.	0	IP address
1989	IP URJ-Endpt not reg	Unregistration Request rejected: endpoint is not registered.	UID	IP address
1990	IP URJ-No endpoint ID	Unregistration Request rejected: no endpoint ID provided.	0	IP address
1991	IP URJ-GW/MCU is not reg	Unregistration Request rejected: URQ received from a Gateway or MCU that is not registered.	UID	IP address
1992	IP URJ-No H323 sig group	Unregistration Request rejected: there is no H.323 user for the signaling group (internal software error).	UID	IP address
1993	IP URJ-No non-std data	Unregistration Request rejected: no non-standard data in the URQ.	UID	IP address
1994	IP URJ-NSD has invld OID	Unregistration Request rejected: the non-standard data (NSD) from the registered application has an invalid object ID in the URQ.	UID	IP address
1995	IP URJ-Can't decode NSD	Unregistration Request rejected: failure to decode non-standard data (NSD) in the URQ.	UID	IP address
1996	IP URJ-Unexpected NSD msg	Unregistration Request rejected: unexpected non-standard data (NSD) in the URQ from the registered application endpoint.	UID	IP address

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Table 10: Denied IP events

Event Type	Event Description	Explanation	Event Data 1	Event Data 2
1997	IP URJ-User is on a call	Unregistration Request rejected: the user is on a call.	UID	IP address
1998	IP URJ-PSA unmerge failed	Unregistration Request rejected: PSA unmerge operation failed (internal software error).	UID	IP address
1999	IP URJ-PSA merge failed	Unregistration Request rejected: PSA merge operation failed (internal software error).	UID	IP address
2000	IP URJ-No stn user record	Unregistration Request rejected: no station user record exists for unregistering user (internal software error).	UID	IP address
2001	IP URJ-TTI op failed	Unregistration Request rejected: unexpected TTI return code.	UID	IP address
2002	IP URJ-Build UCF msg	Unregistration Request rejected: failure to build an unregistration request confirm (UCF) message (internal software error).	0	IP address
2003	IP URJ-PSA unmerge failed	Unregistration Request rejected: PSA unmerge operation failed (internal software error).	UID	IP address
2004	IP URJ-No stn user record	Unregistration Request rejected: PSA unmerge operation failed (internal software error).	UID	IP address
2005	IP URJ-PSA unmerge failed	Unregistration Request rejected: PSA unmerge operation failed (internal software error).	UID	IP address
2006	IP FURQ-no H.323 ext reg	Force Unregistration Request. Received a KeepAlive RRQ from a dual-connect endpoint without a registered H.323 extension (cannot make calls). Re-register the endpoint.	UID	IP address
2007	IP FURQ-User, no sig conn	Force Unregistration Request. Unregister user because there is no signaling connection. RAS is alive, but the signaling connection has gone down (user cannot make calls). Re-register the endpoint.	UID	IP address

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Table 10: Denied IP events

Event Type	Event Description	Explanation	Event Data 1	Event Data 2
2008	IP FURQ-H323, no sig conn	Force Unregistration Request. Unregister associated H.323 user because there is no signaling connection. Re-register the endpoint.	UID	IP address
2009	IP FURQ-Move user	Force Unregistration Request. Extension is already registered, but received a force login RRQ. Send a URQ to the existing extension.	UID	IP address
2010	IP FURQ-Restart cleanup	Force Unregistration Request. Instruct the RAS manager to cleanup a UID that had just been registered prior to a system restart.	UID	0
2011	IP FURQ-Aged H323 ext	Force Unregistration Request. Unregister H.323 user that aged out. Endpoint's time-to-live (TTL) expired without receiving a KeepAlive RRQ.	H.323 UID	IP address
2012	IP FURQ-Aged Endpt-no KA	Force Unregistration Request. Unregister endpoint that has aged out. Endpoint's time to live (TTL) expired without receiving a keep-alive RRQ.	UID	IP address
2013	IP FURQ-SigGrp removed	Force Unregistration Request. An H.323 Gateway (administered as a signaling group) is registered. Unregister the Gateway before removing the administered signaling group.	Gateway UID	IP address
2014	IP FURQ-Siggrp changed	Force Unregistration Request. Changes have been made to a registered H.323 Gateway (administered as a signaling group). Unregister the Gateway.	Signaling group	IP address
2015	IP FURQ-Ext removed	Force Unregistration Request. Unregister user because the extension has been removed.	IP User-UID	0
2016	IP FURQ-IPusr is sftphone	Force Unregistration Request. A user has PSA'ed an extension that was registered as an IP endpoint.	IP User-UID	0
2017	IP FURQ-Records exhausted	Force Unregistration Request. Unregister the LAN port if there are no station user-records remaining.	IP User-UID	0

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Table 10: Denied IP events

Event Type	Event Description	Explanation	Event Data 1	Event Data 2
2018	IP FURQ-Mtc: H323/Vphone	Force Unregistration Request. Maintenance has unregistered an H.323 or IP Softphone station.	UID	0
2019	IP FURQ-Mtc: Remote Max	Force Unregistration Request. Maintenance has unregistered a Remote Max station.	UID	0
2020	IP FURQ-Mtc:RemOfc TTI	Force Unregistration Request. TTI background maintenance task has requested the removal of Remote Office LAN TTI ports.	UID	0
2074	IP RRJ-Invld sta state	The associated telephone endpoint is in-tsa state.		
2076	IP RRJ-Invld sta state	The associated telephone endpoint is disconnected (out-of-service).		
2077	IP FURQ-User dialed TSA	The associated telephone endpoint is put into “in-service/in-tsa” state.		
2078	IP RRJ-Invld sta state	The associated telephone endpoint is put into a disconnected (out-of-service) state.		
2079	IP RRJ-Shrd Ctrl OutofSrv	The associated telephone endpoint is out-of-service.		

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display failed-ip-network-region

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 390 and [test failed-ip-network-region](#) on page 462.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
display failed ip-network-region					

Output

```
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)

display fiber-link

S8700 MC

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	Feature Interaction
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 Command Parameters on page 34.			

display firmware download

S8700

display firmware download [schedule]

Use **display firmware download** to see the status of the current download schedule. Use [change firmware download](#) on page 94 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 381, [disable firmware download](#) on page 119, and [test firmware download](#) on page 464, and the MO [FW-DWNLD \(Firmware Download\)](#) on page 1034 in the Maintenance Alarms Reference, 555-245-102 for more information.

Here is an example of **display firmware download** results.

```

display firmware download                                     Page 1 of 1
                                FIRMWARE DOWNLOAD

Source Board Location: 1C02
Firmware Image File Name: usd1v22r1
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   Target   Target   Target   Target
Location Location Location Location 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.

```

Field Descriptions

Source Board Location	The CLAN board location (UUCSS) 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. This is only displayed when a download is in progress or after a download.

1 of 2

Schedule Download	This field indicates whether the download will take place immediately or at some future time. When this field is a y , Start Date/Time and Stop Date/Time indicate when the download will occur.
Remove Image File After Successful Download	This field indicates whether the firmware image file on the source board will be automatically removed following the successful download to every specified target board. If set to y and every board was successfully downloaded, the image file will be removed, and the file system on the source board will be disabled.
Start Date/Time	This field only appears if the Schedule Download field is set to 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	This field only appears if the Schedule Download field is set to 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 this field is left blank, the download will continue until completion.
Target Location	These fields contain the target board locations (UUCSS) of the boards that will receive the download file image.

2 of 2

display initcauses

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
display initcauses	print schedule	See Common Command Parameters on page 34			

Output

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

Field Descriptions

Cause	This gives the reason for the system reset, as follows: Craft Request: The reset was manually initiated using reset system. 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. Internal Request: A fault has triggered the system to automatically reset. Software Request: Software requested the system restart. Unknown: The reason for the system reset is unknown. The Software Error Log may contain more information about the restart. Bad Memory: A defective memory circuit pack generating too many errors caused a restart. 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. Maintenance Reset: This refers to resets of the SPE by maintenance in SPE Down mode in which maintenance periodically tries to awaken the SPE.
Action	The level of recovery performed by the system. Reset system 1 (Warm) Reset system 2 (Cold-2) Reset system 3 (Defaults to Reset system 4) Reset system 4 (Reload) Reset system 5 (Extended reboot)
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.

display ipserver-interface

S8700

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	Feature Interaction
display ipserver-interface	<i>n</i>	Port network 1 - 64 Example: display ipserver-interface 2			

Output

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

```
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
```


Field Descriptions

Socket Encryption	Enter y to turn socket encryption on for the S8700 media server and IPSI link. Appears on the S87090 IP Connect server.
Enable QoS	Turn on or off quality of service (QoS) from the S8700 media server to the IPSI link. y/ n Note: 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)

display media-gateway

S8300 | G700

display media-gateway [*x* | *next*]

Use **display media-gateway** to see information for a specific **G700** Media Gateway.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
display media-gateway	x	number to assign to media gateway			
	next	next available number			

See [add media-gateway](#) on page 68 for screen display and an explanation of field descriptions.

display node-names

S8700

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	Feature Interaction
display node-names	print schedule	See Common Command Parameters on page 34	init inads craft		

Output

The following example shows the output from **display node-names**.

Page 1

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. _____	____.____.____.____			

Field Descriptions (Page 1)

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.

Page 2

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NODE NAMES

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. _____	____.____.____.____

Field Descriptions (Page 2)

Name	Non-specific node name (up to 15 characters each) for CMS nodes, DCS nodes, and so forth. Valid entries are alpha-numeric and/or special characters for identification.
IP Address	IP address for the adjunct or switch. Enter 0 – 255 or leave blank.

display port

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

display port *UUCSSpp* [schedule]

Use **display port** to see a port's equipment type and identification number.

IF equipment type is...	THEN identification type is...
Station	Extension number
Data module	Extension number
Trk Gp /Mbr No	Trunk group number and member number
Modem pool	Modem pool group number
Integrated announcement	Not applicable

1 of 2

IF equipment type is...	THEN identification type is...
Tone Detector	Not applicable
Media Processor	Not applicable
TTI Port	Not applicable

2 of 2

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
display port	<i>UUCSSpp</i> <i>UUCSSppp</i>	Cabinet (<i>UU</i>), carrier (<i>C</i>), slot (<i>SS</i>), port (<i>pp</i> or <i>ppp</i>) For example, both 1a0502 and 01a05002 specify cabinet 1, carrier A, slot 5 and port 2.	init inads craft cust browse		

Output

The following example shows the output from **display port**.

display port 1c0801
PORT INFORMATION
Port: 01C08001
Equipment Type: Station
Identification: 71026

Field Descriptions

Port	Port address, reformatted to have a 2-digit cabinet and a 3-digit port.
Equipment type	Type of hardware that is physically connected to the specified port
Identification	Depending on the equipment type, the identifies an extension, a trunk group number and member number, or a modem pool number.

display signaling-group

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command displays 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	Feature Interaction
display signaling- group	xx	number of signaling group to be displayed Example: display signaling-group 4	init inads craft	none	none

The following is an example of the output of **display signaling-group**:

```
display signaling-group 4
```

Page 1 of 5

SIGNALING GROUP

```
Group Number:4Group Type:h.323Max number of NCA TSC:4
Remote Office?nMax number of CA TSC:4
Trunk Group for NCA TSC:4
Trunk Group for Channel Selection:4
Supplementary Service Protocol:a
```

```
Near-end Node Name:jb_clanFar-end Node Name:cl_dolan_c11
Near-end Listen Port:7007Far-end Listen Port:7007
Far-end Network Region:
LRQ Required?nCalls 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
```

Field Descriptions

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, the trunk group entered in this field is the one that can accept incoming calls.
Supplementary Service Protocol	This field appears only when trunk Group Type is ISDN. The letter a indicates AT&T Customer Supplementary Services, when <i>Country Code 1A</i> is selected on the DS1 screen. When the <i>Country Code</i> selected on the DS1 screen is 1B , Bellcore Supplementary Services is indicated. And when the <i>Country Code</i> selected on the DS1 screen is 1C , Nortel Proprietary Supplementary Services is indicated. The letter b indicates ISO Q SIT. The letter c indicates ETSI. The letter d indicates ECMA QSIG. The letter e allows DCS with rerouting, when <i>DCS with Rerouting</i> is y , and the <i>Used for DCS</i> field on the trunk group screen is y . The letter f indicates Feature Plus. The letter g indicates ANSI.
Near-end Node Name	The node name for the C-LAN IP interface on this switch. The node name is 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. The node name is administered on the Node Names screen.
Near-end Listen Port	A port number assigned to both near-end and far-end systems for signaling. 1720 is a recommended default. 1719 is used when <i>LRQ</i> 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?	If the far-end PBX uses a Communication Manager server, this field is n . If 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, this field is y .
RRQ Required?	This field displays y if the signaling group serves a remote office (gateway); it displays n if the signaling group serves a gatekeeper.
Calls Share IP Signaling Connection?	A value of y indicates inter-Communication Manager server connections; a value of n indicates that the local and/or remote PBX uses a non-Avaya server.
Bypass if IP Threshold Exceeded?	A value of y indicates that the system will automatically remove 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?	Allows direct audio connections between IP endpoints. A value of y saves on bandwidth resources and improves sound quality of voice over IP transmissions.
IP Audio Hairpinning?	A value of 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:	This field 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.

```

display signaling-group 4
ADMINISTERED NCA TSC ASSIGNMENT
Page 2 of 5

Service/Feature:                               As-needed Inactivity Time-out (min):

TSC Local                                     Mach.
IndexExt. EnabledEstablishedDest.DigitsAppl.ID

1: 64666Y permanent22666 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

```

display synchronization

[S8700](#) | [S8500](#) | [S8100](#)

display synchronization *cabinet#* [*schedule*]

Use **display synchronization** to see a synchronization plan. On an [S8700 IP](#), specify the cabinet number.

Use **display synchronization** to display the synchronization form, with the administered synchronization stratum and reference sources.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
display synchronization			init inads craft cust rcust bcms browse	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.	

Output

This is an example of **display synchronization 2** on an **S8700 IP**.

display synchronization 2Page 1 of 2

SYNCHRONIZATION PLAN
CABINET 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

display synchronization

Page 1 of 10

SYNCHRONIZATION PLAN

SYNCHRONIZATION SOURCE (circuit pack location)

Stratum: 4

Primary: 02A08

Secondary:

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

Field Descriptions

Stratum	Specifies the synchronization stratum used. S8700 IP: Value is 4 S8700 MC: Values are 3 and 4
Primary	Designates the first choice system synchronization source. A blank entry means there is 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	If the circuit pack has slip detection enabled, this field shows y .

display system-parameters duplication

S8700

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 the PNC Duplication field 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	Feature Interaction
display system-parameters duplication			init inads craft		

Output

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
```

Field Descriptions

Enable Operation of PNC Duplication	Status of PNC duplication: y is enabled; n is disabled. Appears when PNC Duplication is y on the System Parameters Customer Options screen.

Enable Operation of IPSI Duplication	Status of IPSI duplication: y is enabled; n is disabled

display system-parameters ipserver-interface

S8700

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	Feature Interaction
display system-parameters ipserver-interface	print schedule	See Common Command Parameters on page 34.	init inads craft dadmin customer super-user		

Output

```
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
```

display system-parameters maintenance

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
display system-parameters maintenance	schedule	See Common Command Parameters on page 34.	craft inads init super-user logins with Maintain Switch Circuit Packs permissions enabled		

Output for display system-parameters maintenance, page 1

A series of maintenance tests and operations runs automatically every day according to the schedule and settings specified in the following fields.

This is an example of **display system-parameters maintenance**, page 1.

```

display 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

                                MAINTENANCE-RELATED SYSTEM PARAMETERS

SCHEDULED MAINTENANCE
    Start Time: 01 : 00
    Stop Time: 06 : 00
    Daily Maintenance: daily
    Save Translation: daily
    Command Time-out (hours): 2
    Control Channel Interchange: no
    System Clocks/IPSI Interchange: no

```

Field descriptions for page 1

Defaults for data entry fields are listed in parentheses.

Operations support parameters

OPERATIONS SUPPORT PARAMETERS

Product Identification	10-digit number (starting with 1) that identifies the switch to an Operations Support System (OSS), for example, INADS.
First OSS Telephone Number	First telephone number that the switch dials to report alarms; must be obtained from the National Customer Support Center (NCSC) or the TSC. (# and * are not allowed in the telephone number.)
Abbrev Alarm Report	Enables the Abbreviated Alarm Report feature for the first OSS. (yes)
Second OSS Telephone Number	Second telephone number that the switch dials to report alarms; must be obtained from the National Customer Support Center (NCSC) or the TSC. (# and * are not allowed in the telephone number.)
Abbrev Alarm Report	Enables the Abbreviated Alarm Report feature for the second OSS. (no)

Alarm Origination to OSS Numbers (previously Alarm Origination Activated)	One of four options for alarm origination (neither): • If both, all Major and Minor alarms result in an automatic call to both OSS telephone numbers. Both OSS telephone numbers must be administered. • If first-only, all Major and Minor alarms result in an automatic call to the first OSS number only. The switch does not call the second OSS telephone number even if the number is administered. The first OSS telephone number must be administered. • If neither, alarm origination does not take place. Warning alarms are not reported to either numbers. • If second-as-backup, all Major and Minor alarms result in an automatic call to the first OSS telephone number. If calling the first OSS telephone number fails four attempts, the switch starts to call the second OSS telephone number as a backup until calling the first OSS telephone number becomes successful. Both OSS telephone numbers must be administered. If Alarm Origination is deactivated, both Cleared Alarm Notification and Restart Notification are disabled, even though they may still be activated in the administration.
Cleared Alarm Notification	Enables the switch to originate a call to the OSS and send an alarm resolution message whenever all previously-reported Major and Minor alarms are resolved. Alarm Origination must be activated in order for Cleared Alarm Notification to work. (no)
Restart Notification	Enables the switch to originate a call to the OSS and report any system restarts caused by problems with the switch.
Suspension Threshold	The threshold for suspending Cleared Alarm Notification (1-15). Some problems may cause alarms to be generated and then resolved repeatedly. To detect these problems (by not sending additional Cleared Alarm notifications to indicate a problem-free system), the switch suspends Cleared Alarm Notification when it has reported this administrable number of Cleared Alarm notifications in a 24-hour period. A suspended Cleared Alarm Notification is only enabled again with a successfully completed "logoff" command, a system reset, or when the threshold is changed. This field is irrelevant if Cleared Alarm Notification or Alarm Origination is disabled.
Test Remote Access Port	Specifies whether testing of the remote access port on the SYSAM circuit pack is enabled. This field should read yes whenever there is an INADS line connected to the switch and there is a maintenance contract in effect so that alarm origination capability is maintained.
CPE Alarm Activation Level	Indicates the minimum level (Major, Minor or Warning) at which the Customer-Provided Equipment (CPE) alarm is activated. If the level is none, the CPE does is not activated for any alarm. (none) The CPE alarm is always activated when the switch goes into Emergency Transfer, regardless of the CPE Alarm Activation Level setting.

Customer Access to INADS Port	Provides the capability to prohibit access to system administration and maintenance interface, via the INADS port when using customer login ID's. This field can only be activated by Avaya services through system-parameters maintenance administration.(no)
Repeat Dial Interval (MMS)	Indicates the number of minutes that the system must wait before attempting another call origination to an OSS. This timer is triggered by the lack of a far-end acknowledgment. (7)

Scheduled maintenance

A series of maintenance tests and operations runs automatically every day according to the schedule and settings specified in the following fields.

SCHEDULED MAINTENANCE

Start Time	The hour and minute (24-hour notation) at which daily scheduled maintenance begins. (22:00)
Stop Time	Time (hour and minute) when scheduled daily maintenance stops. If any daily maintenance operations are not completed by this time, the system notes where in the sequence it stopped and perform those operations during the next scheduled daily maintenance.
Daily Maintenance	Display-only, represents the series of tests that are always run by maintenance software as part of daily maintenance.
Save Translation	Indicates the days that translation data in memory is automatically saved to the Mass Storage System disk and/or tape devices during scheduled maintenance. The save operation is first made to disk, followed by a disk backup to tape. On systems with duplicated SPEs, translation data is saved on both SPEs. Valid entries are daily , days of the week, or no . n specifies that no automatic saves are to be executed. (daily)
Update LSPs When Saving Translations	
Command Time-out (hours)	
Control Channel Interchange	Each port network has a pair of TDM busses called A and B, each of which has a set of time slots dedicated to use by the control channel. At any one time, the control channel in each PN is carried on only one of the two busses. This field indicates on which days the control channel in each port network will be switched from one of the paired TDM busses to the other. Valid entries are daily , days of the week, or no . "No" specifies that no interchange be executed. (no)

System Clocks/IPSI Interchange S8700	S8700 For high-reliability configurations, there are duplicate IPSIs on IPSI-controlled port networks. For critical-reliability configurations, there are both duplicate Tone-Clock circuit packs on non-IPSI controlled port networks and duplicate IPSIs on IPSI-controlled port networks. When this option 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. (no) This field does not apply to duplex-reliability configurations since the IPSIs are not duplicated in the port networks.
EXP-LINK Interchange	This field indicates whether or not the expansion links between port-networks are interchanged as part of scheduled maintenance. The value "daily" means that EXP-LINK interchange occurs automatically everyday. The value "no" means that EXP-LINK interchange is not done automatically as part of scheduled maintenance. Values represented by the days of the week mean that EXP-LINK interchange occurs automatically on the specified day only. Since EXP-LINK interchange only applies to duplicated systems, simplex systems do not display this field. (no)

Output (Page 2)

display 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:	

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.

1 of 3

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 8 ports on each TN744 or TN2182 circuit pack. To alarm the first occurrence of a CLSFY-PT being taken out of service, set this field to the total number of CLSFY-PTs. If there are no TN744 or TN2182 circuit packs in the system, leave this field blank.
MMIs	Minimum number of Multimedia Interface (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 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	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.

TERMINATING TRUNK TRANSMISSION TEST (Extension)

Test Type 100, Test Type 102, Test Type 105	An extension assigned to receive tie-trunk calls from other switches with test line origination capability. The system responds by sending a sequence of test tones. Test Type 100 tests far-end to near-end loss and C-message by sending: • 5.5 seconds of 1004-Hz tone at 0dB • Quiet until disconnect; disconnect is forced after 1 minute

ISDN MAINTENANCE

ISDN-PRI Test Call Extension	The extension used by a far-end ISDN node to place a call to the system to test the ISDN-PRI trunks between the far end and the system.

DS1 & MF MAINTENANCE

2 of 3

DSO Loop-Around Test Call Extension	Extension number for the test call. This test extension number is used to establish a loop-around connection on the selected trunk. The DSO Loop-Around Test Call feature is used primarily for testing DSO channels associated with non-ISDN-PRI trunks. The loop-around is activated by dialing the test extension number. Multiple DSO Loop-Around connections can be set up by placing multiple calls to the loop-around extension. The DSO Loop Around feature provides a loop around connection for incoming non-ISDN DS1 trunk data calls. This feature is similar to the far-end loop around connection provided for the ISDN Test Call feature. This DSO loop around is provided primarily to allow a network service provider to perform facility testing at the DSO level before video teleconferencing terminals are installed at the PBX. The feature is activated on a call-by-call basis by dialing a test call extension specified on the second page of the System Parameters Maintenance form. No special hardware is required. When the test call extension is received by the PBX, a non-inverting, 64 kbps connection is set up on the PBX's Time Division Multiplexed bus. More than one loop around call can be active at the same time. For calls routed over the public network using the ACCUNET Switched Digital Service (SDS) or Software Defined Data Network (SDDN), the data transmission rate is 56 Kbps, since robbed bit signaling is used. For calls established over a private network using common channel signaling, the full 64 kbps data rate is available. When the incoming trunk group is used only for data calls (SDS), the Communications Type on the associated Trunk Group form should be set to "data." When the incoming trunk group is used for robbed bit alternate voice and/or data (SDN/SDDN), the Communications Type on the Trunk Group form should be set to rbavd (robbed bit alternate voice data). For private network trunks using common channel signaling, the Communications Type on the associated Trunk Group form can be set to "avd."
MF Test Call Extension	Extension number for the multifrequency test call.
SPE Optional Boards	These fields indicate whether a Disk circuit pack is present in the system, and which Packet Interface slots are administered. If a Packet Interface circuit pack is physically present, the corresponding Packet Interface field is set to y when the system boots, and no change to that field is allowed. If the system is equipped with duplicated SPEs, a Packet Interface field is set to y when either SPE carrier contains a Packet Interface circuit pack in the corresponding position. If a Packet Interface circuit pack is not present, then the value for the Packet Interface field is read from translation data stored on disk or tape. If the field is set to n, a Packet Interface circuit pack may be administered by changing the corresponding Packet Interface field to y.

3 of 3

Output (Page 3)

These are examples of **display system-parameters maintenance**, page 3.

```
display system-parameters maintenance                                Page 3 of 3

                                MAINTENANCE-RELATED SYSTEM PARAMETERS

MAINTENANCE SAVE TRANSLATION CORRUPTION AUDIT
      Enable Translation Audit? y
      Display Warning When Detected? n
      Alarm When Detected? n
      Block Save Translation When Detected? n
```

```
display system-parameters maintenance                                Page 3 of 3
                                MAINTENANCE-RELATED SYSTEM PARAMETERS

                                Modem Connection: external
```

Maintenance Save Translation Corruption Audit

Check to make sure the translation audit parameters are set at their defaults (y, n, n, n) unless translation corruption is currently being diagnosed. While at default settings, a translation audit is performed before every **save translation** operation performed automatically by system maintenance. Automatic **save translation** operations are performed according to the schedule specified by the “Save Translation” field value on page 1 of this Maintenance-Related System Parameters screen. If a translation audit detects corruption, then a message is logged in the software error log. Use **display software** to view the software error log.

Enable Translation Audit	Indicates whether a translation audit is performed prior to a save translation operation. A translation audit is used to detect corruption in the translation data. y applies when Save Translation on the first page of this screen is y .
Display Warning When Detected	Indicates whether a warning appears on the SAT interface if translation corruption is detected by a translation audit. Default is n .
Alarm When Detected	Indicates whether an alarm is issued if translation corruption is detected by a translation audit. Default is n .
Block Save Translation When Detected	Indicates whether all “save translation” operations will be blocked if corruption is detected. Default is n .

display test-schedule

S8700

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 32.

Output

The following is the output from **display test-schedule n**.

Page 1 of 1

ATMS TRUNK TEST SCHEDULE

Schedule No: ____
 Schedule Time: __:____
 Schedule Date: __/__/____
 OTL Throttle: ____

Schedule Test Days
 SU: __ TU: __ TH: __ SA: __
 MO: __ WE: __ FR: __

Interval: ____
 Duration: ____
 Test Type: ____

Trk	Bgn	End	Trk	Bgn	End	Trk	Bgn	End	Trk	Bgn	End	Trk	Bgn	End
Grp	Mem	Mem	Grp	Mem	Mem	Grp	Mem	Mem	Grp	Mem	Mem	Grp	Mem	Mem

Field Descriptions

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.

1 of 2

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.
Test Type	One of the following types of test to be performed on the trunk group/members in this schedule: • full runs the most comprehensive test and collects every associated measurement for each TTL type. • supv performs a supervision test and only confirms the presence of the test set at the far end. No measurements are taken for this test. • no-st runs the “full” test, but skips any self-test sequences. This saves about 20 seconds on the type 105 test and does not have any effect on type 100 or 102 tests. • no-rl runs the “full” test, but skips any return-loss sequences. This saves about 20 seconds on the type 105 test and does not have any effect on type 100 or 102 tests. • no-st/rl runs the “full” test, but skips every self-test and return-loss sequence. This saves about 40 seconds on the type 105 test and does not have any effect on type 100 or 102 tests.
Duration	The maximum number of hours (1 to 24) a schedule can remain active. Schedules continue to run until every trunk group/member for that particular schedule is tested or until the scheduled duration elapses. If the duration elapses before every trunk group/member can be tested, the schedule stops.
Trk Trp	The trunk-group numbers to be tested when this schedule runs. There is no limit to the number of times that a trunk group can appear on any particular schedule, or to the number of different schedules in which a trunk group can appear. Default is blank.
Bgn Mbr	The beginning member number of the trunk group to be tested; default is 1 .
End Mbr	The ending member number of the trunk group to be tested. This value must be greater than or equal to the value of the beginning member field.

2 of 2

display time

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
display time	print schedule	See Common Command Parameters on page 34.			

Output

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
```

Field descriptions

Day of the Week	The day of the week that the system has stored.
Day of the Month	The numerical day of the month.
Month	The month of the year stored by the system.
Year	The current year stored by the system.
Hour	The hour of the current day.
Minute	The number of minutes into the hour.
Second	The number of seconds into the minute stored by the system.

enable administered-connection

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

enable administered-connection [*adm-conn#* | **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**. These commands can be useful in isolating results of certain maintenance processes by preventing interference from others.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
enable administered-connection	adm-conn#	The number (1-128) of connection as assigned during administration			
	all	Enable every administered connection in the system			

enable/disable announcement-board

[S8700](#) | [S8300](#) | [G700](#)

enable/disable 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's Guide for Avaya Communication Manager, 555-233-506*.

enable filesystem

[S8700](#)

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.

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	Feature Interaction
enable filesystem	UUCSS PPCSS filesystem size actual-size	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		

S8700

enable suspend-alm-orig

S8100

This command enables Suspend Alarm Origination for a board (including all ports and endpoints on the board) or for a port (including all endpoints on the port) for both on- and off-board alarms or for off-board alarms only. Many control circuit packs do not have a board location, so this command cannot support all circuit packs. Each enable command becomes a new entry or replaces an existing entry in the Suspend Alarm Origination table. A new entry that matches both the physical location and off-only, on-, and off-board specifications of an active entry replaces the active entry in the Suspend Alarm Origination table.

On the command line, specify a time-out duration of 1 - 72 hours. The **off-board-only** is optional; if the keyword is not specified, the entry suspends Alarm Origination for both on-and off-board alarms.

This command may be particularly useful for:

- Improved control over customer requests. For example, to suspend off-board DS1 alarms temporarily for customers that periodically disconnect DS1 trunks for testing or other business-related purposes.
- Improved control over external (non-Avaya) problems such as suspending off-board DS1 alarms before a customer resolves facility problems (for example, a T1 trunk that has developed an off-board condition).

- Improved control over internal (Avaya) problems that cannot be resolved immediately. For example, the command can be used to suspend Alarm Origination for a bad circuit pack detected late Friday night and dispatch personnel cannot respond until Monday.

NOTE:

Also see other Suspend Alarm Origination related commands, including **disable suspend-alm-orig** and **list suspend-alm-orig**.

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
enable suspend- alm- orig	board/port location off-board-only expires-in-hrs	Physical location of the hardware optional; if not specified, both on-and off-board alarms suspended No. of hours (1-72) Examples: enable suspend-alm-orig 1B03 expires-in-hrs 3 enable suspend-alm-orig 1B0701 expires-in-hrs 72 enable suspend-alm-orig 1B07 off-board-only expires-in-hrs 24	init inads craft cust rcust	Both on- and off-board alarms if the off-board-only keyword is not specified	none

enable synchronization-switch

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

enable synchronization-switch

[all | cabinet *cab#*] parameters are available on [S8700 IP](#)

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 1803 in the Maintenance Alarms Reference, 555-245-102.

S8700 IP: Specify the cabinet, only if Internet Protocol (IP) PNC on the **display system-parameters customer-options** screen is y.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
enable synchronization-switch			init inads craft		

enable test-number

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
enable test-number	<i>test#</i>	The number of the test to be re-enabled Descriptions of each test appear under the relevant MO in Maintenance Alarms Reference, 555-245-102 Example: enable test-number 102			

get boot-image

[S8700](#)

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

Output

```
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
```

Field Descriptions

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 305.
Reboot Image	y indicates that this image becomes active after a system reset. n indicates that this image becomes inactive after a system reset.

get ethernet-options

S8700

get ethernet-options *location*

Use **get ethernet-options** to generate a report about a specific Ethernet connection.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
get ethernet-options	<i>location</i>	The physical location of the circuit pack (<i>UUCSS</i>)	init inads craft cust		

Output

```
display ethernet-options 1C07
```

	Administered Value	Actual Value
Auto Negotiation:	Yes	Yes
Speed:	N/A	10Mbps
Duplex:	N/A	Full
Link Integrity:		Active

Field Descriptions

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

get power-shutdown

get power-shutdown [*cabinet* | *carrier*]

Use **get power-shutdown** to see the cause of the last shutdown of a power supply in an individual **G650** or a **G650** stack. Use **get power-shutdown** only on **G650** carriers or a **G650** 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	Default	Feature Interaction
get power-shutdown	<i>cabinet 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		

Output

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

Field descriptions

Slot	Power supply cabinet/carrier/slot
Cause	Cause of last shutdown.

go shell

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

go shell

This command provides 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.

Output

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>
```

list atm pnc

[S8700](#)

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	Feature Interaction
list atm pnc	print schedule	See Common Command Parameters on page 34.	init inads craft		

Output

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

list atm pnc			Page 1
PNC	A-PNC	ATM 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			

list cabinet

S8700

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. Use this command when the port network number is needed for another command entry and only the cabinet number is known.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list cabinet	schedule	See Common Command Parameters on page 34.			

Output

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          1  1  PN 01  PN 01  PN 01  PN 01  SN 01
2  EPN 5-car                1          1  1  PN 02  PN 02  PN 02  PN 02  PN 02
3  EPN 5-car                1          1  1  PN 03  PN 03  PN 03  PN 03  SN 01
4  EPN 5-car                1          1  1  PN 04  PN 04  PN 04  PN 04  PN 04
5  EPN 5-car                1          1  1  PN 05  PN 05  PN 05  PN 05  PN 05
6  EPN 5-car                1          1  1  PN 06  PN 06  PN 06  PN 06  PN 06
7  EPN 5-car                1          1  1  PN 07  PN 07  PN 07  PN 07  PN 07
8  EPN 5-car                1          1  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**.

```
list cabinet

                                CABINET REPORT

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

Field Descriptions

Number	The administered number of the cabinet.
Type	The type of cabinet.
Layout	The layout of the cabinet. S8700 IP: rmc stands for rack mounted cabinet.
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 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.
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 , carrier E is not used.

list configuration

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

list configuration *hardware-group* [print | schedule]

NOTE:

For information on **list configuration software-version**, see [list configuration software-version](#) on page 206.

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.		
	carrier c	Displays every circuit pack and assigned port on a specified carrier.		
	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.		
	trunks	Displays every circuit pack that can be used for administering trunks. Every assigned port appears.		
	print schedule	See Common Command Parameters on page 34. Examples: list configuration carrier 2c schedule list configuration port-network 5 list configuration stations print		

Output

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

list configuration all				Page 1											
SYSTEM CONFIGURATION															
Board Number	Board Type	Code	Vintage	Assigned Ports											
				u=unassigned	t=tti	p=psa									
01A01	CALL CLASSIFIER	TN744E	000002	01	02	03	04	05	06	07	08				
01A02	IP SERVER INTFC	TN2312AP	HW32 FW042	01	02	03	04	05	06	07	08				
01A05	IP MEDIA PROCESSOR	TN2302AP	HW03 FW034	01	02	03	04	05	06	07	08				
01A06	CONTROL - LAN	TN799C	000003	u	u	u	u	u	u	u	u	u	u	u	u
				u	u	u	u	u	u	u	u	u	u	u	u
				17											
01A08	CO TRUNK	TN747B	000026	u	u	u	u	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
				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	u	u	u	u	u	u	u	u	u	u	u

Field Descriptions

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
Assigned Ports	Each port on the circuit pack is represented by a position corresponding to its circuit number in ascending order from left to right. Two rows appear for circuit packs with more than 8 ports. The assigned ports for list configuration ds1 do not appear. Identifies the current status of the port that corresponds to the position: 01 - 16 - the circuit number of an assigned port u - the port exists but is unassigned. t - the port is not assigned and is supported by Terminal Translation Initialization. Activate the port with the TTI association sequence. mj - the port is assigned as an external device major (mj) alarm port mn - the port is assigned as an external device minor (mn) alarm port 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.

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		unknown
01C18	TN464F	000002	isdn-pri		none

Field Descriptions

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

S8300 | G700

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	Feature Interaction
list configuration media-gateway	x	media gateway number			

List configuration media-gateway screen

list configuration media-gateway x

SYSTEM CONFIGURATION

Module Number	Module Type	Code	Vintage	Assigned Ports u=unassigned t=tti p=psa							
002V1	ANA MM	MM711	HW00 FW000	u	u	u	u	u	u	u	u
002V2	DS1 MM	MM710	HW00 FW000	u	u	u	u	u	u	u	u
				u	u	u	u	u	u	u	u
				u	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	u
				u	u	u	u	u	u	u	u
002V9	ANN VMM			u	u	u	u	u	u	u	u
				u	u	u	u	u	u	u	u

Field descriptions for list configuration media-gateway x

Module Number	GGGVMM, where GGG is the G700 number and VM is the module number (V1-V4) or the virtual slots V8 or V9.
Module Type	Type of Avaya Media Module in the slot: ■ V1-V4 allow: - ANA MM (analog) - bri - dcp - icc (S8300 and LSPs, both processor-type Media Modules) - VOIP MM (voip) - ds1 (also referred to as T1/E1) ■ V8 accepts only messaging-analog ■ V9 accepts only ANN VMM, gateway-announcements If an administered Media Module is in conflict with the inserted Media Module, a pound sign (#) appears to the left of the 'Module Type' field on the Media Gateway screen.
Code	MM720 (BRI) MM712 (DCP) MM711 (Analog) MM710 (T1/E1) MM760 (VoIP) S8300 (ICC)
Vintage	Module Vintage are displayed for both the hardware and firmware. 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

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	Feature Interaction
list configuration power-supply	<i>cabinet</i> <i>carrier</i>	cabinet location carrier location	init super-user inads craft dadmin any login with Switch Circuit Pack Maintenance permissions		

Output

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

Field descriptions

Location	The power supply cabinet/carrier/slot
Power Supply Serial Number	The serial number of the power supply

1 of 2

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)

2 of 2

list configuration software-version

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

list configuration software-version [**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	Default	Feature Interaction
list configuration software- version	memory- resident	Specifies display of RAM-resident files.	init		
	print	See Common Command Parameters on page 34.	inads		
	schedule		craft		

Output

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: R011xL00.0.059.0

TRANSLATION DATA
Memory Resident: 11:12 am  FRI FEB 22, 2002
Disk Resident: 11:12 am  FRI FEB 22, 2002
Disk Second Copy: good
```

Field Descriptions

Software Version Section

This section displays 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 appears blank if the disk is not installed.

Translation Data Section

This section displays 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. A save translation updates this date. If “Date invalid” appears, 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 appears 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 cti-link

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

The list cti-link command lists the administered CTI links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list cti-link	link number (1-8) count	Max # of links to list	init inads craft cust	None	None

Output

The following display shows a typical result for **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

Field Descriptions

Link	Displays the link number.
Ext	Displays the extension associated with the CTI link (the extension is required but not used)
Type	Displays the link type: ASAI-IP, ADJ-IP, ASAI, ADJLK
Port	Displays the port number
Name	Displays the node name for this link.
COR	Displays the class of restriction number.

list directory

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
list directory	PPCSS [full path]	board location file/directory name			

Output

list directory board 1C12					Page 1
LIST DIRECTORY					
Board Location	File/Directory Name	Creation Date	Time	Size	Kb
01C12	F: fwdling464gv01	2000/01/01	00:00:00	367	
01C13	F: fwdling2302av01	2000/02/29	23:59:59	493	
D = Directory F = File					

list disabled-MOs

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
list disabled-mos	print schedule	See Common Command Parameters on page 34.			

list external-device alarm

[S8700](#) | [S8500](#) | [S8100](#)

For detailed information about this command, refer to Chapter 2 of *Maintenance for Avaya Communication Manager and DEFINITY® Server CSI* (555-233-119).

list fiber-link

S8700 MC

list fiber-link [print | schedule]

Use **list fiber-link** to list every fiber link in the system. The list is a summary of data entered on the fiber link screen (**add**, **display**, **change**, or **remove fiber-link**).

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list fiber-link	print schedule	See Common Command Parameters on page 34.			

Output

S8700 MC: 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 LINK #	- - - TYPE	ENDPOINT 1- A-PNC LOC	- B-PNC LOC	- - - TYPE	ENDPOINT 1- A-PNC LOC	- B-PNC LOC	DS1 CONV
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

Field Descriptions

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.

list history

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 Command Parameters on page 34. Examples: list history list history print list history schedule	init inads craft cust browse rms		See below

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.

Output

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	

Field Descriptions

Date	The date list history was issued (mm/dd).
Time	The time list history was issued (hh:mm).
Port	The port type to which the user was connected when list history was issued. - TTI, PSA, CTA and ACTR moves are recorded when the “CTA/PSA/TTI Transactions in History Log” field is y on the Feature-Related System Parameters screen. These transactions appear as two separate records: one recording the moved-from port, and the other one recording the moved-to port. - IP station registrations and unregistrations are recorded when the “Record IP Registrations in History Log” field is y on the Feature-Related System Parameters screen.
Login	User login
Actn	The action part of the command, specifying the operation to be performed. This field is truncated after 4 characters to allow enough space for objects and qualifiers and to uniquely identify each action.
Object	The qualifier (12 characters) specifying the object of the command. Where the object is multiple words in length, only the first word appears in the object field; every succeeding word is treated as a qualifier.
Qualifier	One or more qualifiers describing the characteristics of the action/object pair. This field is truncated after 31 characters to keep information for a command on a single line.

list ip-route

S8700

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	Feature Interaction
list ip-route	board <i>UUCss</i>	Board location Example: list ip-route board 01A03	init inads craft		

Output

The following example shows the output from **list ip-route**.

list ip-route					
IP ROUTING					
Route Number	Destination Node	Gateway/ Subnet Mask	C-LAN Port Network	Metric/ Bits	Accepted by C-LAN
xxx	xxxxxxxxxxxxxxxx	xxxxxxx xxx.xxx.xxx.xxx	xxxxxxx	0 24	accepted
xxx	xxxxxxxxxxxxxxxx	xxxxxxx xxx.xxx.xxx.xxx	xxxxxxx	0 24	pending
xxx	xxxxxxxxxxxxxxxx	xxxxxxx xxx.xxx.xxx.xxx	xxxxxxx	1 24	rejected

Field Descriptions

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.
C-LAN Port	Indicates the CLAN port location that provides the interface for the route.

1 of 2

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.
Network Bits	
Accepted by CLAN	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: • 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 accepted or rejected 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

list ipserver-interface

S8700 | G650

list ipserver-interface [schedule]

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

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list ipserver-interface	schedule	See Common Command Parameters on page 34.	init super-user inads craft dadmin switch circuit pack maintenance permissions		

Output

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

```
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	State Of Health C P E G	
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	

Field Descriptions

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

list isdn-testcall

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
list isdn-testcall	print schedule	See Common Command Parameters on page 34.			

Output

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

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.

list marked-ports

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
list marked-ports	print schedule	See Common Command Parameters on page 34.			

Output

list marked-ports	
MARKED-PORT INFORMATION	
Port	Board-Type
1C0101	DIG-BD
1C0102	DIG-BD

Field Descriptions

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](#) | [S8500](#) | [S8100](#)

Use list measurements to get system performance measurements.

Action/Object	Qualifier	Qualifier Description	Login
list measurements	log	Detailed report generated	init
	summary	Summary report generated	inads
	aca	See detailed descriptions below.	craft
	clan ethernet		cust
	clan ppp		rcust
	clan sockets		browse
	ds1_location		nms
	ip codec		bcms
	ip-signaling group		

list measurements aca

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

For more information about using ACA refer to “Automatic Circuit Assurance” in *Administrator’s Guide for Avaya Communication Manager (555-230-506)*.

list measurements clan ethernet

S8700

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 displays in the field. 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	<i>UUCss</i> print schedule	Cabinet-carrier-slot address of the CLAN circuit pack See Common Command Parameters on page 34. Examples: list measurements clan ethernet 1A05 list measurements clan ethernet 1A05 print	init inads craft cust	

Output

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	

Field Descriptions

Date	The date that the data was collected.
Time	The current 15-minute interval in which the action was performed
CRC Check	The error count for CRC errors
Total	The total value of the counter on the board The counter value can be up to 11 digits long because of the 32-bit counter on the board. After an N/A occurs, the delta equals the total. Bussing out or releasing a board or a port, using reset board , and reseating the board all clear the firmware counters.
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

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 displays in the field. 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	primary
	UUCsspp	Cabinet-carrier-slot port address of the CLAN circuit pack	inads	
	print schedule	See Common Command Parameters on page 34. Example: list measurements clan ppp 1C1001	craft cust	

Output

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

Field Descriptions

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](#) | [S8500](#) | [S8300](#) | [S8100](#)

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.			
	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.			

Output

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)

Meas Hour	Board	Region	Socket Usage (Erl)	Socket Peg	Socket Denial Peg	% Denials	% Time 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

Field Descriptions

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)

Meas Hour	Board	Region	Socket Usage (Erl)	Socket Peg	Socket Denial Peg	% Denials	% Time ASB
0800	01A03	1	112.0	0	0	0.00	0.00
2300	02A10	1	109.0	0	0	0.00	0.00
1000	13A05	2	83.0	0	0	0.00	0.00
2300	26A08	2	82.0	0	0	0.00	0.00
2000	32A01	3	122.7	15	0	0.00	0.00
700	64A08	3	164.5	0	0	0.00	0.00

The reports for **summary today-peak** and **summary last-hour** are similar to the previous report.

The following example shows **list measurements clan sockets detail yesterday-peak** report – Page 1.

```
list measurements clan sockets detail yesterday-peak 32a10
```

Switch Name:				Date: 9:30 am MON AUG 12, 2002			
CLAN SOCKETS DETAIL REPORT (Yesterday-Peak Hour)							
Meas			Socket		Socket		
Hour	Board	Region	Usage	Socket	Denial	%	% Time
			(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

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.

Action/Object	Qualifier	Qualifier Description	Login	Default
list measurements ds1	log	Detailed report generated	init	
	summary	Summary report generated	inads	
list measurements dis1-facility	UUCSS	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	craft	
		See Common Command Parameters on page 34.	cust	
	print	Examples:	rcust	
	schedule	list measurements ds1 log 2a18	browse	
		list measurements ds1 summary	nms	
		list measurements ds1-log 2e01a	bcms	
		list measurements ds1-fac summary		
		2e01d schedule		

Output 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
```


Field descriptions for list measurements ds1-summary

The following field descriptions pertain to the summary reports accessed by **list measurements ds1 summary** and **list measurements ds1-facility summary**.

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)
Current Interval Count	The error count for the current (incomplete) 15-minute interval for each of the four error categories. (0 - 900 or N/A if data for the 15-minute interval is invalid)
Category	The categories correspond to measurement error counters: • Errored Seconds: the value of the errored seconds counter for the specified 15-minute interval (0 - 900 or N/A if data for the 15-minute interval is invalid). • Bursty Errored Seconds: the value of the bursty errored seconds counter for the specified 15-minute interval (0 - 900 or N/A if data for the 15-minute interval is invalid). • Severely Errored Seconds: the value of the severely errored seconds counter for the specified 15-minute interval (0 - 900 or N/A if data for the 15-minute interval is invalid). • Unavailable/Failed Seconds: the value of the failed seconds counter for the specified 15-minute interval (0 - 900 or N/A if data for the 15-minute interval is invalid). • Controlled Slip Seconds • Loss of Frame Count:

list measurements ip codec

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
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.			

Output

The following example shows the IP Codec Hourly Output For Region 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

Field Descriptions

Meas Hour	The hour the measurement was taken. Switches in multiple time zones are treated as in the current MMI reports. We do not assume that the customer has made any correlation between LAN regions and time zones. Range: 0000 – 2300.
Region	The network region that the IP Media Processors and Medpros for this measurement are in.
DSP Rscs	Total IP codec resources (voice channels) in the region. (22 or 31) * # Medpro + 64 * #IP Media Processors. The 22 or 31 multiplier for Medpro depends on admin of codec preferences. For R10, a G711 call takes 1 resource, while a G723/729 call or a Fax relay call takes 2 resources.
G.711 Usage (ERL)	Usage in Erlangs of G.711 codecs during the measurement interval. Includes time that the voice channels are on a call. Usage shall be measured from the time the voice channel is allocated until it is released. Calculated by: (Total Call Seconds) / 3600 where Total Call Seconds is a sum of the following: total time (in seconds) that a G.711 resource on a Medpro is in use total time (in seconds) that a G.711 resource on an IP Media Processor is in use
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 .

1 of 2

G.723/9 Usage (ERL) Usage in Erlangs of G.723 or G.729 codecs during the measurement interval. Includes time that the voice channels are on a call. Usage shall be measured from the time the voice channel is allocated until it is released. Calculated by:

(Total Call Seconds) / 3600 where Total Call Seconds is a sum of the following:

total time (in seconds) that a G.723 or G.729 resource on a Medpro is in use
twice the total time (in seconds) that a G.723 or G.729 resource on an IP Media Processor is in use

G.723/9 In Reg peg	Total number of times an IP media processor port in the region was allocated to a G.723 or G.729 call.
G.723/9 Out of Reg peg	The total number of times an IP media processor port was needed in the region for a G.723 or G.729 call, but was successfully allocated to a resource in another region. Out of Region does not include denials. If "Network regions are interconnected" is n , Out of Region is always 0 .

2 of 2

The following example shows the Measurements IP CODEC yesterday-peak – Page 1.

```
list measurements ip codec summary yesterday-peak    Page    1
Switch Name:                                         Date:  5:27 pm  WED MAR 26, 2002

      IP CODEC RESOURCE SUMMARY REPORT

                G711                                G723/9
-----
Meas  DSP  Usage  In Reg  Out of  Usage  In Reg  Out of
Hour Region Rscs  (Erl)  Reg peg  (Erl)  peg    Reg peg
0400  1    xxxx  xxxx.x  xxxxx  xxxxx  xxxx.x  xxxxx  xxxxx
0300  2    xxxx  xxxx.x  xxxxx  xxxxx  xxxx.x  xxxxx  xxxxx
0600  44   xxxx  xxxx.x  xxxxx  xxxxx  xxxx.x  xxxxx  xxxxx
```

The reports **list measurements ip codec summary today-peak** and **list measurements ip codec summary last-hour** are similar to the above report.

The following example shows the Sample IP Codec detail yesterday-peak Output for Region 4.

```
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
-----
Meas  DSP  Usage  In Reg  Out of  Usage  In Reg  Out of
Hour Region Rscs  (Erl)  Reg peg  (Erl)  peg    Reg peg
0400  4    xxxx  xxxx.x  xxxxx  xxxxx  xxxx.x  xxxxx  xxxxx
```

list measurements ip dsp-resource

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

list measurements ip dsp-resource *qualifier*

Supports IP media processing DSP resource measurements. The **list measurements ip dsp-resource** command works on IP Media Processor and Medpro.

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	Feature Interaction
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.			

Output

The following example shows the dsp-resource Hourly Output For Region 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
```

Field Descriptions

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.
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 .

1 of 2

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	Peg	Reg Peg	Peg	Blk	of Srv	
0400	1	xxxx	xxxx.x	xxxxx	xxxxx	xx.xx	xx.xx	
0300	2	xxxx	xxxx.x	xxxxx	xxxxx	xx.xx	xx.xx	
0600	44	xxxx	xxxx.x	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.

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	Peg	Reg Peg	Peg	Blk	of Srv	
0600	4	xxxx	xxxxx	xxxxx	xxxxx	xx.xx	xx.xx	

list measurements ip-signaling-group

S8700

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	Feature Interaction
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.			

Output

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 Grp	Hour Average	Hour Packets	Hour Packets	Hour & Worst	Interval Average	Interval Packets	Interval 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 output for **list measurements ip-signaling-group last-hour**.

list measurements ip-signaling-group last-hour						Page 1 of 24		
Switch Name:			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 Grp No	Region	Hour Average Latency(ms)	Hour Packets Sent	Hour Packets % Lost	Hour & Worst Interval	Interval Average Latency(ms)	Interval Packets Sent	Interval Packets % 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**.

The **yesterday** screen has exactly 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

Switch Name:

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

Page 1 of 24

Date: 6:28 pm THU FEB 4, 1997

Sig Grp No	Region	Hour Average Latency(ms)	Hour Packets Sent	Hour Packets % Lost	Hour & Worst Interval	Interval Average Latency(ms)	Interval Packets Sent	Interval Packets % 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%

Field Descriptions

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.

1 of 2

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.)
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 media-gateway

S8300 | G700

list media-gateway

Use **list media-gateway** from the primary server to see all **G700** Media Gateways currently administered

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list media-gateway	x	number of the media gateway			
	next	next available number			
	print	See Common Command Parameters on page 34.			

Output for list media-gateway

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

list media-gateway				page 1 of x		
MEDIA-GATEWAY REPORT						
Number	Name	Serial No/ FW Ver/HW Vint	IP Address Cntl IP Addr	Type	NetRgn	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

Field Descriptions for list media-gateway

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 show system or see the sticker on the back of the unit to locate the media gateway serial number.
IP Address	The IP address of the media gateway. The IP address field is blank until the media gateway registers for the first time. Once the media gateway registers, the IP address appears, even if the media gateway becomes unregistered. That IP address changes when a media gateway with a different IP address is validly registered with the same administered identifier. The populated IP address is persistent over reboots.
Type	Type of media gateway.
NetRgn	Network region number assigned to the media gateway
Reg	y/n y means a media gateway is currently registered with the primary server.
FW Ver/ HW Vint	Firmware version and hardware vintage
Cntrl IP Addr	IP address of the CLAN or NIC

list monitored-station

S8700

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	Feature Interaction
list monitored-station	start extension count xxxx print	starting extension for the list number of stations on the list See Common Command Parameters on page 34.	init inads craft cust		

Output

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					

Field Descriptions for list monitored-stations

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

list multimedia

S8700

list multimedia [print | schedule]

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list multimedia	endpoints h.320-stations ip-stations print schedule	See Common Command Parameters on page 34.			

Output

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

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
                                Ext      Port      Registered?
                                4002      X          n
                                33564      S00032     n
                                35036      S00002     y
                                MEDIA COMPLEX
                                Ext      Port      Registered?
                                35037      S0003      n
```

list pms-down

S8700

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	Feature Interaction
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 Command Parameters on page 34			

Output

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
```

Field Descriptions

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.

list registered-ip-stations

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#) | [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	Feature Interaction
list registered-ip-stations	gatekeeper-address	the CLAN's or processor's IP address (xxx.xxx.xxx.xxx)			
	network-region <i>n</i>	the network region of the registered stations			
	product-id	the product type (x.yyy) of the registered extension			
	station-type	administered set type (xxxxxx)			

Output

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 Orig Rgn Port	Gatekeeper IP Address	
3030	4624	IP_Phone	1.700	135.9.44.56	10	135.9.44.200	
3031	4624	IP_Soft	1.800	135.9.44.56	10	135.9.44.200	
3032	6408D+	IP_Soft	1.800	135.9.44.57	10 1E0303	135.9.44.200	
3033	console	IP_eCons	1.500	135.9.44.57	10	135.9.44.200	
3034	606A1	IP_Agent	1.800	135.9.44.57	10	135.9.44.200	
3035	8410D	IP_ROMax	1.100	135.9.44.58	10	135.9.44.200	

Field Descriptions

Extension	Station extension numbers
Station 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 number, and the release information, provided from the endpoint during registration.
Product Release	Release number of the registered station, provided from the endpoint to the gatekeeper during registration
Station IP address/port	Location of the registered station, as the CLAN or processor IP address or port location
Network Region	Network region number assigned to the endpoint
Original Port	Port number assigned to the extension that is now under the control of the specified endpoint, for example, a softphone.
Gatekeeper IP Address	The IP address of the C-LAN, S8300 , or other device that is performing the role of the H.323 gatekeeper for this endpoint.

list remote-office

S8700

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	Feature Interaction
list remote-office	print schedule	See Common Command Parameters on page 34.			

Output

The following example shows the screen from **list remote-office**.

list remote-office					Page 1 of 1
REMOTE OFFICES					
Num	Node Name	Net Region	Location	IP Address	
10	romaxn01	1	1	135.9 .72 .52	

Field descriptions for list remote-office

Num	Number assigned to the remote office
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

list set-data

S8700

list set-data

Output

The following example shows the screen from **list set-data**.

```
list set-data
```

		SET DATA				
Ext	Name	Building Floor Room	Cable Jack	Color/ Cord Len	Speaker Headset Mounting	Set Type
-	-	-	-	-	-	-
4000	sdfsd			0 d	n n	H.323
4001	793 Analog 1			0 d	n n	2500+
4002				0 d	n n	8410D

list signaling-group

S8700 | S8500 | S8300 | S8100

This command lists 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	Default	Feature Interaction
list signaling-group	count xx	number of signaling groups to be displayed Example: list signaling-group count 6	init inads craft	none	none

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 CA	TSCs	No, 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

Field Descriptions

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.
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.

list skill-status

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
list skill- status	starting- number xx count num- groups yy	The starting hunt group number. The number of hunt groups to be displayed. Example: list skill-status list skill-status 3 list skill-status 11 count 6	init inads craft	1 1 if <i>starting- number</i> is specified. Otherwise, all.	

Output

list skill-status										Page 1 of 5				
SKILL STATUS														
Grp No.	Grp Name	Grp Type	S L	C O	D D	D D	Extension/ Service Level	Level 1 Threshold	Level 2 Threshold	S	EWT	OCW		
1	CC HG 1						70631							
		ead-mia	y	n	y	n	n 20	/	40 /	60 /	0	0		
2	CC HG 2						70632							
		ead-mia	n				n 20	/	/	/	0	0		
3	CC HG 3						70633							
		ead-mia	n				n 20	/	/	/	0	0		
4	CC HG 4						70634							
		ead-mia	n				n 20	/	/	/	0	0		
5	CC HG 5						70635							
		ead-mia	n				n 20	/	/	/	0	0		
6	CC HG 6						70636							
		ead-mia	n				n 20	/	/	/	0	0		
7	CC HG 7						70637							
		ead-mia	n				n 20	/	/	/	0	0		

Field Descriptions

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
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

This table shows data for each skilled hunt group:

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)

list station

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
list station	ext x	first extension in the list			
	to-ext x	last extension in the list			
	port x	port number			
	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 Command Parameters on page 34.			

Output

This is an example of **list station movable always**.

```
list station movable always
```

STATIONS								
Ext	Port/ Type	Name/ Hunt-to	Room/ Move	Data Ext	Cv1/ Cv2	COR/ COS	TN	Cable/ Jack
1001	01A0301 6402D	Digital a0301	always		1	1	1	

list suspend-alm-orig

S8100

This command lists 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	Feature Interaction
list suspend- alm-orig			init inads craft	none	none

Output

```
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

list synchronization

S8700 IP

list synchronization [schedule]

Use **list synchronization** on **S8700 IP** to see the stratum clock and primary and secondary synchronization sources administered for all the cabinets.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list synchronization	schedule	See Common Command Parameters on page 34.			

Output

list synchronization			
SYNCHRONIZATION PLAN			
Cabinet	Stratum	Primary	Secondary
2	4	02B02	02A08
13	4	13A07	
26	4	26A04	

list sys-link

S8700 | S8500 | S8300 | S8100

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 1833 in *Maintenance Alarms Reference*, 555-245-102 for details.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list sys-link	print schedule	See Common Command Parameters on page 34.			

Output

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	

Field Descriptions

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 1803 in the Maintenance Alarms Reference, 555-245-102: 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.
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.

list testcalls

This command generates 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 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. 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.

Action/Object	Qualifiers/Options	Qualifier/Option description
list testcalls	detail	Detailed measurement report displayed
	summary	Summary measurement report displayed
	grp group number	Measurements for a specific trunk group displayed. When used with the to-grp option, this option is the starting trunk group in a range of user-specified trunk groups.
	to-grp group number	Measurements for all trunk groups from 1 to the specified “to-grp” trunk group are displayed. When used with the grp option, this option is the ending trunk group in a range of user-specified trunk groups.

Action/Object	Qualifiers/Options	Qualifier/Option description
	mem member number	Measurements for a specific trunk group member displayed. When used with the to-mem option, this option is the starting trunk group member in a range of user-specified trunk group members.
	to-mem member number	Measurements for all trunk group members from 1 to the specified “to-mem” trunk group member displayed. When used with the mem option, this option is the ending trunk group member in a range of user-specified trunk group members.
	port location	Measurements for a specific trunk circuit (port) displayed
	result identifier	This option is used to filter out all measurement results that do not match the user-specified result, that is, only measurement results that match the user specified result are displayed. Examples of results are pass, marg, fail, etc.
	not-result identifier	This option is used to filter out all measurement results that do match the user-specified result, that is, only measurement results that do not match the user specified result are displayed. Examples of results are pass, marg, fail, etc.
	count number	This option is used to specify (limit) the number of records displayed.

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 grp 78 to-grp 80 mem 1 to-mem 5 count 3 result pass
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
```

Output

The following example is of the output for the **list testcalls detail grp 80** command.

```
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 FE NE FE  NE FE NE FE
1
2
3
4
5
6
7
8
9

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

Detail report field descriptions

Group	trunk group number selected
Type	trunk group type
Vendor	vendor of this trunk group
TTL Type	kind of test line for this trunk group
Threshold Values	The list of marginal and unacceptable threshold values defined on the trunk group form. The following fields appear on the lower section of the form. Many of the column headings contain the abbreviations “FE” for far end and “NE” for near end. These abbreviations define which end took the measurements.
Trk Mem	The trunk member within the trunk group.
Test Date	The month and day this trunk was tested.
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.

1 of 2

Loss dev at 2804Hz	Transmission tests at high frequency. These tests measure a maximum positive and negative deviation of +9 and -9 dB from the 1004-Hz loss measurements.
C-msg Noise	Maximum noise interference (in dBrnC: decibels above reference noise, which is B(EQ)10 sup -12E(EQ) watts) terminating on a voice terminal within the voice-band frequency range (500 to 2500 Hz) between 15 and 55 dBrnC.
C-ntch Noise	Maximum signal-dependent noise interference on a line between 34 and 74 dBrnC.
SRL-LO	Singing return loss from 0 to 40 dB between the sum of the circuit (repeater) gains and the sum of the circuit losses. SRL-LO occurs most often in the frequency range of 200 to 500 Hz.
SRL-HI	Singing return loss from 0 to 40 dB between the sum of the circuit (repeater) gains on a circuit and the sum of the circuit losses. SRL-HI occurs most often in the frequency range of 2500 to 3200 Hz.
ERL	Echo return loss from 0 to 40 dB between the level of signal strength transmitted and the level of signal strength reflected. ERL occurs most often in the frequency range of 500 to 2500 Hz.

2 of 2

The following example is the output from **list testcalls summary grp 80**.

list testcalls summary grp 80										SPE A
ATMS MEASUREMENT SUMMARY REPORT										
Trk Grp Num	Num Of Trks	Last Test Date	Last Test Time	Trunks Passed Transm Test	Trunks Failed Marginal Threshld	Trunks Failed Unaccept Threshld	Trks In-Use	Trks Not Test	Busied Out Trunks	
80	19			0	0	0	0	19	19	

Summary report field descriptions

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.

1 of 2

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.

2 of 2

list trace

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

list trace station ext | tac tac# | attendant | data-module | previous | advocate | ewt | ras | vdn | vector

Use **list trace** to troubleshoot misdirected calls, trunking/routing problems, call denials, and DS1 connectivity to other vendor equipment. You can also view the Virtual Path Identifier (VPI) and Virtual Channel Identifier (VCI) data.

See [list trace station](#) on page 254 and [list trace tac](#) on page 254.

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
list trace			init inads craft cust		
	Station ext	Trace calls originating from and terminating to a specific station extension. See list trace station on page 254.			
	tac tac#	Trace calls entering and leaving the server on a specific trunk group number. See list trace tac on page 254.			
	attendant	Trace calls to and from the attendant extension			
	data-module	Trace calls to and from data modules			
	previous	Show the results of the previous trace			
	advocate				
	ewt				
	ras				
	vdn				
	vector				

list trace station

list trace station *ext*

1 Use **list trace station** to check the VPI.VCI data for the station identified by the extension *ext*. Add **/a** after the extension (*ext/a*) to request ATM-specific trace data on **S8700**.

The following screen shows VPI.VCI and ATM-specific trace data for a successful 2-party call setup. The VPI.VCI information appears for **S8700**. The ATM information appears on **S8700 MC**.

```
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

list trace tac

list trace tac *tac#* **/[q][d]**

/a appears on **S8700 MC**

Use **list trace tac** to trace calls entering and leaving the server via a trunk group. To request additional trace data, follow *tac#* with a slash (/) and then one or more of these qualifiers:

q	Requests trace data of QSIG operations, such as diversion, diversion with reroute and path replacement, performed on the specified trunk. QSIG trace data displayed includes reject and invoke information and return errors.
d	Requests trace data on calls made over a specified trunk group.
a	S8700 MC : Requests ATM-specific trace data for specified trunk.

Examples

```
list trace tac 48
```

```
list trace tac *14/q
```

```
list trace tac 284/dqa
```

Output

The following example shows the output for **list trace tac tac#/q** requesting QSIG trace data with an outgoing call on the trunk 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
```

list trunk group

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

For more information about **list trunk-group** see “Trunk Groups” in *Administrator’s Guide for Avaya Communication Manager*, 555-233-506.

mark port

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 32 and [Common Command Output Screens](#) on page 35.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
mark port	UUCSSpp	Location of the port to be marked: PCSSpp Examples: mark port 1c0208 mark port 2a1001	init inads craft		

monitor bcms

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

monitor bcms split *split#* | system *system#* | skill *skill#*

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	Login	Default	Feature Interaction
monitor bcms	split <i>split#</i>	status of 1 split and the <i>number</i> of the split (ACD hunt group number).			
	system <i>system#</i>	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 (-).			
	skill <i>skill#</i>	status of 1 particular skill group and the <i>number</i> of the group. Examples: monitor bcms system mon bcms spl 1			

Output for monitor bcms system *n*

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										
SPLIT	CALLS WAIT	OLDEST CALL	AVG ANSW SPEED	AVAIL AGENT	# ABAND	AVG ABAND TIME	# ACD	AVG TALK	AVG AFTER 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	

Field Descriptions

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 "EXTxxxxx". 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.
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.

1 of 2

# 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

Output for monitor bcms split

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

```

Field Descriptions

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.

1 of 2

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.
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

monitor health

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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:

This command is not available in ASA.

After this command terminates, users are logged off.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
monitor health			init inads craft cust nms browse	none	If standby SPE Emergency Transfer Select Switches change and handshakes are down, the displayed Emerg Trans field is incorrect until handshake re-initializes. When monitor health terminates, users are logged off of the system.

Output for monitor health for [S8700 IP](#)

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	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						

Output 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-Gateways' for G700 statusto quit - 9:53 THU MAR 14 2002
- Press CANCEL to quit -
```

See [status health](#) on page 384 for field descriptions.

monitor security violations

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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:

This command is not available in ASA.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
monitor security-violations	print	Reports print to SAT-linked printers.	init inads craft cust rcust bcms browse	none	none

Output

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

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	The 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

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).

monitor system

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
monitor system		Example: monitor system view1 monitor system view2 monitor system conn monitor system conn pnn 1 5 7	system technician inads cust init nms browse		
	view1	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.			
	view2	show the view1 screen except the last hour's hunt group measurements			
	connection	show the connection monitor output for key information			
	conn pnn <i>pnn-1</i> <i>pnn-2</i> <i>pnn-3</i>	pnn shows data for PNN's 1, 2 and 3 pnn pnn-n shows data for specific PNNs (up to 3).			

Description

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.

Output for monitor system view1 and view2

The following is an example of **monitor system view1**.

```
monitor system view1
      ATTENDANT STATUS
      Console no.
Activated:  1 2 3 4 5 6
Deactivated: 7 8

      MAINTENANCE STATUS
      # of alarms for trunks: 4
      # of alarms for stations: 2
      # of alarms for other res: 1
      First OSS number has been informed? n

      TRAFFIC STATUS
      Measurement Hour: 1800
      Trunk Group Measurement
(4 grps with highest %time ATB)
      Grp no: 78
      Grp dir:
Calls qued: 1
%Out blkg:
%Time ATB:

      Hunt groups Measurement
(4 grps with highest # of qued calls)
      Grp no: 16
      Calls qued: 2
      Calls aban: 1
      Attendant Group Measurement
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
      Console no.
Activated:  1 2 3 4 5 6
Deactivated: 7 8

      MAINTENANCE STATUS
      # of alarms for trunks: 4
      # of alarms for stations: 2
      # of alarms for other res: 1
      First OSS number has been informed? n

      TRAFFIC STATUS Measurement Hour: 1800
      Trunk Group Measurement
(4 grps with highest %time ATB)
      Grp no: 78
      Grp dir:
Calls qued: 1
%Out blkg:
%Time ATB:

      Attendant Group Measurement
Calls qued: 1    Calls aban: 0

16:08 WED MAR 6 1996
```

Field Descriptions for monitor system view1 and monitor system view2

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.

1 of 2

# 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 .
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

Output for monitor system conn

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

```

Field Descriptions for monitor system conn

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-TN748 TTRs	Number of currently active touch-tone receivers requested on the TN748 circuit pack.
Requests-TN748 CPTRs	Number of currently active call progress tone receivers requested on the TN748 circuit pack.
Requests-TN744 CPTRs	Number of currently active call progress tone receivers requested on the TN744 circuit pack.
Requests-TN744 TTRs	Number of currently active touch-tone receivers requested on the TN744 circuit pack.
Requests-TN744 MFC	Number of currently active multifrequency receivers requested on the TN744 circuit pack.

monitor traffic

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
monitor traffic trunk-groups	starting-group#	Number of calls in the queue waiting to be serviced for each trunk group. The number of members in the group and the number of members active on calls appear for comparative analysis. Only administered trunk groups up to a maximum of 60 appear. Use # to specify the starting trunk group. For example, enter 5 to see trunk groups from group 5 and up.			
monitor traffic hunt-groups	starting-group#	Shows trunk-group report information plus how long the oldest call in each group's queue has been waiting. Updated every minute. Unadministered hunt groups are blank.			

Output

The following display shows a typical result for **monitor traffic hunt-groups**.

monitor traffic hunt-groups											22:49 G3-MT DEC 31 2002				
HUNT GROUP STATUS															
#	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)

Field Descriptions for monitor traffic hunt-groups and monitor traffic trunk-groups

#	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.

monitor trunk

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

monitor trunk *group# / member#*

Use **monitor trunk** to see same information as [status trunk](#) on page 439. **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
monitor traffic	<i>trunk-groups</i> <i>hunt-groups</i>	see below	init inads craft cust rcust bcms browse	none	none

Output

The following example shows the output from **monitor trunk 78/**.

```
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:
```

Field descriptions

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.

1 of 2

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).

2 of 2

netstat arp

S8700

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** contains as many pages as are required to display all of the data received from the CLAN boards.

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
netstat arp	unsorted	Show ARP data in the order it was received	init		
	ip-sorted		inads		
	mac-sort	Sort ARP data by IP address (on page 271)	craft		
	ck-dup	Sort ARP data by MAC address Show ARP entries that contain duplicated IP addresses	station trunk MSP		

Output

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 [Field Descriptions for netstat arp](#) on page 273 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 [Field Descriptions for netstat arp](#) on page 273 to further interpret this report.

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		
06DUP12B08		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 [Field Descriptions for netstat arp](#) on page 273 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 [Field Descriptions for netstat arp](#) on page 273 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.

Field Descriptions for netstat arp

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	other — The IP address and the MAC address for the entry are dissociated. You can ignore this. invalid — The IP and MAC address for this entry are disassociated. You can ignore this. dynamic — needs further investigation. static — needs further investigation.

netstat ip-route

S8700

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		(none) Display routing tables for all CLAN and VAL circuit packs	init inads craft		
	board <i>UUCSS</i>	specify the CLAN or VAL circuit pack			

Output

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

Field Descriptions

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	- 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.

ping

[S8700](#) | [S8500](#) | [S8100](#)

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 only indicates low-level connectivity. If an external ping works but higher-level applications such as DCS, CMS, or INTUITY do not, then you can only assume that there 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 either:
 - an IP address (**ip-address addr**)
 - a node (**node-name name**)
- The source can be either:
 - a CLAN or IP Medpro board (**board UUCSS**)
 - 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 and 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, hence 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 will be 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. Conversely, 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	Default
ping ip-address	addr board UUCSS	See descriptions below. Examples:	init inads craft cust dadmin	
ping node-name	source port-id packet-length len repeat #	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		

Parameters

ip-address <i>addr</i>	The IP address of the device to ping, where the IP address format is <code>www.xxx.yyy.zzz</code> .
node-name <i>name</i>	The name of the node to ping. Use display node-names ip to determine what IP nodes are administered.
board <i>UUCSS</i>	The location of the CLAN or IP Medpro board (UUCSS) to use as the source of the ping. Specify the board if there are multiple CLAN or IP Medpro boards. If neither the board option or source option 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 <i>port-id</i>	The virtual endpoint port ID to use as the source of the ping. This can be the virtual endpoint port ID of a softphone, IP phone, or Remote Max (R300) phone. Use status station ext to determine the virtual endpoint port ID of a phone. If neither the board option or source option 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 <i>len</i>	Specifies the packet length of the ping packet. Packet lengths from 64 to 1500 bytes can be specified. The packet-length qualifier is optional, and if not used, the default packet length is 64 bytes. Specifying a longer packet length in the command line can show: - if a router or host has a problem fragmenting or reassembling transferred packets - a more complete indication of the link status
repeat <i>rpt</i>	The number of times to repeat the ping test. See Caution above before using.

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	

Field Descriptions

End-pt IP or End-pt Node-name	The destination of the ping 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 ping .
Error Code	Identifies problems associated with the circuitry in the data path for a peer-to-peer IP layer connection. For the meaning of the error code and troubleshooting procedures, see the Port Type 's maintenance object description in the Maintenance Alarms Reference, 555-245-102. The MO description will indicate the type of ping test used and the meaning of that ping test's error codes.

Error messages

Error messages for **ping** are listed in [Table 4, Ping command error messages](#), on page 277.

Table 4: 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 the "board" option).
Board not inserted	Valid board location, but there is no board in that slot.
Error encountered, could not complete request	The internal error of not being able to find the port through which the IP address is reached.
Invalid range	The packet size is greater than 1500 or less than 64 bytes in length or if there are invalid or unrecognized parameters.

1 of 2

Table 4: Ping command error messages*Continued*

Message	Interpretation
WARNING Default packet length of 64 bytes used for TN799DP	Indicates that the default packet length of 64 bytes is used for a TN799DP board.

2 of 2

recycle carrier

S8700 MC | G650

recycle carrier *UUC* [override]

Use **recycle carrier** to momentarily shut down and restore power to a specified **S8700 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	Feature Interaction
recycle carrier	cabinet carrier	cabinet location carrier (or G650 within a G650 stack)	init super-user inads craft		
	slot override	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	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 MC When a port carrier is recycled, every port and adjunct supported by circuit packs on that carrier undergoes a service outage. Use **recycle carrier Uuc override** to power recycle a control carrier.



CAUTION:

Never recycle power to a carrier containing DEFINITY AUDIX TN566/TN2169 circuit packs without first shutting down the AUDIX system. Doing so can damage AUDIX software. Follow instructions on the TN566/TN2169 faceplate (these also appear under ADXDP-PT in *Maintenance Alarms Reference*, 555-245-102).



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 32 and [Common Command Output Screens](#) on page 35.

refresh ip-route

S8700

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	Refreshes route tables in all CLAN circuit packs.	init	all	
	<i>location</i>	Refreshes ip-route tables in a specific CLAN circuit pack (CCcss).	inads craft station trunk MSP permissions		

Output

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	

Field Descriptions for refresh ip-route all

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

refresh route-table

S8700

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	Feature Interaction
refresh route- table	all	Refreshes route tables in all CLAN circuit packs.	init	all	
	<i>location</i>	Refreshes ip-route tables in a specific CLAN circuit pack (CCcss).	inads craft station trunk MSP permissions		

Output

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					

Field Descriptions for refresh route-table

C-LAN Board Location	The physical location of the circuit pack in CCss 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

release access-endpoint

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command removes 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.

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

Output

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

release board

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

release board *location*

This command activates 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

Output

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

release cdr-link

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command removes 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 338.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release cdr-link			init inads craft	none	none

Output

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

release commands

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

release board *UUCSS*

release *maintenance-name* [*address*]

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 will abort. 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.

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release board	UUCSS <i>maintenance-name</i> <i>[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			

Output

The identity of the maintenance object and the result of command execution appears on a screen similar to the related **busyout** screen. When the command aborts or fails, an error code indicating the reason appears. See [Common Abort and Fail Codes](#) on page 40.

release cti-link

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

release cti-link [link *n*]

Description

The release cti-link command is used 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. On [S8100](#), the LAN interface is provided by the TN2314 Ethernet interface and/or by the C-LAN (Control LAN) TN799 circuit pack.

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

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release cti-link	<i>link n</i>	Link number (1 - 8) Example: release cti-link 1	init inads craft or any customer type login		

release data-module

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command activates the specified data module (or data channel). Hardware tests are executed to verify that the equipment is functioning.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release data-module	extension	Extension number associated with desired data module or data channel.	init inads craft cust nms	none	none

release ipserver-interface

[S8700](#)

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 77.

S8700 IP: busying out an IPSI circuit pack takes down the port network.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release ipserver-interface	<i>U</i>	Specify the cabinet number (1-44) with the IPSI board you want to test.			
	<i>c</i>	Specify the carrier you want to test			

release journal-printer

[S8700](#)

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 39.

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 79. For information on journal printers, see [status journal-link](#) on page 393.

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.

release mis

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command activates management information systems. Hardware tests are executed to verify that equipment is functioning properly.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release mis			init inads craft cust rcust	none	none

release modem-pool

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command deactivates specified modem pool groups or group members. Specifying group numbers, member numbers releases single group members. Specifying modem pool group numbers releases members in a modem pool group.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release modem-pool	group member	1-5. pair of analog and digital line ports (or two pair for the Integrated modem-pool case). 1-32.	init inads craft	none	none

release pms-link

S8700

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 39.

This command deactivates 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.

release port

This command deactivates specified ports on circuit packs.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release port	location	Physical location of the port: PCSS	init inads craft	none	none

release pri-endpoint

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command removes 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	Feature Interaction
release pri-endpoint	extension	extension number associated with desired PRI endpoint.	init inads craft nms		

release processor-ip-interface

[S8100](#)

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.

release sp-link

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 39.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release sp-link			init inads craft		

release station

release station

Use **release station** to remove specified administered voice terminal extensions from a maintenance busy state.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release station	extension	Extension number (see dial-plan)	init inads craft cust		none

release tdm

[S8700](#) | [S8500](#) | [S8100](#)

This command removes specified tdm buses from a maintenance busy state.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release tdm	port-network pn number bus bus	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

Feature interactions

- The system tears down busied out buses. No new calls can be administered on busied out buses.
- To prevent busyouts of particular buses, technicians should move dedicated tone time slots to another bus (the other half of the duplicated bus).

release tone-clock

Use **release tone-clock** to remove specified tone/clocks from maintenance busy states.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release tone-clock	<i>location</i>	Physical location of the tone/clock: <i>PC</i>	init inads craft	1	

release trunk

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
release trunk	group member	trunk group number trunk group member number	init inads craft		

remove file

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	<i>PPcss</i> <i>path</i>	board location file location (using the entire path starting at <code>"/</code>)			

remove ipserver-interface

S8700

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	Feature Interaction
remove ipserver-interface	<i>n</i>	Port network 1 - 64			

Output

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                                                  -----
Host: ipsi-A05a                                                Call Control 802.1p: 6
DHCP ID: ipsi-A05a                                             Call Control DiffServ: 46

Secondary IPSI
-----
Location: 5B01
Host: ipsi-A05b
DHCP ID: ipsi-A05b
```

This is an example of **list ipserver-interface** on an [S8700 IP](#).

```
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                                                  -----
Host: 130.120.50.140                                           Call Control 802.1p: 6
DHCP ID: ipsi-A03a                                             Call Control DiffServ: 46
```

Field Descriptions

Socket Encryption	This field appears on S8700 IP . Indicates whether socket encryption is turned on or off for the S8700 media server and IPSI link. (y/ n)
Enable QoS	Indicates whether quality of service (QoS) is turned on or off. (y/ n)
Primary IPSI	
Location	Location of the IPSI board
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)

reset board

S8700 | **S8500** | **S8300** | **S8100**

reset board *UUCSS* [repeat *repeat#*]



CAUTION:

This command 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 Reference, 555-245-102 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.

S8700 MC

On **S8700 MC** 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 32 and [Common Command Output Screens](#) on page 35.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
reset board	UUCSS	Reset every administered port on the circuit pack.		1	
	PCSS				
	repeat#			1	

reset fiber-link

S8700 MC

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** on **S8700 MC**, 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.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
reset fiber-link	fiber#	The administered number of the fiber link (1-44). On a critical-reliability system (duplicated PNC), this number designates a fiber link pair; the following qualifier specifies which fiber in the pair is to be reset			
reset fiber-link	a-pnc b-pnc	For a critical-reliability system (duplicated PNC), this distinguishes between the two fibers in a duplicated pair. On a high-reliability system (unduplicated PNC) this is always a-pnc and need not be specified.			

reset ip-stations

S8700

reset ip-stations [ip-phones | all-ip] [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	reset all IP endpoints	(all)	all-ip	See Feature Interactions for reset ip-stations on page 295
	ip-phones	reset IP phones only			
	ip-network-region <i>n</i>	reset IP endpoints in specified IP network region		all	
	all-regions	reset IP endpoints in all network regions Examples: reset ip-stations ip-phones reset ip-stations ip-network-region 2 reset ip-stations ip-phones ip-network-region 2		regions	

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

reset ipserver-interface

S8700

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>UU</i>	Specify the cabinet with the board you want to test.			
	<i>c</i>	Specify the carrier you want to test.			
		Example: reset ipserver-interface 2a			

reset login-id

S8700

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

reset maintenance

S8700 MC

reset maintenance *UUC*

Use **reset maintenance** on **S8700 MC** 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.

reset packet-interface

S8700 | S8500 | S8100

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:

- **S8100** TN2314 circuit pack
S8500 TN2312BP (IPSI) circuit pack
S8700 TN2312BP (IPSI) circuit pack

A standby PKT-INT can always be reset. If the PKT-INT is active, it can only 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 will have a bad PKT-INT state of health that will cause the IPSI to go 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	Default	Feature Interaction
reset packet-interface	<i>U</i> <i>c</i>	Specify the cabinet number that has the board you want to test. Specify the carrier you want to test.			

reset pnc interchange

S8700 MC

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 on S8700 MC**, 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 [Table , PNC-DUP \(PNC Duplication\)](#), on page 1524 of the Maintenance Alarms Reference, 555-245-102.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
reset pnc interchange	override-and-lock	Override the anti-thrashing mechanism. Subsequent PNC interchanges are prevented, regardless of changes in the states health of the PNCs. Double call setup still takes place; each call is set up on both PNCs. To unlock the PNCs, use set pnc unlock.  CAUTION: This option forces execution of the interchange regardless of the standby's state of health, possibly disrupting service.			

Output

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.

reset port-network

S8700

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 under [EXP-PN \(Expansion Port Network\)](#) on page 978 in Maintenance Alarms Reference, 555-245-102.

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.

For **S8700 MC**, **reset port-network** applies to port networks 1 - 64.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
reset port-network		Example: reset port-network 10 level 2			
	PN#	Port network number. Use list cabinet to find the PN number(s) associated with a given cabinet.			
	level 1 level 2	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. Emergency transfer is not supported in S8700 IP.			

For more information, see [Common Command Output Screens](#) on page 35 and [Common Abort and Fail Codes](#) on page 40.

reset switch-control

S8100

This command resets and initializes the switch control hardware and firmware.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
reset switch-control	none restart	none restart archangel firmware on the TN2314	init inads craft nms		none

reset system

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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.

This command 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	Default	Feature Interaction
reset system	Level 1 2 4	1 = Warm Restart 2 = Cold 2 3 = Reboot 4 = Reboot 5 = Reboot See Table 5, Approximate Recovery Time for S8700 System Resets (min:sec) , on page 300. Example: reset system 1	init inads craft		see below

Table 5: Approximate Recovery Time for [S8700](#) System Resets (min:sec)

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

NOTE:

System reset times differ between different configurations.

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.

Output

Reset system can not 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.

reset val

S8700

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
reset val	UUCSS	Reset every administered port on the circuit pack.			

reset tone-clock

S8100

Use **reset tone-clock** to reset the tone clock component TN2314 Processor circuit.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
reset tone-clock	location	Carrier location	init inads nms	1	
	repeat #			1	

**WARNING:**

reset tone-clock is service disrupting and may cause extraneous alarms.

Help Messages

location	A "location" represents the physical position of the tone-clock component on the TN2314 circuit pack to be reset and is entered as "Uc" where "U" represents the cabinet number (always 1), "c" represents the carrier (always a).
number	The "number" specifies how many times each board reset is to be repeated. "Number" may be any integer between 1 and 100.

If the system technician presses HELP after entering "reset board," the following message will be displayed:

```
Enter [cabinet(1-0)];[carrier (A)], ['repeat' (1-100)]
```

Error Messages

Reset tone-clock error messages

error message	meaning
Board invalid	the format of the tone-clock location is incorrect a reset is attempted on an invalid board in the service slot
Board not assigned	a tone-clock is not inserted in the specified location
'login id': 'command' has a command conflict	the command entered is in conflict with another currently executing command
Command resources busy; Press CANCEL to clear, and then resubmit	a resource problem occurs that requires the user to restart the command
All maintenance resources busy; try again later	all of the available maintenance resources are currently in use

restore announcements

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 Command Parameters on page 34.	init inads craft cust rcust		see below

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

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 the **restore announcements** command 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, the **restore announcements** command is not allowed.
- Unsaved or corrupted announcement files on the MSS, disallow the **restore announcements** command.
- 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.

resume hardware-group

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
resume hardware-group		none	init inads	none	none

Feature interactions

- Cancelling a test hardware-group command deactivates the test command. The **status hardware-group** displays the state as **canceled**.
- When **resume hardware-group** is entered to resume a previously-canceled **test hardware-group**, the state of the test command is **active** on **status hardware-group**.

Output

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.

save translation

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

save translation

Use **save translation** to back up translations of the database to the server. It either completes or fails.

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.

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.

Run **save translation** as part of scheduled background maintenance or on demand. See [change system-parameters maintenance](#) on page 107 for more information

Output

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
```

Field descriptions

Processor	Identifies the processor carrier where translation data is saved. (SPE-A)
Command Completion Status	Identifies the success or failure of the command.

set boot-image

S8700

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

set emergency transfer

G650

set emergency-xfr on | off | auto <cabint>

Use **set emergency-xfr** to manually set the state of emergency transfer on a TN2312BP in a **G600**, **G650**, 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	Default	Feature Interaction
set emergency-xfr	on	activates emergency transfer	init super-user inads craft dadmin switch circuit pack maintenance permissions		
	off	deactivates emergency transfer			
	auto				
	cabinet	the media server controls emergency transfer specify cabinet location			

set ethernet-options

S8700

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
set ethernet-options	location	The physical location of the circuit pack (<i>UUCSS</i>)			

Output

```
set ethernet-options 1C07
                               SET ETHERNET OPTIONS
Auto Negotiation:  y
                   Speed:
                   Duplex:
```

Field Descriptions

Auto Negotiation	y means that the system automatically negotiates the highest possible network speed. n means that 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 set to y
Duplex	Half/Full

set ipserver-interface

S8700 MC

set ipserver-interface *Uc* | **a-all** | **b-all**

Use **set ipserver-interface** *Uc* on **S8700 MC** 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	Uc a-all b-all	Specify the cabinet and carrier with the IPSI board you want to make active. 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			

set options

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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.	

Description

A remote user with INADS permission uses **set options** to select which types of maintenance categories report alarms automatically and which types require the customer to call in. Judicious use of **set options** can reduce the number of ineffective alarms to the TSC.

Settings on **set options** 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.

Form Input

The following is an example of the output of **set options**.

set options	ALARM REPORTING OPTIONS	Page 1 of 22
		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 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 w

set options	ALARM REPORTING OPTIONS	Page 2 of 22
		Major Minor
	Off-board Firmware Download Alarms:	w w
	Off-board Signaling Group Alarms:	w w

On the first page of 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.

On the second page of the Alarm Reporting Options screen, assign an alarm severity group to each trunk group. This reduces the level of alarms reported for on-board or off-board trouble conditions.

The following alarm options are available:

- Minor

Alarms are raised as maintenance testing discovers them and the severity of the alarm is 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. However, 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, thus, 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.

In every case, if the option associated with the alarm type is set to **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.

Station MOs affected by set options

NOTE:

Although alarms on these MOs may appear as warnings, the alarms should be investigated with user-reported problems.

- Analog Lines (ANL-LINE, ANL-NE-L, ANL-16-L)
- Digital Lines (DIG-LINE)
- Hybrid Lines (HYB-LINE)
- MET Lines (MET-LINE)
- ISDN-BRI Lines (BRI-PORT, BRI-SET)

Minor alarms escalate to major alarms if more than 75 percent of the members of the trunk group are alarmed. If the trunk option is set to “warning,” “minor,” “report,” or “no,” this no longer happens. Maintenance reactivates individual trunk members according to major and minor alarm criteria.

Trunk MOs affected by set options

NOTE:

Although alarms on these MOs may appear as warnings, the alarms should be investigated with user-reported problems.

- 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)

Circuit Pack MOs affected by set options

NOTE:

Although alarms on these MOs may appear as warnings, the alarms should be investigated with user-reported problems.

NOTE:

Trunks that are not members of Trunk Groups, (for example, PCOLs) are downgraded according to the alarm severity of group one.

- DS1 Interface Circuit Pack (DS1-BD)

Adjunct-Related MOs affected by set options

NOTE:

Although alarms on these MOs may appear as warnings, the alarms should be investigated with user-reported problems.

- 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)

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.

Associated Link MOs affected by set options

NOTE:

Although alarms on these MOs may appear as warnings, the alarms should be investigated with user-related problems.

- 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)
- 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)

Field Help

Press **HELP** in any field of the first page to see the help message:
m(inor) n(o) r(eport) w(arning) y(es)

The following is a description of the help message values:

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.

set pnc

S8700 MC

set pnc lock | unlock

On **S8700 MC** 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
set pnc	lock	PNC interchanges are prevented, and the active port network connectivity is locked on-line.			
	unlock	Releases the PNC lock.			

set signaling-group

S8700

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	Feature Interaction
set signaling-group	<i>group#</i>	The number assigned to the signaling group.			

set switch-node-clock

S8700 MC

set switch-node-clock *UUCSS* [override]

Use **set switch-node-clock** on **S8700 MC** to set which switch node clock (SNC) circuit pack in a given switch node carrier is active.

Set switch-node-clock is valid only for a simplex PNC with a Center State Switch (CSS).

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
set switch- node-clock	<i>override</i>	Set the active switch node clock regardless of the health of the standby SNC circuit pack.			

set synchronization

S8700

set synchronization *location* [print]

Use **set synchronization** to set a specific synchronization-capable circuit pack as the reference source for system synchronization signals. The circuit packs that are synchronization-capable include:

- DS1 Trunks
- BRI Trunks
- IPSIs
- ATM CES (**S8700 MC**)
- Tone-Clocks (**S8700 MC**)

Use **set synchronization** only after automatic synchronization has been disabled with **disable synchronization-switch**. On **S8700 IP**, specify a sync source location for each port network. The default is the Tone-Clock in that port network.

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 on **S8700 MC**, provides the port network's timing source.

S8700 MC: **set synchronization** is not supported when ATM-PNC is enabled.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
set synchronization	location	Specifies the physical position of the synchronization-capable circuit pack that supplies a reference for synchronization.			
	print	See Common Command Parameters on page 34.			

set tdm

S8700 | S8500 | S8300 | S8100

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 1886 in the Maintenance Alarms Reference, 555-245-102 for details.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
set tdm port-network	PN#	Port Network number of the TDM bus to be set. Use list cabinet to see port network numbers for a given cabinet.			See below
	bus	One of the paired TDM buses, a or b.			
	override	Sets a bus which is out of service, or a bus whose dedicated tone time slots are in use by call processing.  CAUTION: Use of override option disrupts service. Example: set tdm port-network 2 bus a			

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.

set time

S8700

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.

Input Form

set time

Page 1 of 1

DATE AND TIME

DATE

Day of the Week: SundayMonth: October

Day of the Month: 24Year: 1999

TIME

Hour: 8Minute: 16Second: 31Type: 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.

Field Descriptions

These are the fields on the **set time** input screen. The current time, or default time appears in the fields.

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.

set tone-clock

S8700

set tone-clock *UUC* [override]

On port networks not controlled by an IPSI, use **set tone-clock** to force a Tone-Clock interchange.

On port networks with duplicated Tone-Clocks, use **set tone-clock** to select which of the two Tone-Clock circuit packs is to be active.

On port networks with an IPSI for a Tone-Clock, **set tone-clock** is blocked.

In PNs, the A-carrier Tone-Clock is the preferred Tone-Clock. It is always active unless a failure, maintenance testing, or **set tone-clock** caused an interchange to the B-carrier Tone-Clock. If you use **set tone-clock** during a maintenance session, set the PN Tone-Clock back to the A carrier when you are finished, assuming it is healthy.

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	Feature Interaction
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. Examples: set tone-clock 01c override set tone-clock a	init inads craft	1	

status access-endpoint

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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.

Output

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
```

Field Descriptions

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.

status administered-connection

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

status administered-connection *adm-conn#* [**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	Feature Interaction
status administered-connection	adm-conn# print	The number (1-128) of the administered connection, assigned during administration. See Common Command Parameters on page 34.	init inads craft cust rcust bcms browse		

Output

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	

Field Descriptions

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.

1 of 2

Connection State	The current status of the administered connection as follows: • connected = A connection between the originating and destination endpoints is currently active. • restored = The connection has been restored. The session may or may not have been preserved. • failed = The connection failed due to either an administrative error such as a wrong number or a service-blocking condition such as barring of outgoing calls. Recovering from such a failure requires manual intervention. No further attempt is made by the system to re-establish the administered connection until change administered-connection is executed. If the failure was caused by a transient condition, you may be able to re-establish the connection by first disabling and then enabling the connection via the Enable field on the change administered-connection screen. (The enable admin and disable admin commands affect only maintenance processes). The cause of the failure is reported as an ISDN cause value that is recorded in the error log. See the Hardware Error Log Table for ADM-CONN (Administered Connection) on page 193 in the Maintenance Alarms Reference, 555-245-102 to identify failure causes. • waiting to retry = The system is waiting between attempts to restore the connection. The amount of time between attempts to restore is administered on the administered connections screen. Check the contents of the Failure Cause field for information about why the administered connection failed. • attempting to connect/attempting to restore = These are transitional states during which an attempt is made to connect or restore the administered connection. If an administered connection remains in this state for longer than 1 minute, disable and then re-enable the connection. If the problem still persists, or if the administered connection has retried a number of times with administered connection origination attempt timed out reported in the Failure Cause field, then make sure that the originating data module is connected and the destination access endpoint is not out-of-service. • not scheduled = The administered connection is enabled but is not scheduled to be active at the current time. • disabled
Failure Cause	The reason for a current state of attempting to connect , attempting to restore , or failed . If the administered connection should be active but is not connected, this field shows the most recent reason for failure.
Number of Retries	The number of consecutive failed attempts to establish the connection.
Auto Restorable	When an administered connection fails, the system can automatically attempt to restore the connection. This field indicates whether this capability is activated on the administered connections administration screen.

2 of 2

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.

Output

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
```

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.

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.

status attendant

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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.

Output

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:
```

Field descriptions

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	Is maintenance testing the object? (y or n)
Connected Ports	Port locations to which the attendant is communicating (cabinet-carrier-slot-circuit).

status audits

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command displays 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.

This command 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** commands.

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 the **test MO** command. For example, **test MO l 8192 p 512 t 0** executes the Station Connections Audits, audit names and numbers (names) included in the Table Of Audits. 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	Default	Feature Interaction
status audits	peak-hour	data collected since the last reboot or since the last execution of the clear audits cumulative command.	init inads	none	see below
	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 command.			

Output

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-USR (SCH)	1	0	0	03/22/10:14	03/22/10:14

Command successfully completed

```
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

Command successfully completed

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.

Field descriptions

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

Feature interactions

- **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 6, Audits that are run as part of time available maintenance](#), on page 327 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 l 8192 p 607 t 0** executes the AC state audit).

Table 6: Audits that are run as part of time available maintenance

Audit name	Audit number	Description
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
ATDRCNT	576	Attendant resource count audit
AT-ADM	529	Attendant group administration audit
AT-CALLS	515	Attendant group calls audit
AT-QUE	523	Attendant group queue audit
AUR-A	540	Attendant user record audit
AU-CIDP	596	Announcement user cid/port audit
AWOH-UR	614	Admin Without Hardware Split User Record Audit
B2B-TAB	617	Board-to-Board Link Audit
BR-CALLS	629	Bridged extensions audit
BUTLK	560	Button lock audit
CALK	569	Coverage answer member lock audit
CATT	527	Attendant connections audit
CCTRAB	624	Call Classifier Tone Receiver Table Audit
CCTR-SID	600	Call classifier tone receiver audit
CDM	528	Data module connections audit
CO-ADM	530	Coverage group administration audit
CO-CALLS	516	Coverage group calls audit
CPROC	585	Call process/call record audit
CPTRTAB	623	Call Progress Tone Receiver Table Audit
CPTR-SID	601	Call progress tone receiver audit

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Table 6: Audits that are run as part of time available maintenance*Continued*

Audit name	Audit number	Description
CPWAKEUP	586	Wake up call process 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-MSG	584	DAP message buffer audit
DE-ADM	531	Data extension group administration audit
DE-CALLS	517	Data extension group calls audit
DMLK	563	Data module lock audit
DUR-A	543	Data user record audit
DXLK	567	Data extension member lock audit
FHT	554	Facility status hundreds table audit
FTED	553	Facility status tracked user audit
FTING	552	Facility tracking user audit
FTSRA	593	Fiber time-slot record allocation audit
GIP-TIMER	609	GIP Timer 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
IM-HMM	579	HMM image table audit
INST-LNK	604	Instigator/down-link user link audit
ISGR-A	594	ISG call record audit
LOG-A	570	MDM error/alarm log audit
MAP-HMM	580	HMM map status table audit
MCT-ADM	561	Malicious call trace administration audit
MIS-FAC	587	MIS facility state audit
MP-ADM	575	Modem pool group administration audit
MP-CALLS	573	Modem pool group calls audit

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Table 6: Audits that are run as part of time available maintenance*Continued*

Audit name	Audit number	Description
MSGQ-HMM	582	HMM map request queue audit
MS-CALLS	588	MISAP call record audit
MUV	555	Message user verification audit
MWIA	550	Message waiting indicator audit
MWL-NOAP	599	Message waiting lamp no AP audit
PA-ADM	533	Paging group administration audit
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
PINC-TAB	612	Packet Inter-Port Network Connection Sub-Table audit
PI-ADM	534	Pickup group administration 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
SDSBUF	581	Service dispatcher stim buffer audit
SDSID	571	Service dispatcher SID audit
SE-ADM	538	Terminating extension group administration audit
SE-CALLS	537	Terminating extension group calls audit
STNLK	562	Station lock audit
SUR-A	539	Station user record audit
S-INC-TAB	611	Service Inter-Port Network Connection Sub-Table audit
S-PT-TAB	610	Service-Port Connection Sub-Table audit
S-TAB	620	Service Table Audit
TEGLK	565	TEG member lock audit
TKLK	564	Trunk lock audit
TONE-TS	608	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

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Table 6: Audits that are run as part of time available maintenance*Continued*

Audit name	Audit number	Description
TSC-PRI	520	ISDN-PRI TSC resource audit
TSRA	547	Time slot record allocation audit
TTI-STATE	618	TTI State Audit
TTI-TRANS	619	TTI Translation Audit
TTR-SID	514	Touch tone receiver audit
TTR-TAB	622	Touch Tone Receiver Table Audit
TUR-A	542	Trunk user record audit
T-TS-TAB	613	Tone Time Slot Connection Sub-Table Audit
UGMA	551	User group membership audit
UPUSR-LNK	603	Up-link user link record audit
URMB	548	User record maintenance busy audit
X25-CHAN	615	X.25 Channel Status Audit
X25-LINK	616	X.25 Link Status Audit

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The following table 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 l 8193 p 556 t 0* executes the Message Waiting Lamp Audit audit).

Audit name	Audit number	Description
MWL	556	Message Waiting Lamp Audit
PRI-USR	597	PRI user record audit
SUR-FREE	625	Station User Record Free List Audit

status bri-port

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 in the Maintenance Alarms Reference, 555-245-102.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status bri-port	<i>UUCSSpp</i> print	See Common Command Parameters on page 34.			

Output

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

```

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

                                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

```

Field Descriptions

See [Interpreting BRI-Port Status Reports](#) on page 333 for information on interpreting results.

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

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

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Interpreting Results of status bri-port

[Table 7, Interpreting BRI-Port Status Reports](#), on page 333 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 7: Interpreting BRI-Port Status Reports

Error Type	Aux Data	Associated Test	Alarm Level	On/Off Board	Test to Clear Value
ASAI, BRI	0-126	Assigned	blank	blank	This is a transitory state for BRI endpoints and ASAI adjuncts. The switch is attempting to establish the link. 1. Check the endpoint and wiring by following the SPID Facility test's procedure described in BRI-SET, BRI-DAT, Various Adjuncts on page 514 in the Maintenance Alarms Reference, 555-245-102. 2. Repeat status bri-port 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.)
ASAI	0-63	Established	blank	blank	This is a transitory state for ASAI adjuncts. ASAI signaling is connected at Layer 2 but the Layer 3 Restart procedure has not been completed between switch and adjunct. 1. Check the adjunct by following the recommended repair procedures of the manufacturer. 2. Repeat status bri-port and determine whether the L2 state of the signaling link is L3-Established. If it is not, follow normal escalation procedures.
BRI	0-126	Established	ext#	blank	This is the normal state for non-MIM initializing, fixed, and automatic TEI BRI endpoints.

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Table 7: Interpreting BRI-Port Status Reports

Error Type	Aux Data	Associated Test	Alarm Level	On/Off Board	Test to Clear Value
BRI, ASAI	64-126	Established	blank	blank	This is a transitory state for automatic TEI BRI endpoints that support MIM initialization. 1. Verify that SPID administration on the switch and the endpoint are consistent. Repeat status bri-port to determine whether the Layer 2 state of the signaling link is L3-Established. 2. Try replacing the endpoint. Repeat status bri-port to determine whether the Layer 2 state of the signaling link is L3-Established. If it is not, follow normal escalation procedures.
BRI	64-126	L3-Established	ext#	blank	This is the normal state for automatic TEI BRI endpoints that support MIM initialization.
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, BRI-DAT, Various Adjuncts on page 514 in the Maintenance Alarms Reference, 555-245-102.
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, BRI-DAT, Various Adjuncts on page 514 in the Maintenance Alarms Reference, 555-245-102.
BRI	0-126	L3-Established	blank	blank	An invalid SPID is assigned to link. 1. Change the SPID value in the BRI endpoint to match the SPID administered to the BRI endpoint on the port. Repeat status bri-port to determine whether the Layer 2 state of the signaling link is L3-Established. If it is not, follow normal escalation procedures.

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Table 7: Interpreting BRI-Port Status Reports

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

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Table 7: Interpreting BRI-Port Status Reports

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

4 of 4

status cabinet

S8700

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	UU print	Location number of cabinet See Common Command Parameters on page 34.		1	

Output

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

NOTE:

S8700 IP: No PN maintenance boards, so the Emergency Select Transfer Switch field is **NoEqp.**

status cabinet 1									
CABINET CONFIGURATION STATUS					CABINET CONNECTIVITY STATUS				
Carrier Location	PN/SN Number	Carrier Type	Cabinet Type	PN/SN	Connectivity Status		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 Transfer	Select Switch			PN/SN	Mj	Mn	Wn		
01B	auto-			PN 1	0	1	19		
01A	auto-								

Field Descriptions

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 2

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

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status cdr-link

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

[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/SEC-CDR \(Call Detail Recording Link\)](#) on page 1605 in the Maintenance Alarms Reference, 555-245-102.

CDR link maintenance provides a strategy for verifying that the CDR files for **S8100** are being retrieved by the Call Accounting software running on a customer-provided PC. The CDR link is in the UP state when data can be transferred to the output file in **S8100**. If the customer-provided PC is not transferring that data to its own files, the link is in a DOWN state.

Output

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
```

Field Descriptions

The following information appears for both the Primary and Secondary CDR links, whether or not both are used.

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.

status clan-port

S8700

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 last hour start time, and end time for the error counter statistics).
- 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 395](#) for more information.

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status clan-port	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			

status cleared-alarm-notif

S8700 | S8500 | S8300 | S8100

Expert Systems use this command to detect chronic alarming conditions. If this command displays **Feature is suspended**, Expert Systems can identify open trouble tickets as chronic problems for special consideration.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
cleared- alarm-notif	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.	none
	2	Second OSS telephone number status of Cleared Alarm Notification.			

status conference

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
status conference	all	display all stored conference data	inads init system technician	all	
	<i>conference-ID</i>	display data on specified conference (current or last completed)			
	endpoint all <i>endpoint-id</i>				
	print schedule	See Common Command Parameters on page 34. 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.

Description

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

- 1 A user unable to join or remain joined to a conference.
- 2 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.
- 3 A user not receiving full service, such as being an audio-only endpoint (no video).
- 4 An audio add-on user unable to join or remain joined to a conference.
- 5 A conferee not being seen by other users due to interworking problems.
- 6 A user not able to participate in the Multipoint Communications Service conference.
- 7 A continuous conference not switching endpoints in or out of quadrants.

Output

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

```

status 50                                     Page 1 of 2
                                     STATUS OF CONFERENCE: 50 Status: in-use
Conference Name: MMCH DYNAMIC                Conference Mode: voice-activated
Password Scope:
    Password:                                Cascade Mode:
        Class: dedicated                    Audio Mode: G.728
Start Time/Date: 09:08 OCT 28                Data Mode: none        MLP Rate:
Stop Time/Date: 00:00 000 00    Admin Bandwidth: 64k    No of Channels: 2
Chair:                                Conf Bandwidth: 64k    Rate Adaptation? y
Format (in/out): CIF                FPS: 7.5  QFPS: 7.5  Lo/Hi Interworking? n

Type Ext Meet-Me Number    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:

```

sdlfsc: KLC.010397

Field Descriptions (status conference, Page 1)

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

1 of 8

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 .
Format (in/out)	• For single-screen conference, the video format of the conference, CIF, QCIF, QCIF/CIF, H.CTS, H.CTX+, and SG4. • For conferences other than H.261, the input and output formats are always symmetric and the mode is the same for input and output. These display as H.CTX, H.CTX+, SG4. • For H.261 mode non-continuous presence conferences, the format is always symmetric and displays as CIF and QCIF. The same is true for the non-presentation, continuous presence conference in single-screen. • For presentation mode H.261 single screen continuous presence capable conferences, the input and output formats may be symmetric QCIF/CIF (displayed as CIF) or asymmetric QCIF/CIF, depending on if the format is administered as upgradeable. • For quad-screen conferences, the format is QCIF/CIF to reflect the input of QCIF from every participant and output of CIF to every participant. • For presentation mode quad-screen conference, the format is also QCIF/CIF to reflect the input/output of every participant except the presenter. In quad-screen mode, the input from the presenter is always CIF.
FPS	The CIF frame rate (frames per second) — ‘-’, 30, 15, 10, 7.5 . FPS indicates the rate that an endpoint is capable of receiving frames. Note that there is no indication of the maximum transmit frame rate nor the current frame rate that the MCU can detect. The frame rate changes as a function of the amount of motion in the input image.

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QFPS	The ACIF frame rate (frames per second) — ‘- ‘, 30, 15, 10, 7.5. QFPS indicates the rate that an endpoint is capable of generating/receiving frames. For quad-screen VAS conferences, QFPS reflects the highest common QCIF frame rate of every endpoint and the rate of the video mixer board, which may be lower than the rest of the participants. Note that QCIF calculation takes into account the highest common CIF frame rate declared by every conference participant, since QCIF rate cannot be greater than that of the highest common CIF rate. For quad-screen presentation conferences, QFPS reflects the highest common QCIF frame rate of every participant and the rate of the video mixer board. Note that the QFPS cannot be greater than the CIF frame rate announced by the presenter. QFPS field is blank for proprietary modes.
lo/hi interworking	Does this conference support Low Speed/High Speed Interworking? - This field will always have a value of 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.

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In Use	Is the endpoint currently participating in the conference or in process of connecting to the conference? - y, c, e, f, n, blank. • y The endpoint is in use and is fully connected on all media in an active conference. • c The endpoint is in use and is fully connected, however the endpoint has changed the conference audio or video capability or has changed the rate of the conference because of rate adaptation. This condition requires analysis of this endpoint's capabilities and mode fields to identify which capability was reduced. • e The endpoint is in use but the endpoint had capability problems. The endpoint does not have one of the required capabilities (Vid, Bhl, MLP) to be a full participant. For MLP capabilities, see the "T120" field. This condition requires analysis of this endpoint's capabilities and mode field to identify the missing capability. • f The endpoint is in use but is not connected to all media. This indicates that the endpoint has declared every required capability (channel/video/audio/data) but is not fully connected to all conference media at this time. This endpoint may be in the process of connecting, has failed to connect, or is not a valid video source. This condition requires analysis of this endpoint's capabilities and mode fields to identify the problem. • n The endpoint was connected in a conference but has/was disconnected or attempted to connect to a conference but was unsuccessful. • blank until the first call is made from/to the endpoint
Chl	Data on the quantify and quality of channels (transfer rate)? - y, e, n, blank • y The endpoint has the required number of channels. • e The endpoint has not declared support for the correct number of channels and cannot participate fully in the conference. • n The endpoint has declared the correct number of channels, but every channel has not yet joined the conference, due to either a network or endpoint problem. • blank Audio add-on endpoints always set to blank.

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Aud	Does it have the required audio capability? - y, c, e, blank • y The endpoint has the required audio capability. Audio add-on endpoint always have the Aud field set to y once the endpoint has joined the conference. • c This endpoint is PCM only and it changed the video quality of the conference by changing the operating audio from G.728 to G.711. If the administered audio mode is auto and the administered bandwidth is 112 kbps (56 k/channel) or 128 kbps (64 k/channel), the system starts out with the highest common audio of G.728. When the administered bandwidth is greater than 128 kbps, the system starts out with the highest common bandwidth of 7 kHz. • e A PCM-only endpoint that did not have the capability of supporting the administered audio mode of G.728 (such as a data conference), or G. 278/G.711 endpoint that did not have the capability of supporting the administered audio mode of 7 kHz. Such endpoints operate with PCM audio and interwork with the current operating audio mode. • blank until the first call is made from/to the endpoint
Vid	Does it have the required video capability and is receiving video? - y, c, e, n, blank • y The endpoint has the required video capability and should be receiving video if the Chl, Aud, and Dat fields are y. • c It downgraded the conference's video quality - either from CIF to ACIF or by decreasing the frame rate. The conference video mode is set by default to CIF and if a QCIF-only endpoint joins the conference, then the entire conference is made to operate in QCIF, with the video clarity downgraded. Also, the conference frame rate is initially set to the highest frame rate that can then be reduced by any endpoint. If the conference video mode is not administered with upgrade capability, then if the video parameters for a conference have been "downgraded," they are not "upgraded" until every endpoint disconnects from the conference. • e The endpoint has not declared any video capability in its cap-set. • n Audio only, not receiving video, possibly due to an audio or data problem. • blank Audio add-on endpoints always blank.
Mlp	The state of the Control Link to the ESM (T.120 stack terminator), the endpoint MLP data capability, and the state of the data connection in the T.120 stack. This field value is always blank, indicating that the Data Mode for the conference is none, and therefore, the data does not apply, or the endpoint has never joined the conference.
Gx	Does it have the Still Frame Graphics capability? - y, e, blank • y This endpoint has this capability. • e This endpoint did not declare this capability. The conference retains the still frame graphics capability when a non-compliant endpoint joins the conference. • blank This endpoint has never joined the conference.

Rate Adpt	Rate adaptation/interworking indicator - 5, 6, y, c, e, n, blank. Values of 5 and 6 apply only to low-speed/high-speed Interworking. Every other value applies only to rate adaptation. • 5 A 56-kbps (low-speed) endpoint has joined a high-speed (128-kbps or above) conference. This endpoint is connected with audio-only capability, but is neither a valid video source nor destination. • 6 A 64-kbps (low-speed) endpoint has joined a high-speed (128-kbps or above) conference. This endpoint is connected with audio-only capability, but is neither a valid video source nor destination. • y This endpoint has joined a conference at the administered rate of 64 kbps, but (because rate adaptation to 56 kbps was triggered by another endpoint) this endpoint has successfully rate-adapted to 56 kbps. • c The administered bandwidth of a conference is 64 kbps and this endpoint has joined the conference at 56 kbps. The first 56-kbps endpoint that joins a 64-kbps rate-adaptable conference triggers rate adaptation (see Join Time below). • n A 64-kbps conference was triggered to rate adapt to 56 kbps by some other endpoint. This endpoint joined the conference at the bandwidth of 64 kbps, but encountered problems in rate adapting down to 56 kbps. This endpoint may have the audio and may be receiving video, but is not a valid video source. • blank Rate adaptation was never triggered by any endpoints. So, if an endpoint is in use and connected, then it joined the conference at the administered bandwidth.
Bond Mode	BONDing Mode - blank. This field is blank for calls that are not related to bonding.
Ts	Indication of the talking state of the endpoint - t, m, M, S, blank. • t At the time the command was invoked, voice energy (talking) was detected from the endpoint. • m At the time the command was invoked, the endpoint indicated to the MCU that it was muted. It is possible that an endpoint may mute, but not send any indication to the MCU. In this situation the MCU does not display a mute indication. • M At the time the command was invoked, the endpoint's audio was muted via UDD/CRCS Agent interface. M displays when both the endpoint and the UCC/CRCS Agent have muted the endpoint audio. • S At the time the command was invoked, the endpoint's audio was muted because of solo-audio state set by UCC/CRCS Agent. While in solo-audio state, new endpoints joining the conference are automatically muted. • blank At the time the command was invoked voice energy (talking) was not being detected from the endpoint.

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Vs

- **a** This value applies only to quad-screen conferences. *a indicates that an endpoint is part of the current mixed image and is fixed in one of the quadrants via administration. A value of *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.
- **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 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.

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- **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 (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----- Trunk Video	Aud/Esm	Sum Grp	Software
1:									
2:									
3:									
4:									
5:									
6:									

Field Descriptions (status conference, Page 2)

Sum Grp	The VD audio Level 1 (L1) and Level 2 (L2) summer group parts for each assigned group (1–4). Summer parts are assigned only for conferences with over 6 participants. When a conference operates at an audio mode of 7 kHz (administered audio mode is 7 kHz, or auto with the bandwidth greater than 128 kbps), the system allocates “primary” and “secondary” L1 and L2 summer parts. These primary and secondary parts are allocated as adjacent port slots on the same board. Status conference only displays the primary summer ports. The secondary summer ports are always one slot higher than the displayed primary summer port.
Join Time	Time (in 24-hour notation) when the channel joined the conference.
Drop Time	Time (in 24-hour notation) when the channel disconnected. If the first channel has a drop time, then it means that the endpoint is idle. If there is a drop time without a join time, it means that the call disconnected without being joined to the conference.
Drop Reason	The reason for the channel’s disconnect: • 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.

1 of 3

Drop Reason (cont'd)	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. • 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.

2 of 3

Drop Reason

(cont'd)

- **Resource** MCU could not provide resources (VC or MMI) when the call arrived or lost the resources during the call. This could be due to them being Out of Service, busied out by craft, or being used by system maintenance. This drop reason could also occur if the DS1/MMI cable is disconnected. If there was a resource problem when the call arrived, it would get reorder (fast busy) and not get disconnected by the MCU.
- **Password** Either the user entered the wrong password or the audio add-on user did not enter it within the specified time period. Note that the audio add-on user gets one attempt to enter a correct password and inter-digit timing for each digit (that is, about 10 seconds between digits).
- **System** An MCU restart (level 2) disconnected every call.
- **UIN - Inv** The user entered an invalid User Identification Number.
- **Unknown** The system could not determine the cause of the disconnect.
- **Wrong - num** This dial-out drop reason occurs when the MCU detects the wrong destination number was dialed. This drop reason is detected by MCU CPTR resources SDN cause value. See "Dial-out" for details.
- **UCC** controller intentionally disconnected the endpoint.

AC Num	Administered Connection Number - from 1 to 128. AC number can be used to further diagnose a problem by combining status conference information with status administered connection and data stored in the error and alarm logs.
Ports Trunk	The data endpoint that the channel is using.
Ports Video	The MMI port for the channel.
Ports Aud	If the endpoint type is not "UCC," the VC audio encoder port (which is always paired to a decoder port) for the channel (only the first channel). Because only one audio encoder port is allocated per endpoint, it appears together with the ESM data port in the endpoint's channel 1 port slot position of the Port Aud/ESM column. For "UCC" endpoint type, the channel 1 port slot position displays the allocated Call Classifier resource.
Ports ESM	The Expansion Service Module MMI data port. This field is always blank.
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 (status conference endpoint)

status conference x endpoint y

The first screen appears when **status conference x endpoint y** is entered and the specified conference is found. Data relevant for each endpoint displays in 6 pages. If the endpoint-ID of **all** is used, every possible endpoint associated with the specified conference appears.

Page 1 - Status Conference Endpoint

status conference endpoint
page 1 of 6

STATUS OF CONFERENCE ____
ENDPOINT: ____
Status: ____

Ext: ____ Type: ____
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----				Rate	Bond			
Use	BAS	Chl	Aud	Vid	Mlp	Gx	Adpt	Mode	Ts	Vs
-	-	-	-	-	-	-	-	-	-	-

Field Descriptions

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	Blank
Dial Out #2	Blank

1 of 6

In Use	Is the endpoint currently participating in the conference or in process of connecting to the conference? – y, c, e, f, n, blank. • y – The endpoint is in use and is fully connected on all media in an active conference. • c – The endpoint is in use and is fully connected, however the endpoint has changed the conference audio or video capability or has changed the rate of the conference because of rate adaptation. This condition requires analysis of this endpoint's capabilities and mode fields to identify which capability was reduced. • e – The endpoint is in use but the endpoint had capability problems. The endpoint does not have one of the required capabilities (Vid, Bhl, MLP) to be a full participant. For MLP capabilities, see the "T120" field. This condition requires analysis of this endpoint's capabilities and mode field to identify the missing capability. • f – The endpoint is in use but is not connected to all media. This indicates that the endpoint has declared every required capability (channel/video/audio/data) but is not fully connected to all conference media at this time. This endpoint may be in the process of connecting, has failed to connect, or is not a valid video source. This condition requires analysis of this endpoint's capabilities and mode fields to identify the problem. • n – The endpoint was connected in a conference but has/was disconnected or attempted to connect to a conference but was unsuccessful. • blank – The field is blank until the first call is made from/to the endpoint.
Enh BAS	EnhancedBasic Service Flag – n, y y – The endpoint supports the enhanced BAS commands/caps; n – The endpoint only supports the basic BAS commands/caps.
Chl	Data on the quantify and quality of channels (transfer rate)? – y, e, n, blank • y – The endpoint has the required number of channels. • e – The endpoint has not declared support for the correct number of channels and cannot participate fully in the conference. • n – The endpoint has declared the correct number of channels, but every channel has not yet joined the conference, due to either a network or endpoint problem. • blank – Audio add-on endpoints always have the Chl field set to blank.

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Aud	Does it have the required audio capability? – y, c, e, blank • y – The endpoint has the required audio capability. Audio add-on endpoint always have the Aud field set to y once the endpoint has joined the conference. • c – This endpoint is PCM only, and it changed the video quality of the conference by changing the operating audio from G.728 to G.711. If the administered audio mode is auto and the administered bandwidth is 112 kbps (56 k/channel) or 128 kbps (64 k/channel), the system starts out with the highest common audio of G.728. When the administered bandwidth is greater than 128 kbps, the system starts out with the highest common bandwidth of 7 kHz. • e – A PCM-only endpoint that did not have the capability of supporting the administered audio mode of G.728 (such as a data conference) • G – 278/G.711 endpoint that did not have the capability of supporting the administered audio mode of 7 kHz. Such endpoints operate with PCM audio and interwork with the current operating audio mode. • blank – The field is blank until the first call is made from/to the endpoint.
Vid	Does it have the required video capability and is receiving video? – y, c, e, n, blank • y – The endpoint has the required video capability and should be receiving video if the Chl, Aud, and Dat fields are y. • c – It downgraded the conference's video quality - either from CIF to ACIF or by decreasing the frame rate. The conference video mode is set by default to CIF and if a QCIF-only endpoint joins the conference, then the entire conference is made to operate in QCIF, with the video clarity downgraded. Also, the conference frame rate is initially set to the highest frame rate that can then be reduced by any endpoint. If the conference video mode is not administered with upgrade capability, then if the video parameters for a conference have been "downgraded," they are not "upgraded" until every endpoint disconnects from the conference. • e – The endpoint has not declared any video capability in its cap-set. • n – Audio only, not receiving video, possibly due to an audio or data problem. • blank – Audio add-on endpoint always have the Vid field set to blank.
Mlp	The state of the Control Link to the ESM (T.120 stack terminator), the endpoint MLP data capability, and the state of the data connection in the T.120 stack. This field value is always blank, indicating that the Data Mode for the conference is none, and therefore, the data does not apply, or the endpoint has never joined the conference.
Gx	Does it have the Still Frame Graphics capability? – y, e, blank • 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.

Rate Adpt	Rate adaptation/Interworking indicator – 5, 6, y, c, e, n, blank. Values of 5 and 6 apply only to low-/high-speed interworking. Every other value applies only to rate adaptation. • 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.
Ts	Indication of the talking state of the endpoint – t, m, M, S, blank. • t – At the time the command was invoked, voice energy (talking) was detected from the endpoint. • m – At the time the command was invoked, the endpoint indicated to the MCU that it was muted. It is possible that an endpoint may mute, but not send any indication to the MCU. In this situation the MCU does not display a mute indication. • M – At the time the command was invoked, the endpoint's audio was muted via UDD/CRCS Agent interface. M displays when both the endpoint and the UCC/CRCS Agent have muted the endpoint audio. • S – At the time the command was invoked, the endpoint's audio was muted because of solo-audio state set by UCC/CRCS Agent. While in solo-audio state, new endpoints joining the conference are automatically muted. • blank – At the time the command was invoked voice energy (talking) was not being detected from the endpoint.

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Vs Indication of the MCU video state for this endpoint – a, b, B, c, i, r, R, s, S, u, U, v, blank.

For quad-screen conferences an * is affixed before the value of Vs to indicate that an endpoint is currently part of the mixed image. A # may be affixed before the value of Vs to indicate that an endpoint was fixed to be in the mixed image (via administration or UCC/CRCS Agent), but instead, a Fill video is shown in its place. This occurs when the video of an endpoint that is fixed in a quadrant cannot be used as a video source because the endpoint is currently not joined to the conference, has suppressed its video, or has invalid video to be the video source. Notice that at most four endpoints have an * or # affixed before the Vs field value.

For quad-screen conference in VAS mode, the mixed image is broadcast to every endpoint. For quad-screen conference in presentation mode, the mixed image is return video to the presenter.

- 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 value of *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.
- 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.

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Vs
(cont'd.)

- 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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Output Page 2 - Endpoint Channel Information

This section only describes the fields that are specific to the endpoint-level command output.

The following screen shows page 2 **status conference x endpoint y**

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:	_____	_____	_____	---	---	_____	_____	_____	_____	---	_____

Field Descriptions

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.

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

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Drop Reason
(cont'd)

- **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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Drop Reason

(cont'd)

- **Resource MCU** could not provide resources (VC or MMI) when the call arrived or lost the resources during the call. This could be due to them being Out of Service, busied out by craft, or being used by system maintenance. This drop reason could also occur if the DS1/MMI cable is disconnected. If there was a resource problem when the call arrived, it would get reorder (fast busy) and not get disconnected by the MCU.
- **Password** Either the user entered the wrong password or the audio add-on user did not enter it within the specified time period. Note that the audio add-on user gets one attempt to enter a correct password and inter-digit timing for each digit (that is, about 10 seconds between digits).
- **System** An MCU restart (level 2) disconnected every call.
- **UIN-Inv** The user entered an invalid User Identification Number.
- **Unknown**—The system could not determine the cause of the disconnect.
- **Wrong-num** This dial-out drop reason occurs when the MCU detects the wrong destination number was dialed. This drop reason is detected by MCU CPTR resources SDN cause value. See “Dial-out” for details.
- **UCC** controller intentionally disconnected the endpoint.

Drop Code	A detail code complementing the Drop Reason (see above). Additional bonding related information may be obtained from supplementary BONDing Drop Codes described above.
AC Num	Administered Connection Number - from 1 to 128. AC number can be used to further diagnose a problem by combining status conference information with status administered connection and data stored in the error and alarm logs.
Ports Trunk	The data endpoint that the channel is using.
Ports Video	The MMI port for the channel.
Ports Aud	If the endpoint type is not “UCC,” the VC audio encoder port (which is always paired to a decoder port) for the channel (only the first channel). Because only one audio encoder port is allocated per endpoint, it appears together with the ESM data port in the endpoint’s channel 1 port slot position of the Port Aud/ESM column. For “UCC” endpoint type, the channel 1 port slot position displays the allocated Call Classifier resource.
Ports ESM	The Expansion Service Module MMI data port. This field is always blank.
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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Output Page 3 - Conference Information

This section only describes the fields that are specific to the **endpoint-level** command output.

The following screen shows page 3 of **status conference x endpoint y**.

status conference endpoint

page 3 of 6

CONFERENCE INFO: Broadcaster: xx (See-Me)

Return Vid: xx

----- MODE COMMANDS/COMMUNICATION MODES -----					EPT MISC		----- FAW --	
CMD	STAT	CONF	EPT-IN	EPT-OUT	-----	I 0	CH1	CH2
-----					-----	-----	-----	-----
XRATE:	y	384	384	384	AIM:	y n	A-OUT:	y n
AUDIO:	n	G728	neutral	G728	VIS	y n	A-IN:	y n
56/64:	y	derestrict	derestrict	derestrict	MIS:	n	M-FRM:	y n
VIDEO:	n	H.261	H.261	H.261	MCV:	n	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		

Conference Info

This information applies mostly to full-screen conferences. The **Broadcaster** field also applies to quad-screen presentation mode conferences.

Broadcaster	Indicates the endpoint number that is the current broadcaster. The Broadcaster can be qualified with the following keywords: 1. Broadcast—indicates a broadcast mode broadcaster. 2. Chair—indicates that the broadcaster was designated by the chair. 3. See-Me—indicates that the broadcaster is a result of MCV request from an endpoint. 4. Presenter—indicates a presentation mode broadcaster. 5. Rollcall—indicates that the broadcaster was designated by the UCC via the Rollcall feature. 6. UCC—indicates that the broadcaster was designated by the UCC. 7. VAS—indicates a Voice Activated Switching broadcaster.
Next Broadcaster	Indicates the endpoint number that is selected to be the next broadcaster.

1 of 2

Return Vid	Indicates the endpoint number that is the current return video. The return video can be qualified with the following keywords: 1. blank—indicates that 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. 2. Autoscan—indicates auto scan return video. This is true only when conference mode is broadcast with auto scan. 3. Browse —indicates that the return video was designated by the UCC via the Browse feature. 4. VAS—indicates a Voice Activated Switching return video.
Next Return Vid	Indicates the endpoint number that is selected to be the next return video.

2 of 2

Mode Commands/Communication Modes

This is a collection of both incoming and outgoing bandwidth allocations for the multiplex. The Incoming data is the rate at which the MCU thinks the endpoint is communicating based on the Bit-rate Allocation Signal (BAS) codes received from the endpoint/codec and the capabilities the MCU has declared. The Outgoing data is the rate from the MCU toward the endpoint. The following are column definitions for this section of page 3.

CONF	The desired conference operating mode. This may be different from the endpoint in (EPT - IN) or endpoint out (EPT - OUT) modes.
CMD	labels for the various types of mode commands
STAT	indicates if the conference and the incoming modes are compatible. A value of y indicates mode compatibility. n indicates that the modes are not compatible.
EPT - IN	defines the communication modes coming in from an endpoint.
EPT - OUT	defines the communication modes sent out to an endpoint based on the number of channels connected and the capabilities of the endpoint.

The following are field definitions for the Mode Commands/Communication Modes section of Page 3.

XRATE One of the supported rates in [Supported Transfer Rates](#) on page 364.

Table 5: 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

1 of 2

Table 5: Supported Transfer Rates

XRATE	Bandwidth of the Call
512	512 kbps
768	768 kbps
1472	1472 kbps
1536	1536 kbps ⁴
1920	1920 kbps

2 of 2

XRATE XRATE may be 64 when the endpoint is just dialing in, or in the event of problems. It implies that only one B channel is being used.

AUDIO Audio rate (kbps bandwidth) of the conference and the endpoint must be the same but not necessarily their mode. When the audio rate of the conference and the endpoint are different the endpoint's audio will interwork but the endpoint's video will be invalid. MCU may or may not send video to such an endpoint.

[Table 6, Audio Mode Configurations](#), on page 365 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.'

Table 6: Audio Mode Configurations

Admin Mode (HC Audio)	All Support HC Audio	Xfer Rate	Facility BW	Conf Mode	Expected Endpoint Mode
auto (G.728)	yes	<=128 k	–	G.728	G.728
auto (G.728)	no	<=128 k	64k	G.711-A-56k	G.711-A-56k B.711-Mu-56k
auto (G.728)	no	<=128 k	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
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

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Table 6: Audio Mode Configurations *Continued*

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

2 of 2

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

Endpoint Miscellaneous (EPT MISC) Information

EPT MISC contains miscellaneous states and counters for an endpoint. The flags can be a value of **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. Value of 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). Value of y on output (O) indicates that every other endpoint in the conference has muted its audio (have sent AIM to MCU). MCU in turn tells this endpoint (by sending it AIM) that there is no audio output from MCU. A value of n on output indicates that there is an audio path open across the bridge.
VIS	Video Indicate Suppressed. Value of y on input (I) indicates that this endpoint has suppressed its video (indicated video is muted). Value of 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. A value of n indicates that the endpoint is viewed as capable of being a valid source (although not necessarily at this moment). A value of n is the correct state to be in for video. A value of 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.
MCV	Multipoint Command Visualize. This command is only sent as input (I) from an endpoint. A value of y indicates that an endpoint has requested to become a broadcaster. This is used during Still Frame Graphics and to force "presentation" mode.
TALK	A value of 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	Value of 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. A value of 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 only to single screen conferences. A value of 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. A value of y indicates that the endpoint is watching the video of the broadcast source.
RTLS	Applies only to single screen conferences. A value of y indicates that the endpoint is watching the video of the return source.
HYPR	A value of 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.

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DMUTE	A value of 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. This field always has a value of n, indicating QCIF format.
H.261	A value of y indicates video framing loss. The H.261 counter indicates the number of times the framing was lost.

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Frame Alignment Word (FAW) Information

The FAW section of page 3 provides the channel Frame Alignment Word information for the communication paths labeled CHL 1 and 2. For 2B calls, both CHL 1 and 2 are used. For 1-channel calls (at rates of 112, 128, 168, 196, 224, 256, 280, 320, 336, 384, 768, 1472, 1536, and 1920 kbps), only CHL 1 is used. A-OUT, A-IN, M-FRM, MFA, and MFN are flags with values of **y** or n.

A-OUT	MCU has endpoint framing.
A-IN	Endpoint has MCU framing
M-FRM	Multichannel frame alignment is present (alignment of both channels in 2B).
MFA	Multiframe alignment word is present (required in 2B call).
MFN	Multiframe numbering is present (required in 2B call).
FAS	Frame Alignment Signal (FAS) channel number (1 or 2). This number should match the column header.
MCUFAL	MCU Frame Alignment Loss (MCUFAL). A counter of the number of times the MCU indicates to the endpoint that it has lost endpoint FAW or multichannel synchronization (M-FRM). The MCU a-bit toggles when the MCU gains or loses endpoint multichannel synchronization. This counter starts with an initial value of 0x00, increments to 0xff, then wraps around to 0x01. The MCUFAL count is also shown in the Fr Err field on page 2.
FEFAL	Far End Frame Alignment Loss (FEFAL). A counter of the number of changes the MCU detects in the endpoint’s a-bit (A-OUT). The endpoint a-bit toggles when an endpoint gains or loses MCU framing. This counter starts with an initial value of 0x00, increments to 0xff, then wraps around to 0x01.

Output Page 4 - Endpoint Capability Information

This section only describes the fields that are specific to the **endpoint-level** command output. The following screen shows page 4 of **status conference x endpoint y**.

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

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.

VID Provides information about the type of video and frame rate the endpoint supports.

vfmt - does not display if the endpoint has no video capability. Every value is blank if there is an active call or if this is an audio-only endpoint. Otherwise, values for this field include:

- **FCIF** for full CIF
- **QCIF** for quarter CIF. Support of CIF implies support of QCIF. In general, for larger screens, CIF displays sharper resolution video, which ZCIF is blocked, but may run at higher frame rates and less clear. The differences are less observable on very small displays.
- **cfps** and **qfps** are the maximum frame rate (frames/second) at which the endpoint can receive video for CIF and QCIF operating modes. CIF frame-rate values are 30 fps, 15 fps, 10 fps, and 7.4 fps. If the endpoint does not support CIF (that is, the vfmt field is QCIF), the cfps value should be blank.
- **da_sfg** indicates support for H.261 Still Frame Graphics transfers.
- **H.CTX**, **H.CTX+** and **SG4** are proprietary video format capabilities.
- **SG4_sfg** indicates support for SG4 Still Frame Graphics

1 of 2

MISC	The <code>restrict</code> field is 1 way for an endpoint to indicate that it is operating at 56 kbps per channel, the other way is the 56/64 command mode with a value of <code>restrict</code>. An endpoint on a 56-kbps conference must send one or both of the 2 indications that they are operating at 56 kbps before they become a video source in a 56-kbps conference. If they signal either way that they are operating at 56 kbps in a 64- or 384-kbps conference, they are an audio-only source, but the MCU continues to send Selected Communication Mode (SCM) toward them when possible. A MISC capability of <code>derestrict</code> and a 56/64 command of <code>derestrict</code> together indicate that an endpoint is operating at 64 kbps. If either is <code>restrict</code>, the conference operates at 56 kbps. Other field values include: • <code>dcomp</code> indicates support for WorldWorx PCS data compliance. • <code>mbe</code> 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. • <code>cic</code> (Chair Indicate Capability) indicates chair control capability.
XR	Transfer rate capabilities are statement about the speeds at which the endpoint can operate over the current connection and operate a Px64 Multiplex. For a 384-kbps (H0) call, the endpoint sends its capabilities to indicate 384-kbps support, which displays as 384. On a 336-kbps call, the endpoint must signal 384-kbps support. If an endpoint does not indicate support for 384 kbps on a 384-/336-kbps conference, the MCU provides Audio Only Communications Mode (ACOM). For a 2B conference, the MCU sets the rate to 2x64, expecting the endpoints to do likewise (64x2 is displayed; if this is not displayed, there is no 64x2 capability). Endpoints may occasionally take 2x64 (or the current channel rate: 384, 768, 1472, 1536) out of their capability. This is Mode 0 forcing and is part of normal procedures. The MCU will provide AOCM if the endpoint does not signal support matching the configuration of the conference.
AUD	The audio fields are statements of the audio protocols that the endpoint supports. 711m and 711a are PCM (G.711) and support Mu and A-law, respectively, and at least one is required of endpoints. The <code>g728</code> 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 <code>g722_48</code> field indicates endpoint support for G.722 (7 kHz) at both 48 and 56 kbps. Therefore, <code>g722_48</code> indicates that the endpoint supports G.722 audio at both rates. The <code>g722_64</code> field indicates endpoint support for G.722 at 64 kbps in an unframed (not supported by the MCU) mode.
LSD	The LSD fields indicate the capabilities for Low Speed Data conferencing.
HSD	The HSD fields indicate the capabilities for High speed Data conferencing.
MLP	The MLP fields indicate the capabilities for Multi Layer Protocol Data capabilities.
HMLP	The HMLP fields indicate the conference's capability for High Speed MLP data conferencing.

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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

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

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

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

Field Descriptions

Dial-Out Number	The actual numbers that are dialed out by the administered connections for each channel in the call. Note that the dial Out #1 and #2 on page 1 of the forms display the DCP endpoint number. This is particularly useful with bonding dial-out calls.
Connection State	Indicates the current call state of the AC. The following are connection states associated with dial-out ACs: • enabled—is transient in nature and indicates that an AC is about to enter the attempting to connect state. • disabled—this may mean one of three things: — The AC has reached an administered retry threshold, and all retries are stopped. Verify this by checking the error log and checking whether an error type of 9 is logged against the AC. — The AC was in a connected state and the far end disconnected. — The initial channel call has not yet connected. No dial out call attempt is made for the additional channel(s) until the initial channel has reached a connected state. • not scheduled—is transient in nature and indicates that an AC is about to enter the “attempting to connect” state. • waiting to retry—means that the AC is inactive (sleeping) and waiting for the retry timer to expire. Once the timer expires, the AC sends a dial out call and enters the “attempting to connect” state. ACs in this state indicate that the dial out call has failed at least once. • attempting to connect—means that the AC is active on a call, but the call has not yet connected. • connected—means that the call associated with the AC has been answered and join cut-thru to the conference.
Retry Count	Indicates how many 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	Shows an 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 7, Status AC - Failure Cause Values , on page 372 lists all possible failure cause values displayed by this field and its associated description. The Failure Cause value is logged in the error log and appears with display errors . Err Type appears as a decimal.

Table 7: Status AC - Failure Cause Values

Failure Cause (hexadecimal)	Description
0x00 (0t0)	N/A
0x01 (0t1)	Incorrect destination address
0x02 (0t2)	Reason unknown
0x06 (0t6)	Reason unknown

1 of 2

Table 7: Status AC - Failure Cause Values

Failure Cause (hexadecimal)	Description
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
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

status data-module

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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

Output

```
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:
```

Field Descriptions

Data Ext/Stn Ext for Stn DM	The data module extension number. For DTDMs, the connected station extension is shown.

Port/Channel Number	The location of the port connected to the data module. For data channels, the channel number is shown.

Service State	The operational state of the data-module: in-service/idle The data module is connected but idle. in-service/active The data module is connected and in use. out-of-service The data module has been removed from service. disconnected The data module no longer appears to be present

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

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.

status dlq cti-link

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

The status dlq cti-link command displays the status of all CTI links administered on the DLG Administration page of the IP Services form. These links provide connectivity to ASAI adjuncts, which are connected to an Ethernet LAN. On [S8100](#), the LAN interface is provided by the TN2314 Ethernet interface and/or by the C-LAN (Control LAN) TN799 circuit pack.

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

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status dlq cti-link	link number	link number (1–8)	init inads craft cust		

Output

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

```
status dlq cti-link

DLG CTI-LINK STATUS

CTI   Client      Vers  Mnt  Local Node      Service      Msgs  Msgs
Lnk   Name/Link      Rcvd      Busy      State      Sent      Rcvd
  1   Dorothy/1          4      yes  procr      down        0        0
  2   Lion/3           no  clan1  established 14       14
  5   Tinman/7          no              down        9        9
```

Field Descriptions

CTI Link	The CTI link number (1 – 8) as administered on the DLG Administration page of the IP Services form.
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	The service state of the CTI link • 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 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.

status dlg interface

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
status dlg interface			init inads craft cust		

Output

The following display shows a typical result for **status dlq interface**.

```
status dlq interface
```

```
DLG INTERFACE STATUS
```

Local Node	Enabled?	Number of Connections	Status
procr	yes	1	listening

Field Descriptions

Local Node	The name of the DLG interface as administered on the IP Services form.
Enabled	Shows if the interface is enabled (as set in the Enabled field on the IP Services form).
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 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.

status environment

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
status environment	cabinet carrier	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.

Output

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

Field descriptions

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) Client	The inlet air flow temperature (Fahrenheit is on the left and Celsius is on the right)
Temp (F/C) Ex	The outlet air flow temperature (Fahrenheit is on the left and Celsius is on the right)
Hot Spot	The status of the temperature at the power supply's hot spot: • ok • wn (warning) • sh (shutdown)
Voltage	The three voltages monitored are: • +5VDC Primary logic control • -5VDC Logic support • -48VDC Telephone support (Talk Battery)
Fan Ctrl	The speed at which the fans are running. Fan voltage is: • udr = under 12VDC • mid = +12VDC • hgh = +14VDC • ovr = above +14
Fan Alm	A fan alarm occurs when one or more fans fail.
Ring Voltage Stat	Status of the ringer on the associated power supply. See Table 8, Ring Status and Ring Control states , on page 380 for the valid states for Ring Stat and Ring Ctrl: • ok • over (overloaded) • shrt (shorted) • fault • cmd (commanded off)

Ring Voltage Ctrl	Indicates if the associated power supply is providing ringing voltage for the G650. Only one power supply can provide ringing voltage to the carrier. See Table 8, Ring Status and Ring Control states, on page 380 for the valid states for Ring Ctrl and Ring Stat: • actv (active) • stby (standby) • dsbl (disabled, see Ring Set field values) • off (due to short or internal failure)
Ring Voltage Set	Indicates the ringing voltage frequency. The ringing voltage frequency is set via a physical switch on the 655A power supply: • 20 Hz (North American Ringer Signal) • 25 Hz (European/International Ringer Signal) • off (The ringer switch on the power supply is set to <i>off</i>.)
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. • AC (Alternating Current) • DC (Direct Current)

Table 8: 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.

status firmware download

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
status firmware download	last	last completed or aborted download schedule			

Output

This screen is display only.

```

status firmware download                                     Page 1 of 1

                                STATUS FIRMWARE DOWNLOAD

Source Board Location: 01C02
Firmware Image File Name: usd1v22r1
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      Target      Target      Target      Target
Location St Location St Location St Location St Location St
1. 01C04 C 11. _____ 21. _____ 31. _____ 41. _____
2. 01C06 C 12. _____ 22. _____ 32. _____ 42. _____
3. 01C08 P 13. _____ 23. _____ 33. _____ 43. _____
4. _____ 14. _____ 24. _____ 34. _____ 44. _____
5. _____ 15. _____ 25. _____ 35. _____ 45. _____
6. _____ 16. _____ 26. _____ 36. _____ 46. _____
7. _____ 17. _____ 27. _____ 37. _____ 47. _____
8. _____ 18. _____ 28. _____ 38. _____ 48. _____
9. _____ 19. _____ 29. _____ 39. _____ 49. _____
10. _____ 20. _____ 30. _____ 40. _____ 50. _____
20
21
Status: Pending(P) Completed(C) Failed(F) Aborted (A)

```

Field Descriptions

The field values are the same as for **change firmware download**, except:

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 firmware download to see the error code. See Troubleshooting procedures for each error code in Test Firmware Download (#1413) on page 1064 in <i>Maintenance Alarms Reference</i> , 555-245-102.

For more field descriptions, see [change firmware download](#) on page 94.

status hardware-group

S8700

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 hardware-group](#) on page 465) initiated, and the state (active/canceled/complete) of the hardware group test.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status hardware-group			init inads craft cust rcust bcms browse	none	none

Output

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

Field Descriptions

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 hardware-group on page 465) 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 .

1 of 2

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.
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).

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status health

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

status health [print]

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	print		init inads craft cust nms browse	none	none.

Output for status health on S8700 MC

The following example shows the output for **status health** on an S8700 MC.

```
status health

PNC: Simplex                      ALARMS:Maj:  2  Min:  1  Wrn: 38
Pwr: comm Sync:primary Logins:4  BUSYOUT:Trk:  0  Stn:  0  Oth:  0

Cab EmTr  Maj Min Wrn PNC                      Cab EmTr  Maj Min Wrn PNC
 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|  2 up/up
 5 n.a.    0|  0|  4 up
 6 n.a.    0|  0|  0 up

9:51 THU MAR 14 2002

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

Output for status health for S8700 IP

If Cabinet Layout on the Cabinet screen is **rack-mount-stack**, the output looks like the following. **S8700 IP** does not use PN maintenance boards or emergency transfer; so the EmTr field is **NoEqp**.

```
status health

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                      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

14:33 TUE MAR 12 2002
```

Output for status health on S8100.

The following example shows the output for **status health** on **S8100**.

```
status health

ALARM SUMMARY
  Major: 0
  Minor: 2
  Warning: 0

BUSY-OUT SUMMARY
  Trunks: 0
  Stations: 0
  Others: 0

CRITICAL SYSTEM STATUS
Active SPE: A/auto
Duplicated? SPE:n
Time Source: primary
# Logins: 3

CABINET STATUS

Emerg Alarms
Cab Trans Mj Mn Wn PNC
1 auto- 0| 2| 2 up
2 n.a. 0| 0| 0 dn
3 n.a. 0| 0| 0 dn

9:33 WED APR 28 1998
```

Field Descriptions

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
Active PNC	S8700 - A-PNC or B-PNC – The currently active PNC or B-PNC Locked - The PNC is locked via the set pnc command. Auto - The system is controlling selection of the active PNC.

1 of 3

Active SPE	S8100 - A or B - the active processor complex. When the active processor complex is locked on-line with lock switching on DUPINT, the “lock” option appears. Otherwise, “auto” appears.
Duplicated	S8100 - Duplication status of the SPE component.
SPE Power	S8100 - Power source for the processor complex. (commercial) When commercial power is unavailable, battery backup is in use and is indicated with “backup”.
Time Source	S8100 - The current timing source. Values vary according to timing sources selected. external = Stratum-3 hardware internal = an internal source, such as a tone clock. Administer Primary and secondary timing sources for Stratum-4 primary = the primary administered source is in use secondary = the administered secondary source is in use local = neither the primary or secondary sources are in use.
Sync Source	The current source of timing signals used for system synchronization For systems with a Stratum 3 clock: External – Normal operating condition Internal – Another source besides the Stratum 3 clock, such as a Tone-Clock circuit (or circuit pack on S8700 MC), is providing the master timing signal. For systems with Stratum 4 timing: Primary – The primary administered timing source Secondary – The secondary administered timing source Local – Another source besides the administered ones, such as a Tone-Clock circuit (or circuit pack on S8700 MC), is providing the master timing signal.
# Logins	Number of current users
Cab	Cabinet number Use list cabinet to relate cabinet numbers to port network numbers.

2 of 3

Emerg Trans	The current setting of the switches on the PN's Maintenance circuit packs that control Emergency Transfer. See EMG-XFER (Emergency Transfer) on page 899 in the Maintenance Alarms Reference, 555-245-102. The following states are available: Auto- Emergency Transfer is under system control and is not currently activated (normal operating state). Auto+ Emergency Transfer is under system control and is in effect. On Emergency Transfer has been manually activated. This setting should only be in effect during an emergency. Off Emergency Transfer is manually prevented from occurring. This setting should only be in effect when a technician is on site. na The setting of the switch in this PN is not available to the switch. The Expansion Archangel Link (EAL) may be down. S8700 IP: NoEqp means that the cabinet has no equipment to support the Emerg Trans feature.
Maj, Min, Wrn	Number of major, minor or warning alarms associated with the cabinet An asterisk indicates that the number exceeds 99 or 999.
PNC	Current Port Network Connectivity (PNC) status for each of the port networks in the cabinet When multiple port networks exist within a cabinet, Carriers A, B, and C are listed first and separated from Carriers D and E by a slash (e.g., up/up). up Both the Expansion Archangel Link (EAL) and the Indirect Neighbor Link (INL, if applicable) are available. dn Both EAL and INL (if applicable) are not available. ne (Near End) The EAL is available but the INL is not available. fe (Far End) The INL is available but the EAL is not available. S8700 MC cabinets only: up/up: 2 port networks share a cabinet, the first up is associated with the PN contained in A, B, and C carriers, and the 2nd up in D and E. up/up/up: 3 port networks share a cabinet, the first is in carrier A, the second in B and C, and the third in D and E. up/up/up/up: 4 port networks share a cabinet, the first is in carrier A, the second in B, the third in C, and the fourth in D and E. up/up/up/up/up: 5 (the maximum allowed) port networks share a cabinet, the first is in A, the 2nd in B, the 3rd in C, the 4th in D, and the 5th in E. Use list cabinet to see the carriers and port networks in each cabinet in the system.
Time of Day	Current system time

status ip-board

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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
status ip-board	CCccss	board location			

Field Descriptions

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.

1 of 2

Field Name	Output type		MIB data	Description
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.
ICMP Destination unreachable messages	Counter	Long	icmpInDestUnreac hs	The number of ICMP Destination Unreachable messages received.
ICMP Redirect message	Counter	Long	icmpInRedirects	The number of ICMP Redirect messages received

2 of 2

status ip-network-region

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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. The status of each connection is determined by the last background maintenance **ping** test that was run and is reflected in a matrix.

Each cell in the matrix represents a network region. If ne7u8i work region x is connected to another network region, then the other region's cell contains one of the following:

(blank)	Connection not administered.
F	Failed (based on the last background maintenance ping test result).
1 to 7	Passed (represents the codec set to be used between the two regions and implies that inter-network region connectivity exists between these two regions).

To troubleshoot broken network connectivity, also see [display failed-ip-network-region](#) on page 163, [test failed-ip-network-region](#) on page 462, and [change ip-network-region](#) on page 97, or see *Administration for Network Connectivity for Avaya Communication Manager, 555-233-504*.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status ip network-region	x y	locations of the networked regions			

Output for status ip-network-region

The following example shows the output for **ip-network-region 2**. In this example, the “F” in the second row (33-64), third column (33+3-1=35) indicates that the connection between network regions 2 and 35 failed the **ping** test. If you ran **ip-network-region 35**, the failure would show up there, too, but in the first row, second column.

```
status ip-network-region 2

                                Inter Network Region Connection Management

Region                                (Group Of 32)
      1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2
001-032      1
033-064      F
065-096
097-128
129-160
161-192
193-224
225-250
```

Field descriptions

- Not administered.
- f Failed (based on background maintenance ping test result).
- 1 - 7 Passed (represents the preferred codec to be used between the two regions and implied meaning that inter-network region connectivity exists between these two regions).

status isdn-testcall

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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

This command displays the progress of an outgoing ISDN-PRI test call on the trunk specified. 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	Default	Feature Interaction
status isdn- testcall	group number	Administered trunk group number	init inads craft	none	see below
	group member number	Administered group number (trunk within a trunk group)			
		Example: status isdn-testcall 78/1 print			

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.

Output

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								
Port	Bit Error Rate	Number Of Bits	Block Error Rate	Number Of Blocks	Start Time	Duration Specified	Duration Of Test	Reason Of Termination
1B1401	0EE0	4EE7	0EE0	6EE2	25/12:36	120	100	in progress

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 clear isdn-testcall . 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.

status journal-link

S8700

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.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status journal-link	wakeup-log	Status the printer that handles automatic wakeup events, emergency access events and scheduled reports			
	pms-log	Status the printer that handles housekeeping events while the PMS is down			
	print	See Common Command Parameters on page 34. Examples: status journal-link wakeup-log status journal-link pms-log print			

Output

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
```

Field Descriptions

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.

status link

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 (includes the time of the last reset, the last hour start time, and end time for the error counter statistics).
- 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	Feature Interaction
status link	<i>n</i>	The number of the administered link Example: status link 1	init inads craft		

Output

The following example shows page 1 of the output for **status link**.

Link/Port Status screen (Page 1)

status link 1	LINK/PORT STATUS	Page 1 of 4
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		

Field Descriptions, Page 1

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)
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

Error Counters screen (Page 2)

```

status link 1
Page 2 of 4

ERROR COUNTERS

Reset Time: 03/08 17:38
Last Hour Start Time:
End Time:

Incoming Received:      Unicast Pkts      Multicast Pkts      Octets
  Since Reset          5649003          1401469          689650382
  Last Hour

Incoming Dropped:      Error Pkts        Discard Pkts
  Since Reset           0                83
  Last Hour

Outgoing Transmitted:  Unicast Pkts      Multicast Pkts      Octets
  Since Reset          4181883          773          492543628
  Last Hour

Outgoing Dropped:      Error Pkts        Discard Pkts
  Since Reset           0                0
  Last Hour

CRC Check: 0
Collision Count: 0

```

Field Descriptions (Page 2)

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.

Processor Channel Status screen (Page 3)

The example below is for processor channels (page 3 of the screen). Information about administered hop channels displays on page 4 of the screen.

The processor or hop channel status information can take either 1 or 2 pages on this screen, depending on the number of links being reported and their condition.

status link 1	PROCESSOR CHANNEL STATUS	Page 3 of 4
UP: 001,004		

Field Descriptions (Page 3)

NOTE:

A dash (–) or a colon (:) between numbers indicates all numbers including and between the indicated numbers.

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	

status logins

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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**.

Output

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

status media-gateways

status media-gateways [x | next]

Use **status media-gateways** to see the alarm status of the administered **G700** 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	Default	Feature Interaction
status media-gateways	x	number of the media gateway			
	next	next available number			

Output

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|up  16 0| 0| 0|up   24 0| 0| 0|up   32 0| 0| 0|up   40 0| 0| 0|up

```

Field Descriptions for status media-gateways

ALARM SUMMARY	Current number of alarms (Major/Minor/Warning) for all G700s administered
BUSY-OUT SUMMARY	Current number of trunks/stations in a busy-out state for all G700s administered
H.248 LINK SUMMARY	Current number of H.248 links that are down and up for all G700s administered
GATEWAY STATUS	Number of major alarms, minor alarms, and warnings that exist on each of the G700s administered
GATEWAY STATUS	Status of the H.248 link, either up or down (dn) on each of the G700s administered

status packet-interface

S8700 | S8500 | S8300 | S8100

status packet-interface [*cabinet #*] [print]

Use **status packet-interface** to see the status of the processor in **S8100**, and the IPSIs in the **S8500** and **S8700**.

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.

This command 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	Feature Interaction
status packet-interface			init inads craft	none	none

Output

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:	-	-

Field Descriptions

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.

status periodic-scheduled

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 the [change system-parameters maintenance](#) on page 107 command.

Output

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 MAINTENANCE	System Critical	100%	n	00:00:08	4.0/hr
	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 MAINTENANCE	System Critical	100%	n	00:00:26	1.0/day
	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					

Field Descriptions

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 Reference</i> , 555-245-102 for more information.
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 month/day/hour:minute:second format. For scheduled maintenance, this time reflects when the pre-scheduled maintenance began.

status pms-link

S8700

status pms-link [print]

Use **status pms-link** to see the status of the property management system interface link.

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 79.

Output

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
```

Field Description

status pnc

[S8700 MC](#)

status pnc [print]

Use **status pnc** on [S8700 MC](#) 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.

Output

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
                                SNLocations: 01E                    SNLocations: 03E

```

Field Descriptions

Many fields on this screen are blank when the PNC is not duplicated

Duplicated	Whether or not the system has a duplicated PNC (critical-reliability option).
Software Locked	On a system with duplicated PNC, whether the PNCs are locked by means of the set pnc lock or reset pnc override-and-lock . When this field is y , spontaneous or demand PNC interchanges are not possible. To enable interchanges, use set pnc unlock .
Standby Busied	On a system with duplicated PNC, whether or not the standby PNC is busied out with busy pnc . Interchanges are prevented when the standby is busied out.
Direct Connect	Whether the system uses direct-connect connectivity or a center stage switch.
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 04f Health vector) guarantees that the standby’s call setup matches completely that of the active.

1 of 3

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

Inter PN Index, Inter SN Index	The Inter-PN and Inter-SN Indexes screen the state-of-health vector, which is used to track and compare the states of health of both PNCs. The fields making up the indexes are 2-digit numbers separated by periods (.), with each field representing a different class of faults. The fault class fields are arranged in order of decreasing importance from left to right. In other words, each field in the index supersedes the following fields in determining which PNC is healthiest. The Inter-PN Index contains six fields (aa.bb.cc.dd.ee.ff), and the Inter-SN Index has two (gg.hh). The Inter-PN Index reports faults in connectivity between port networks and supersedes the Inter-SN Index, which reports faults in connectivity between switch nodes. (The Inter-SN Index is only meaningful for systems with a center stage switch having 2 switch nodes, each of which is duplicated). The meaning of each fault class field is given in Table 9, Fault Class Field Descriptions (S8700), on page 408. A zero entry indicates that there are no such faults reported. Higher numbers indicate increasing number of faults. All zeros indicates a perfect state of health. Unless the PNCs are locked, the active PNC's state of health should always be equal to or better than the standby's. (Otherwise, the system would perform a spontaneous interchange.) After a PNC-related alarm is cleared, the system performs a partial refresh of the standby PNC. The corresponding fault class field is not updated to reflect the improved state of health until the refresh is done. The state-of-health indexes will not agree with the current alarm status during this period.
Major Alarms, Minor Alarms, Warning Alarms	The number of major, minor, or warning alarms logged against DS1C-BD, SNI-BD, SNC-BD, EXP-INTF, FIBER-LK, DS1C-FAC, SNC-LINK, SN-CONF, SNC-REF, SYNCH, and SNI-PEER on the indicated PNC.
SN Locations	The locations of all switch nodes comprising the indicated PNC.

3 of 3

Table 9: Fault Class Field Descriptions (S8700)

Inter PN Index Fields (<i>aa.bb.cc.dd.ee.ff</i>)				
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
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 list fiber-link .)	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

status port-network

S8700

status port-network [print]

Use **status port-network** to see information about the status of a specified port network.

Output

The following example shows the output for the **status port-network** for **S8700 MC**.

Since the PKT-INTs are moved to the IPSIs in PNs for **S8700 MC**, this command shows the location and state of the links, whether active or failed, and the total.

status port-network										
PORT NETWORK STATUS										
PN	Major Alarms	Minor Alarms	Warning Alarms	Carrier Locs	PN Active	Control Standby	FIBER-LINK		Endpoints	Mode
1	1	0	282	01A 01B	up	up	1	A-PNC	01A01-01E04	active
							1	B-PNC	01B02-03E04	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	0	0		

Field Descriptions

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.
PNC Status	Active and standby (if PNC is duplicated) PNC (Port Network Connectivity) status for the specified port network appears. 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. A status of “up” denotes that the EAL and INL are both available. A status of “down” appears when the EAL and INL are both unavailable. When the EAL is available but the INL is unavailable, a status of “near-end” appears. A status of “far-end” appears when the INL is available but the EAL is unavailable. When the far-end EAL is unavailable, Tone-Clock, TDM-bus, and packet-bus information are blank.
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”).

1 of 4

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.
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 circuit pack (IPSI or Tone-Clock pack on S8700 MC) 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 when 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 when Control Links are down.

2 of 4

System Clock	Shows which IPSI (or Tone-Clock circuit pack on S8700 MC) supplies the system clock for that port network by displaying the mode of the Tone-Clock. active means that the Tone-Clock supplies the system clock. 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 the system clock, but is not currently active down means the Tone-Clock is not operational Blank when Control Links are down.
System Tones	Shows which IPSI (or Tone-Clock circuit pack on S8700 MC) 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: • 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 or n). When Control Links are down, this field is blank.

3 of 4

Minor Alarms	Whether minor alarms are logged against the packet bus that is being displayed (y or 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.

4 of 4

status pri-endpoint

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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). Examples: status pri-endpoint 25012 status pri-endpoint 77868	init inads craft nms browse		

Output

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

Command Successfully Completed

```

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.

Field descriptions

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.

status processor-channel

S8100

status processor-channel *channel#* [print]

Use **status processor-channel** to see the status of the specified processor channel and the values of its various counters. A processor channel is one of 128 logical channels associated with an SCI link. Each processor channel terminates in the switch processing element with a session.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status processor- channel	<i>channel#</i>	The processor channel to status			
	print	See Common Command Parameters on page 34.			

Output

The following display is typical for **status processor-channel 1** with processor channels carried over link type of Ethernet or PPP (using the TCP/IP protocol).

```
status processor-channels 1
```

PROCESSOR CHANNEL STATUS

```
Channel Number: 1
Channel Status: Administered but not connected
Link Number: 3
Link Type: ethernet
Message Buffer Number: 0
Reset Count: 0
Retransmission Count: 0
```

Field Descriptions for status processor-channel

Channel Number	The processor channel number 1-64.
Channel Status	State the channel is in: 1. Channel is not administered. 2. Channel is administered but not used. 3. Channel is in a state entering “wait session accept” (WSA). 4. Channel is in a state waiting for a “session accept” message from the far end. 5. Channel is waiting for action. 6. Channel is in data transfer state (channel up and running). 7. Channel is in resynchronization state. 8. Channel is waiting for acknowledge of disconnect message. 9. ISDN-PRI Channel is currently down. 10. ISDN-PRI Channel is in the data transfer state (that is, channel is up and running).
Reset Count	Number of times reset has been issued for this channel
Message Buffer Number	Number of message buffers currently used for communication on this channel.
Link Number	Physical SCI link (1-8) associated with the channel
Retransmission Count	Number of times that message retransmission has occurred

status processor-ip-interface

S8100

Use **status processor-ip-interface** to see displays the status of the processor interface for **S8100**.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status link processor-ip-interface					

Output

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
```

status psa

[S8700](#)

See [status tti on page 444](#).

status remote-access

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command displays information about remote access calls.

Output

```
status remote-access

REMOTE ACCESS STATUS
Remote Access Status: not-administered
Date/Time Modified:  /  /  :

Barrier Code    Date Modified    Expiration Date    No. of Calls    Status    Date/Time Expired    Cause
                  Calls Used
1:              /  /            /  /              /  /              /  /            :
2:              /  /            /  /              /  /              /  /            :
3:              /  /            /  /              /  /              /  /            :
4:              /  /            /  /              /  /              /  /            :
5:              /  /            /  /              /  /              /  /            :
6:              /  /            /  /              /  /              /  /            :
7:              /  /            /  /              /  /              /  /            :
8:              /  /            /  /              /  /              /  /            :
9:              /  /            /  /              /  /              /  /            :
10:             /  /            /  /              /  /              /  /            :
```


Field descriptions

Remote Access Status	Indicates if the feature is enabled or not.
Barrier Code	
Date Modified	
Expiration Date	
No. of Calls	
Calls Used	
Status	
Date/Time Expired	
Cause	Reason for the expiration

status remote-office

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command displays information about a specified remote-office.

Output for status remote office

```
status remote-office
                                REMOTE OFFICE 10
                                Node Name: romaxn01
                                Network Region: 1
                                Location: 1
                                IP Address: 135.9 .72 .52
Trunk Signaling Groups:
Stations Registered:
```

Field descriptions

Node Name
IP Address
Network Region
Location
Trunk Signaling Groups
Stations Registered

status signaling-group

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
status signaling-group	group#	The administered number associated with each signaling group.			
	print	See Common Command Parameters on page 34.			

Output

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:
```

Field Descriptions

Group ID	An administered number that identifies the signaling group.
Type	See ISDN-SGR (ISDN-PRI Signaling Group) on page 1154 in the Maintenance Alarms Reference, 555-245-102 for more information about group types. facility associated signaling: Every member is carried on a single DS1-associated facility. Facility-associated signaling groups support only simplex D-channel configurations. non-facility associated signaling: Members can include trunks on several different associated DS1 facilities. An explicit identifier specifies members of the DS1 trunk group across its ISDN-PRI link. A single D channel on one facility provides signaling for every member. With D-channel backup, a second D channel is assigned to assume control of signaling if the primary D channel fails.
Group State	in-service: one of the D-channels signaling for the group is in service out-of-service: neither D-channel in the group is in service If there is no D-channel backup and the primary D-channel is out-of-service, the signaling group is in an out-of-service state.
Link	Link transporting the D-channel
Port	Address of the port transporting either the primary or secondary D-channel
Level 3 State	State of the primary or secondary D-channels: in-service: a D-channel is “in-service” when it is in the multiple-frame-established state at layer 2 carrying normal call-control signaling at layer 3. standby: a D-channel is “standby” when it is in the multiple-frame-established state at layer 2, and not carrying any layer 3 call-control messages on logical link 0,0. wait: a D-channel is in a “wait” state when an attempt has been made by one side of the interface to establish layer 3 peer communications as part of the process of going to the “in-service” state, which is transitional in nature. Only when the ISDN SERVICE message is sent over the interface, and the far end of the interface responds with a SERVICE ACKnowledge message is the D-channel placed in the “in-service” state. maintenance-busy: a D-channel is “maintenance-busy” when it is not in the multiple-frame-established state at layer 2. This state is entered automatically when an active D-channel is declared failed. A D-channel that has been placed in the “maintenance-busy” state may be placed in the “out-of-service” state without system technician intervention. manual-out-of-service: a D-channel is “manual-out-of-service” when system technician intervention has caused it to be placed in the TEI-assigned state at layer 2. System Technician intervention is required to retrieve a D-channel from this state. out-of-service: a D-channel is “out-of-service” when it is in the TEI-assigned state at layer 2, but is periodically requested by layer 3 to attempt to establish the link. no-link: no link is administered for the D-channel

status sp-link

S8700

status sp-link [print]

Use **status sp-link** to see a summary of the operational state of the system printer link.

Output

The following display shows a typical result when **status sp-link** is entered.

```
status sp-link

                                SYSTEM PRINTER LINK STATUS

Link State: down
Number of Retries: 0
Maintenance Busy? no
```

Field Descriptions

Link State	The operational state of the link: - 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 has not been administered for the system printer on the features-related system parameters screen.
Number of Retries	The number of times the switch has tried to establish the link since a request to set it up has been received. This field appears only when the link is down. The maximum value displayed is 999.
Maintenance Busy	Whether maintenance testing is being performed on the system printer link. A blank appears if the system printer link is not administered.

status station

S8700 | S8500 | S8300 | S8100 | 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	Feature Interaction
status station	extension print	Station extension (per dial plan) See Common Command Parameters on page 34. Examples: status station 30001 status station 83277 print	init inads craft cust browse		

Output for status station on S8700 MC

The following example shows the output for **status station 30001** on an **S8700 MC**.

```

status station 30001
page 1 of x

GENERAL STATUS
Administered Type: 6408D+      Service State: No hardware assigned
Connected Type: N/A           Download Status: pending
Extension: 30001              SAC Activated? no
Port: X                       User Cntrl Restr: none
Call Parked? no              Group Cntrl Restr: none
Ring Cut Off Act? no         CF Destination Ext:
Active Coverage Option: 1
Softphone Signaling:

EC 500 Status:                Off-PBX Service State:
Message Waiting:
Connected Ports:

ACD STATUS
Grp/Mod Grp/Mod Grp/Mod Grp/Mod Grp/Mod
/ / / / /
/ / / / /
/ / / / /
/ / / / /
On ACD Call? no Occupancy: 0.0 Room Status: non-guest room On ACD Call? no

HOSPITALITY STATUS
Awaken at:
User DND: not activated
Group DND: not activated

```

Field Descriptions for page 1, status station for S8700 MC

Administered Type	Administered station type
Connected Type	The type of phone connected to this port
Extension	Station or attendant extension
Port	Port location: cabinet-carrier-slot-circuit
Call Parked	Whether the station has a call parked (y/n)
Ring Cut Off Activated	Whether ring cut-off is activated (y/n)

1 of 2

Active Coverage Option	Specifies the active coverage path.
Softphone Signaling	Shows the port for the softphone
Service State	In service/on-hook, in service/off-hook, in-service/in-tsa (Terminal Self Administration), out of service, or disconnected - state of the telephone endpoint.
Download Status	Shows status of downloading the soft keys specified on the status screen.
SAC Activated	Whether send all calls is activated (y/n)
User Cntrl Restr	One or two of the following: none, total, stat-stat, outward or terminate
Group Cntrl Restr	One or two of the following: none, total, stat-stat, outward or terminate
CF Destination Ext	Call forwarding destination extension, if any
EC 500 Status	
Off-PBX Service State	
Message Waiting	Whether there is a message waiting for the station. "AUDIX", "PMS" or blank if no messages are waiting
Connected Ports	Port locations of the facilities to which the station is connected: cabinet-carrier-slot-circuit
On ACD Call	Whether the agent is on an ACD call (y/n)
Awaken at	Time that Automatic Wakeup Call is scheduled
User DND	Status of Do Not Disturb
Group DND	Status of group Do Not Disturb
Room Status	Whether a room is occupied or not (non-guest room, vacant, or occupied)

2 of 2

Page 2 status station

Page 2 status station displays the part ID of the station for status station, if available.

status station 30001

page 2 of 2

GENERAL STATUS

CONNECTED STATION INFORMATION

Part ID Number: unavailable

Serial Number: unavailable

Station Lock Active? no

Field Descriptions (Page 2)

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. 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.

Output for status station with Active IP Phone Conference Call on S8700 IP

The following example shows the output for **status station** with Active IP Phone Conference call on an **S8700 IP**. 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).

Page 1 of status station 70103 for a 3-way IP conference call.

```

status station 70103
                                Page 1 of 5

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

ACD STATUS
Grp/Mod Grp/Mod Grp/Mod Grp/Mod Grp/Mod
/ / / / /
/ / / / /
/ / / / /
/ / / / /
On ACD Call? no      Occupancy: 0.0

HOSPITALITY STATUS
Awaken at:
User DND: not activated
Group DND: not activated
Room Status: non-guest room

```

Field descriptions are the same as [Field Descriptions for page 1, status station for S8700 MC](#) on page 421.

status station, page 2, for a 3-way IP conference call

status station 70103 Page 2 of 5

GENERAL STATUS

CONNECTED STATION INFORMATION

Part ID Number: unavailable

Serial Number: unavailable

Station Lock Active? no

UNICODE DISPLAY INFORMATION

:latn

Field descriptions are the same as [Field Descriptions \(Page 2\)](#) on page 423 for **S8700 MC**.

status station, page 3, for an IP call

status station 70103 Page 3 of 5

CALL CONTROL SIGNALING

Switch IP

Port

Switch-end IP Addr:Port

Set-end IP Addr:Port

IP Signaling: 01A0317 170. 20. 20.170 :1720 170. 20. 20. 0:3244

H.245:

Node Name: gert_clan1

Network Region: 1 1

AUDIO CHANNEL

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 1

Audio Connection Type: ip-tdm

Product ID: IP_Phone

H.245 Tunneled in Q.931? does not apply

Registration Status: registered-authenticated

MAC Address: 00:60:1d:24:65:18 **Native NAT Address: 10.0.0.1**

Media Encryption:

Field Descriptions (Page 3)

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.

1 of 3

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.
xxxxxxx Audio	The type of audio active for the station. xxxxxxxx is one of these values: 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 . If the station is a telecommuter IP SoftPhone configuration with call-back audio, xxxxxxxx is set to PCM . If no audio path is present, xxxxxxxx is blank.
Audio: 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. Blank is for stations with no established audio path, or for telecommuter stations. An idle IP SoftPhone or H.323 station with an as-needed service link shows no audio port.
Audio: 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.
Audio: 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 (for Audio Channel)	Label administered for an IP address.
Network Region (for Audio Channel)	A number given to a set of IP addresses to indicate they have a common set of characteristics.
Audio Connection Type	Audio codec selected. Values may be ip-tdm, ip hairpin, ip direct, or ip-idle . If blank, audio is carried directly to service link port.

2 of 3

Product ID and Release	Identifier submitted by the endpoint during registration, and the release number of the endpoint that is provided to the gatekeeper upon registration. This field appears only for Avaya or Lucent products. Value is one of the 30 allowed product IDs administered on the customer options screen, including: IP_Phone - An IP hardphone IP_Soft - An 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	y = H.245 is contained within Q.931, and H.245 fields do not appear. Does not apply to IP SoftPhone endpoints.
Registration Status	Identifies the registration and authentication status of the IP endpoint: 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 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 pending-unregistration — the endpoint is unregistered, but critical internal data structures have not yet been updated Will always be registered-authenticated for an IP station that is able to make calls. If it is registered-not-authenticated, then station is disallowed from making or receiving calls. An unregistered IP SoftPhone cannot be identified as an IP endpoint.
MAC Address	The Media Access Control (MAC) address received from the phone when the phone registers. If the phone registers but is unable to send a MAC address, the field shows “not available”. The field is blank if the phone is not registered.
Native NAT Address	Specifies the network address translation (NAT) IP address of the endpoint when a network device provides the network address translation function for the endpoint. The network device provides the NAT address of the endpoint at the time of registration. The field is blank if the NAT address is not known.
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.

3 of 3

status station, page 4, for an IP call. This screen is only available to IP endpoints.

status station 70103		Page	4 of	5
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		
0		0		
0		0		
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				

Field Descriptions (Page 4)

Average Jitter Last Ten Seconds	The average jitter in received packets from the last ten one-second intervals.
Packet Loss per Second	The ten most recent one-second samples of the lost packet information for the requested endpoint.
Out of Order Counter	A count of the number of out-of-order packets detected during the current connection.
SSRC Change for Call	The number of SSRC changes occurring during the current connection.
Last Rx Sequence No.	Last received data packet sequence number.
Last Tx Sequence No.	Last transmitted data packet sequence number.
Worst Case this Call	Jitter: the worst-case, 1-second jitter (ms) experienced during the current connection. Packet Loss: the worst-case, 1-second packet loss experienced during the current connection.
Average this Call	Jitter: the average jitter for the current connection (the running average of all the 1-second intervals during the connection). Packet Loss: the average packet loss number for the current connection (running average of all the 1-second intervals experienced during the connection).
Current Buffer Size	The current jitter buffer size.

status station, page 5, 70103 for an IP call

This screen shows the IP media processor resources used during this conference call.

status station 70103				Page 5 of 5			
src port: S00003				src port: S00003			
CONNECTED PORTS							
		MP	HP			MP	HP
ip-start:	172. 22. 22. 8:2854			ip-start:	172. 22. 22. 8:2854		
ip-end:	172. 22. 22.233:2960 01B0905			ip-end:	172. 22. 22.233:2960 01B0905		
audio:	G.711MU e:aes ss:off pkt:20ms			audio:	G.711MU ss:off pkt:20ms		
ip-start:				ip-start:	172. 22. 22.182:2712 01B0103		
ip-end:				ip-end:	172. 22. 22.234:2224 02A0107		
audio:				audio:	G.711MU ss:off pkt:20ms		
ip-start:							
ip-end:							
audio:							
ip-start:							
ip-end:							
audio:							
dst port: 01B0824				dst port: 02A0723			

Field Descriptions (Page 5)

Read down the columns on the screen. The first column follows the path of the switch to make the first two connections on the call. The second column follows the path of the switch to conference in the third party.

src port	In each column, the src port is the port address of the statused station.
ip-start	The IP address of one end of a direct connection.
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.
e	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.
ss	Indicates whether silence suppression is active on this audio stream. on/ off
pkt	Size of 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.

status switch-node

S8700 MC

status switch-node SN# [print]

Use **status switch-node** on **S8700 MC** 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
status switch-node	SN#	Normally switch node 1 resides in the PN cabinet, and switch node 2, if present, resides in the nearest PN cabinet.		1	
	print	See Common Command Parameters on page 34.			

Output

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	

Field Descriptions

A line of information appears for each switch node carrier.

Switch Node	The switch node number, 1 or 2. If the PNC is duplicated, the A and B PNCs are reported separately.
Location	UUcSS: the physical location of the switch node carrier - A high-reliability system shows one switch node location. - A critical-reliability shows the active and standby switch node locations.
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

1 of 2

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	UUcSS: the physical location of the standby switch node Clock circuit pack no board if an SNC is administered but not inserted
Standby SNC Location	UUcSS: the physical location of the standby switch node Clock circuit pack no board if an SNC is administered but not inserted Blanks if there is no standby switch node Clock for a given switch node

2 of 2

status synchronization

[S8700](#) | [S8500](#) | [S8100](#)

status synchronization [*cab#*] [print]

cab# parameter is available on [S8700 IP](#).

Use **status synchronization** to see the current synchronization reference.

On [S8100](#), the synchronization subsystem provides error free digital communication between the switch and other PBXs, COs, or customer premise equipment. The subsystem is made up of: TDM bus clock, DS1 trunk board, maintenance and administration software resident in the SPE.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status synchronization	cab# S8700 IP only	Cabinet number	init inads craft cust browse	1	none

Output

The following example shows the output for **status synchronization** on [S8700 IP](#).

```
status synchronization
```

SYNCHRONIZATION STATUS

```

      Stratum Level: 4           Cabinet Number: 01
Maintenance Name: TONE-BD      Physical Location: 01A
Switching Capability: Enabled
Excessive Reference Switching: No
```

The following example shows the output for **status synchronization** on **S8700 IP**.

```
status synchronization
```

SYNCHRONIZATION STATUS

```
Stratum Level: 4
Maintenance Name: TONE-BD      Physical Location: 01B
Switching Capability: Enabled
Excessive Reference Switching: No
```

Field Descriptions

Stratum Level	The stratum level of the current system synchronization reference. S8700 MC: 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.
Maintenance Name	Maintenance object name of the circuit pack that is providing the current system synchronization reference. If the reference is an IPSI on S8700 , or Tone-Clock board on S8700 MC , the switch is operating in free run mode. S8700 MC: If ATM, then Switching Capability, Excessive Reference Switching, and Physical Location do not appear.
Switching Capability	Indicates whether the online reference can be switched or not. S8700 MC: Does not appear when Maintenance name is atm
Excessive Reference Switching	y/n Excessive reference switching is taking place (sync error 1793 is at threshold) S8700 MC: Does not appear when Maintenance name is atm
Cabinet Number S8700 IP	S8700 IP: Cabinet housing the current synchronization reference.
Physical Location	Current sync source location. S8700 IP: A carrier S8700 MC: Does not appear when Maintenance name is atm

status sys-link

S8700 | **S8500** | **S8300** | **S8100**

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.

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status sys-link	<i>UUCSSpp</i> <i>PCSSpp</i> 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 Command Parameters on page 34. Example: status sys-link 1e0201			

Output for status sys-link

The following display shows a typical result for **status sys-link 8a02** on **S8700 IP**.

```

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
Location      Maintenance      Alarms      Location      Maintenance      Alarms
Name
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
Location      Maintenance      Alarms      Location      Maintenance      Alarms
Name
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

```


The following example shows the output from **status sys-link 01a0516** on **S8100**.

```

status sys-link 01a0516                                Page 1 of 2
Location: 01a0516      Type/Chan: PRI      Alarms: none
Current Path: present   Faulted Path: present Last Fault: 04/30/1997 14:18
State: up

Current Hardware Path

Location      Maintenance      Alarms      Location      Maintenance      Alarms
Name
01A           PKT-INT      major
PN 01         TDM-BUS     none

```

If a faulted path exists in addition to the current path, the components making up the faulted path display on page 2 of the report:

```

status sys-link 01a0516                                Page 2 of 2
Location: 01a0516      Type/Chan: PRI      Alarms: none
Current Path: present   Faulted Path: present Last Fault: 04/30/1997 14:18
State: up

Faulted Hardware Path

Location      Maintenance      Alarms      Location      Maintenance      Alarms
Name

```

The following display shows a typical result when **status sys-link 2a0101** is entered. 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      Alarms      Location      Maintenance      Alarms
Name
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
 Current Path: present
 Faulted Path: present

Type/Chan: EAL
 State: up

Alarms: none
 Time Up: 11/12/2000 10:48
 Last Fault: 11/17/2000 11:37

Faulted Hardware Path

Location	Maintenance Name	Alarms	Location	Maintenance 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			

Field Descriptions for status sys-link

Location	The location of the port associated with the system link (cabinet-carrier-slot-circuit).
Type	The type of system link as follows: 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: none: The link is down. present: The current path displayed below is valid.
State	Whether the system link is “up” or “down.”
Time Up	The date and time that the link came up
Faulted Path	The status of the faulted path, if any: present: The path of the link has been faulted at least once. none: There is no record of the link having gone down. default: The default faulted path is being used.

1 of 2

Last Fault	The date and time at which the most recent fault occurred.
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

status system

[S8700](#) | [S8500](#) | [S8100](#)

This command displays 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	Feature Interaction
status system	cabinet	1st-cabinet: PPN Examples: status system 1st-cabinet status system all-cabinets	init inads craft cust rcust bcms browse	none	none

Output

The following example shows the output from the **status system all-cabinets** command.

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	SERVICE STATE	CONTROL CHANNEL	DEDICATED TONES	PKT	SERVICE STATE	BUS ALARMS MAJOR MINOR		BUS FAULTS	OPEN BUS 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									

Field descriptions

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: 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).
SERVICE STATE	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.

1 of 3

SYSTEM CLOCK	Shows which Tone-Clock supplies the system clock for the cabinet displayed: • 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	Shows which Tone-Clock circuit pack supplies the system tones for the cabinet being displayed. • 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	Operational state of the TDM Bus circuit pack: • in: TDM Bus installed and is in-service. • out: TDM Bus failed certain maintenance tests and has been removed from service.
CONTROL CHANNEL	Whether the control channel is on this TDM Bus (y or n)
DEDICATED TONES	Whether the dedicated tones are on this TDM Bus (y or n)
PKT	Packet Bus identifier (1). Refer to Packet Bus Maintenance descriptions for more information.
SERVICE STATE	The operational state of the Packet Buses: • 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	Whether Major alarms exist for packet bus components (y or n)
BUS ALARMS-MINOR	Whether Minor alarms exist for packet bus components (y or n)

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BUS FAULTS	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: • 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	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: • 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)
SELECT SWITCH	Emergency Transfer Switch position on the Processor(s) or the EPN maintenance circuit pack and the state of Emergency Transfer in the cabinet display: • 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 (-) displays.
SERVICE STATE	• <blank> Expansion Interface Link does not exist.
MODE	• <blank> Expansion Interface Link does not exist.
CABINET TYPE	• CMC – This is a Compact Modular Cabinet.
SPE Modes	• active: 1A SPE in a simplex system is always the active SPE.

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status trunk

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

status trunk *group#* [/ *member#*] [print]

Use **status trunk** to see information about the operational 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 depending on whether you execute **status trunk** on the near end or the far end of the trunk. If you execute **status trunk** on the near end, it correctly indicates whether or not the trunk is in a maintenance state. However, if you execute **status trunk** on the far end, it will never indicate 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.

The **monitor trunk** command shows the same information 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		
	group#/ group#	Status member number 1.	cust rcust		
	group#/ member#	Status a specific member of a trunk group.	bcms browse		
	print	See Common Command Parameters on page 34. Examples: status trunk 78 status trunk 80/2 print			

Output

The following screen shows typical results for **status trunk** on **S8700 IP**.

```
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
```

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 Maintenance Alarms Reference, 555-245-102.
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

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 shows 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.

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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
      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
```

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
      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

NETWORK STATUS

Average Jitter (ms)
Last Ten Seconds

0
0
0
0
0
0
0
0
0
0

Packet Loss per Second
Last Ten Seconds

0
0
0
0
0
0
0
0
0
0

Per Call Info
Out of Order Counter: 0
SSRC Change for Call: 0
Last Rx Sequence #: 0x1D64
Last Tx Sequence #: 0x1D1B

SUMMARY
Worst Case this Call (ms): 0
Average this Call (ms): 0
Current Buffer Size (ms): 30

Worst Case this Call: 0
Average this Call: 0

```

Field Descriptions

Average Jitter Last Ten Seconds	The average jitter in received packets from the last ten one-second intervals.
Packet Loss per Second	The ten most recent one-second samples of the lost packet information for the requested endpoint.
Out of Order Counter	A count of the number of out-of-order packets detected during the current connection.

1 of 2

SSRC Change for Call	The number of SSRC changes occurring during the current connection.
Last Rx Sequence No.	Last received data packet sequence number.
Last Tx Sequence No.	Last transmitted data packet sequence number.
Worst Case this Call	Jitter: the worst-case, 1-second jitter (ms) experienced during the current connection. Packet Loss: the worst-case, 1-second packet loss experienced during the current connection.
Average this Call	Jitter: the average jitter for the current connection (the running average of all the 1-second intervals during the connection). Packet Loss: the average packet loss number for the current connection (running average of all the 1-second intervals experienced during the connection).
Current Buffer Size	The current jitter buffer size.

2 of 2

status tsc-administered

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Default	Feature Interaction
status tsc-administered	<i>signaling-group#</i> <i>tsc-index</i> print	Administered signaling group number. TSC number in the signaling group See Common Command Parameters on page 34. Examples: status tsc-administered 1 status tsc-administered 1/2 print	init inads craft		

Output

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

Field Descriptions

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.

status tti

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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.

Use **status psa** to also see the TTI/PSA status screen. It shows that the status of PSA is dependent on the state of TTI.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
status tti	print	See Common Command Parameters on page 34.	init inads craft cust nms browse		TTI background maintenance task is activated by enabling TTI on the System-Parameters Features screen.

Output

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
```

Field Descriptions

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.
TTI State	off means that TTI is not enabled 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: - 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.

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status val-ip

S8700

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

Last Hour Start Time: mm/dd/hh:mm End Time: mm/dd/hh:mm

Incoming Received:	Octets	Datagrams	Discards	Hdr Errors
Since reset	1	0		0
Last Hour	0	327680	0	4294901760
Outgoing Transmitted:	Octets	Datagrams	Discards	No Routes
Since reset	65535	0	0	0
Last Hour	0	0	0	0
Datagrams w/o Routes	ICMP Dest Unreachables			ICMP Redirects
Since Reset	0			65535
Last Hour	0			0

test access-endpoint

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command performs hardware diagnostic tests on all port circuits that are associated with the specified access endpoint extension.

Action /Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test access-endpoint	extension	Access endpoint extension (# of digits determined by dial-plan)	init inads craft nms		none
	short	See Common Command Parameters on page 34.		Short	
	long	Examples: test access-endpoint 25012			
	repeat <i>n</i> clear	test access-endpoint 45002 sh test access-endpoint 45892 l test access-endpoint 24389 sh r 4 test access-endpoint 34899 l r 6 test access-endpoint 93483 r 2 test access-endpoint 10022 c		1	

Output

The following example shows the output for the **test access-endpoint 22502** command, 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	

Field descriptions

Port	Port address (cabinet-carrier-slot-circuit)
Maintenance Name	The name of maintenance object (wideband access endpoint = WAE-PORT; single port access endpoint = TIE-DS1)
Alt. Name	The extension number of the access endpoint

1 of 2

Test No	The test being executed
Result	Test result: Pass, Abort, Fail, No Board, Disabled
Error Code	Numeric code explaining why the release failed or aborted. Refer to the detailed list of the codes by test number for each MO.

2 of 2

test alarms

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
test alarms	auto-page failures step short long repeat # clear	see Parameters (test alarms) on page 449 Examples: test alarms test alarms step failures test alarms long clear auto-page test alarms long failures	inads init nms system technician	short repeat 1	

Description

Use **test alarms** to automatically test all of the hardware that is associated with the active alarms in the alarm log. This command provides a query screen to help the user narrow the selection of alarmed objects. Once the screen is filled out, the user presses ENTER and the hardware associated with the selected alarm log entries is tested. 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** will only test each physical object once.

Parameters (test alarms)

auto-page	This option provides the ability to 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; instead a new screen is provided after the current screen fills up. If the auto-page option is not specified, the SAT screen will not be refreshed once it is filled with test results and testing will stop until the user enters the “PAGE” key to continue or the “CANCEL” key to halt the testing.
failures	This requests that only the failures be displayed on the screen. All passes will not be displayed on the output screen. Hardware failures, aborts, conflicts, and PN-down failures appear.
step	This option will allow the user to step to the next or previous alarm and not have the current alarm tested. When this option is specified, the user is presented with the alarm information and prompted for a keypress. The user may enter CANCEL to abort the command, ENTER to test the currently displayed alarm, NEXT ALARM (function key) to move to the next alarm, PREV ALARM (function key) to move to the previous alarm without testing the currently displayed alarm. If this option is given, then the NEXT ALARM (function key) or PREV ALARM (function key) may be pressed 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 alarms appears, and the PREV ALARM is pressed, then the last alarm appears. Also, if the last alarm is currently displayed, and the NEXT ALARM is requested, then the first alarm will be shown. When this option is given the only way to terminate this command is to press CANCEL.
short	Enter short to execute a series of nondestructive diagnostic tests.

1 of 2

long	This will execute a more comprehensive and longer version of the diagnostic tests. This may involve both destructive and nondestructive tests.
repeat #	The # specifies how many times each test in the sequence is to be repeated. # may be any integer between 1 and 100.
clear	This option causes the test sequence (short or long) to repeat until the alarm is cleared or a single test in the sequence fails. The long clear option forces a clear of all alarms if no errors are encountered during testing. The short clear option only clears alarms pertinent to tests in the short sequence.



WARNING:

Executing a clear with short option, may not clear all alarms even if all tests pass.



WARNING:

Since the “clear long” options clear all counters if tests pass, it is possible for firmware counters to be cleared even when a problem exists. In some cases customer service might degrade since calls may be routed over defective equipment.

2 of 2

Options form

After entering the **test alarms** command, 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 )
  Cabinet: __
  Port Network: __
  Board Number: ____
  Port: _____
  Category: _____
  Extension: _____
  Trunk ( group/member ): __/__
```

Field descriptions (Hardware Test Alarm Query)

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

Alarm Types	The type of alarm or combination of alarms to be tested, specified by y or n in the alarm type fields.
Interval	Test alarms for records for the last hour (h), last day (d), last week (w) or all (a).
From	Test alarm associated with records from the time specified by mm/dd/hh/mm, where mm month, dd is the day, hh is the hour and mm is the minute. If no “from” date is entered, then no checking is done. This will give the user all the alarms active since a month prior to the current time.
To	Test alarms associated with records 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 which is active after the from date will be selected.
Equipment Type	The technician can choose between five different equipment types. If there is no input to any of these fields, the system will default to all the equipment. The user can select one of the following fields: • Cabinet: This allows the technician to test all alarms associated with a particular cabinet. Alarms for a cabinet are referenced by a number ranging from 1 to 3 which is assigned during cabinet administration. • Port Network: This allows the technician to test all alarms associated with a particular port network. Alarms for a port network are referenced by a number ranging from 1 to 3. • Board Number: This allows the technician to choose all alarms associated with a particular circuit pack for testing. Alarms for a circuit pack are referenced by circuit pack location (cabinet-carrier-slot). If the cabinet number is omitted, the system will default to 1. • Port: This allows the technician to choose all alarms associated with a particular port on a circuit pack for testing. Alarms for a port circuit are referenced by port location (cabinet-carrier-slot-circuit). If the cabinet number is omitted, the system will default to 1. • Category: Alarms for a particular equipment category. • Extension: Alarms associated with an extension number. • Trunk (group/member): The technician can choose to test every alarm associated with a particular trunk group or trunk-group member. The group identifier should be entered to test every alarm associated with a trunk group (XX/__). The group identifier and member identifier should both be entered to test every alarm associated with a specific trunk-group member (XX/XX).

The following example shows the 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.

press CANCEL to quit -- press NEXT PAGE to continue

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.

The following output fields are for the ALARM ENTRY section.

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 logical name of the maintenance object which has been alarmed.
On Board	Whether the fault detected is on the associated circuit pack, or an off board element connected to the circuit pack.
Alt Name	Terminal extension numbers or trunk-group numbers.
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.

The following fields appear for the test results:

Port	The port address (cabinet-carrier-slot-circuit) of the maintenance object that is being tested.
Maintenance Name	The type of maintenance object that is being tested.
Alt. Name	The alternate means of identifying the maintenance object. This field contains the extension when the object is a station, and it contains xxx/yyy when the object is a trunk, where xxx is the trunk group number and yyy is the member number. It contains P/xxx when the object is a private CO line, where xxx is the private CO line group number.
Test No	The actual test that is being executed.
Result	An indicator as to whether the test failed, passed, aborted or no hardware was available (no board). If this field has conflict, this means that another user was testing this hardware. If this field has epn-down it means that the epn is inaccessible at this time.
Error Code	A numerical description of why the test failed or was aborted.

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				
01C03	UDS1-BD			145	NO BOARD				
01C03	UDS1-BD			146	NO BOARD				
Testing completed for this object.									

test analog-testcall

S8700

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 the **list testcalls** command.

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.

ATMS, the operation of this command, and the measurement reports are described in Automatic Transmission Measurement System (ATMS) in [Automatic Transmission Measurement System](#) on page 398 of *Maintenance Procedures, 555-245-103*.

test board

S8700

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.

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

For **S8100**, **test board 01A02** tests all of the components associated with the processor circuit pack except for environmental components and system links, which require [test environment](#) on page 461 and [test sys-link on page 482](#). The processor components are tested in the following order:

See *Maintenance Alarms Reference, 555-245-102* for more information on each test.

- [PR-MAINT](#)
- [SW-CTL \(Switch Control\)](#)
- [PKT-INT \(Packet Interface\)](#)
- [TRANS-STO \(Translation Storage\)](#)
- [PR-TN-BD \(TN2314 Processor/Tone-Clock\)](#)

- [TDM-CLK \(TDM Bus Clock\)](#)
- [TONE-PT \(Tone Generator\)](#)
- [PR-SSP \(Processor Board - Scalable Speech Processor\)](#)
- [PR-ADX \(Processor Board - AUDIX Port\)](#)

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test board	location	Physical location of the board	init		none
	short	PCSS	inads	short	
	long	See Common Input Parameters on page 32.	craft		
	repeat <i>n</i>		nms	1	
	clear	Examples: test board 01a01 test board 01a02 test board 01a03 test board 01a05 test board 01a10			

For more information, see [Common Command Output Screens](#) on page 35.

test cdr-link

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 the description for [status cdr-link](#) on page 338.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test cdr-link	primary	test the primary link	inti	primary	
	secondary	test the secondary link	inads		
	short		craft	short	
	long				
	repeat#				
	clear				
	schedule	See Common Command Parameters on page 34.			

For more information, see [Common Command Output Screens](#) on page 35.

test cti-link

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command tests the specified CTI link.

For more information on the CTI link, see the description for [status dlg cti-link](#) on page 375.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test cti-link	link number	See Common Command Parameters on page 34.	init inads craft	short	none
	short				
	long				
	repeat				
	clear			1	

test customer-alarm

[S8700 MC](#) | [S8500](#) | [S8300](#) | [S8100](#) | [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	Feature Interaction
test customer-alarm	location	Extension of the data module or data channel to be tested, per dial-plan	init	1a	none
	short	See Common Command Parameters on page 34. Examples: test customer-alarm test customer-alarm 02 r 2 test customer-alarm 01b r 25 test customer-alarm 2a test customer-alarm 2a sh test customer-alarm 3 c	inads	1	
	long		craft		
	repeat <i>n</i>		dadmin		
	clear		switch		
			circuit pack		
			maintenance		
			permissions		

test data-module

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
test data-module	extension	Extension of the data module to be tested (per dial-plan)	init inads craft cust nms	short 1	none
	short				
	long	Examples:			
	repeat <i>n</i>	test data-module 30000 I			
	clear	test data-module 30000 test data-module 32000 sh r 2 test data-module 33000 I r 25 test data-module 30000 c			

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
test ds1-facility	UUCSSf	The location of the DS1 Converter circuit pack plus a letter (a to d) corresponding to the four facilities connected to the circuit pack.			
	short long				
	external loopback	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 827 of Maintenance Alarms Reference, 555-245-102 and DS1-BD (DS1 Interface Circuit Pack) on page 758 of Maintenance Alarms Reference, 555-245-102.			
	repeat#	See Common Command Parameters on page 34.			
	schedule	Examples: test ds1-facility 04a01d test ds1-facility 03a01a sh c			

test ds1-loop

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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, this command is used 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>	See Parameters for test ds1-loop on page 459. 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	system technician inads init super-user logins with Maintain Switch Circuit Packs permissions	ds1/ csu-loopback-test	

Description

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

location	A location 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 number-of-bits in the loop-up code as well as the actual bit-pattern (in hexadecimal). The test aborts if the busyout 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

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.

test eda-external-device-alm

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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:

For [S8700 IP](#), if the cabinet type is rack-mount-stack, an error message appears. [S8700 IP](#) does not support the MAINT MO.

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.	init inads craft	1	
	physical-location	See Parameters for test eda-external-device-alm on page 461.			
	repeat <i>repeat#</i>	<i>UUcSSpp</i>			
	clear	See Common Command Parameters on page 34.			
	schedule	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-arm

physical location	For an administered external device alarm analog line port, the physical location represents the physical position of the port to be tested. Since the “maintenance board” alarm connections connect to control carrier boards that are in unnumbered slots, the standard port format cannot be used to designate these alarm connections. The special ports UUmajor and UUminor are used designate the major or minor maintenance board alarm connection for cabinet UU. The special locations UUmajor and UUminor 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.

test environment

S8700 | 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 the **S8700** 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
test environment	UU short long repeat# clear schedule	cabinet location See Common Command Parameters on page 34.	init super-user inads craft dadmin switch circuit pack maintenance permissions		

In this test, there are 6 maintenance objects involved on **S8700 IP** servers, and 10 maintenance objects involved on **S8700 MC** servers.

AC-POWER	CABINET
CARR-POW S8700 MC	DC-POWER S8700 MC
EMG-XFER S8700 MC	POWER
RING-GEN	
CUST-ALARM S8700 MC The CUST-ALARM MO is part of the environment functionality but it is not tested using test maintenance . See test customer-alarm on page 456	
RMV-GEN S8700 IP - appears when the rack mount cabinet is used	
EXT-DEV - appears when the External Device Alarm Admin field is n on the change system-parameters customer-options screen.	

test failed-ip-network-region

S8700 | **S8500** | **S8300** | **S8100**

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 163 and [change ip-network-region](#) on page 97.

Output

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	

Field Descriptions

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	Maintenance Object name (NR-CONN (Network-Region Connect))
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 Reference, 555-245-102</i>
Error Code	ping test error code

test fiber-link

S8700 MC

Use **test fiber-link** on **S8700 MC** 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).

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test fiber-link	link#	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			
	a-pnc	On critical-reliability systems (duplicated PNC) this identifier is used to distinguish between the two fibers of a duplicated fiber pair.			
	b-pnc				
	short	For details, see Common Command Parameters on page 34.			
	long				
	repeat	Examples: Critical-reliability system: test fiber-link 1 a-pnc schedule test fiber-link 03 b-pnc sh r 3			
	repeat#				
	clear				
	schedule				

Output

S8700 MC: 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.

test firmware download

S8700

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 Firmware Download \(#1413\)](#) on page 1064 in the *Maintenance Alarms Reference*, 555-245-102 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 1. Open a browser window on your computer and go to <http://www.avaya.com/>.
- 2 2. Select **Support**.
- 3 3. Select **Software and Firmware Downloads**.

test hardware-group

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Default	Feature Interaction
test hardware -group	system carrier UUC cabinet UU port- network PN# pnc a-pnc b-pnc board UUCSS 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 461). See Common Command Parameters on page 34. Examples: test hardware-group system test hardware-group port-network 11 test hardware-group pnc a-pnc test hardware-group board 01c07			see Feature Interactions for test hardware-group on page 466

Feature Interactions for test hardware-group

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.

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.

Form Input

The following is a typical input form for **test hardware-group**.

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

Field Descriptions

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
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]
		TN2312A P	IPSI

Output

When the test 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** on **S8700 IP**.

```
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
```

test inads-link

S8100

This command attempts to make a call over the inads port on the maintenance board to verify the INADS alarm notification process. In the default settings, the system test the link to the first OSS telephone number. If there is an alarm pending to be reported or the call is in progress or up, then the test aborts. If the alarm origination to the OSS telephone number to be tested is disabled, then the test generates an informative error and the test continues. The test waits 2 minutes before dialing the call to allow the remote maintenance technician to logoff, thus freeing the line. A *local* SAT user entering the **test inads-link** command does not need to log off for the system to place the call, but the two-minute delay still exists.

Once the call is answered by INADS, the system sends a message with a test alarm type. INADS acknowledges receipt of the message and creates a trouble ticket. The trouble ticket is closed immediately and has a "INADS LINK TEST" message entered in the description field. If an alarm is raised while the test call is up, the system does not send an alarm message over the existing link. The normal retry mechanism is followed, which means an attempt to make a call to INADS to report the error takes place 7 minutes later. An INADS trouble ticket is created only if the connection is successfully established and a message is sent to the system acknowledging that INADS received the system message.

The **Maintain Process Circuit Packs** field must be set to **yes** on the inads and technician permission forms. This will provide permissions to execute the **test inads-link** command. This field can be changed by executing a **change permission login** command.

No alarms are raised on the system and attendant alarm and acknowledgment lamp states are not changed as a result of the **test inads-link** command. The test does not run during periodic or scheduled maintenance.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test inads-link	1	First OSS telephone number	init inads craft nms	1st OSS number	none
	2	Second OSS telephone number Examples: test inads-link test inads-link 1 test inads-link 2			

Output

Command successfully completed	Test passed
Command failed	Link was up, there was an active alarm that the switch needs to report, or there was a problem with the call. An entry is made in the error log describing why the inads-link test failed.

test ipserver-interface

S8700

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			

Output

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	

test isdn-testcall

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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 \(DS1 ISDN Trunk\)](#) on page 1170 in the Maintenance Alarms Reference, 555-245-102.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test isdn-testcall	group#	Specify the trunk over which to originate the test call.			
	member#				
	minutes	Specify the duration of the test call in minutes from 1 to 120. The duration defaults to 8.4 or 9.6 seconds.			
	num-minutes	See Common Command Parameters on page 34.			
	schedule	Example: test isdn-testcall 78/2 minutes 10			

Output

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.

test journal-printer

S8700

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	Default	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 long				
	repeat-number				
	clear schedule	See Common Command Parameters on page 34.			

Output

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. Busyout 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.

test led

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

test led [**all** | **cabinet UU** | **port-network PN#** | **switch-node SN#** | **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.

test license

[S8700](#)

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	Default	Feature Interaction
test license	short long	On an S8700 media server, short and long run the same test function, even though the test numbers show up differently in the results. See Common Command Parameters on page 34.	init inads craft dadmin Customer superuser login if the Processor and System MSP feature is enabled (display system-parameters customer-options), and the customer superuser login is administered on the Permissions screen		

test link

[S8700](#)

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.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test link	<i>link#</i>	Each link is identified by a number (1-16) assigned on the Communication-Interface Links screen. Display communication-interface links shows the location and identification of each link.			
	short long repeat <i>repeat#</i> clear schedule	See Common Command Parameters on page 34.			

test maintenance

S8700 MC

test maintenance [*C*] [short | long] [*repeat#* | clear] [schedule]

Use **test maintenance** on **S8700 MC** 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, causing a local login via the Maintenance board to drop.

The optional parameter *C* specifies a cabinet. The cabinet number defaults to 1.

Output

The following display shows a typical result for **test maintenance 2** on **S8700 MC**.

test maintenance 2			TEST RESULTS			
Port	Maintenance Name	Alt.	Name	Test No.	Result	Error Code
02A	MAINT			106	PASS	
02A	MAINT			229	PASS	
02A	MAINT			303	PASS	
02A	MAINT			854	PASS	
02A	MAINT			337	PASS	

test media gateway

G700

test media gateway [x |]

Use **test media gateway** from the **G700** Media Gateway Primary Server to run an H.248 link audit and an H.248 context audit. Both tests run successfully and no error codes are associated with the tests.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test media gateway	x	number assigned to the media gateway			

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.

test modem-pool

S8700 | S8500 | S8100

This command 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)	init inads craft	short	none
	member number short long repeat n clear schedule	See Common Command Parameters on page 34. Examples: test modem-pool 1 test modem-pool 1 schedule test modem-pool 1/3 l r 2 test modem-pool 1/3 l r 2 schedule test modem-pool 2 r 2 test modem-pool 2 l		1	

test packet-interface

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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](#), **test packet-interface** tests the IPSI circuit packs.
- On [S8100](#), **test packet-interface** tests the processor board.

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 296](#) and [status packet-interface on page 400](#).

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test packet-interface	<i>Uc</i> <i>short</i> <i>long</i> <i>repeat#</i> <i>clear</i> <i>schedule</i>	Specify the cabinet number with the IPSI board you want to test, and the carrier. See Common Command Parameters on page 34.			

Field Descriptions

Port	A port network number (1 – 44).
Maintenance Name	The name of maintenance object being tested.
Alt. Name	Not applicable.
Test No	The test being executed.
Result	Test result: Pass, Abort, Fail, No Board, Disabled, Extra Bd.
Error Code	Numeric code explaining why the release failed or aborted. Refer to the detailed list of the codes by test number for each MO.

test pkt

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test pkt port-network	pn	The Packet bus to be tested: <i>nn</i> (1)	init	short 1	none
	short		inads		
	long	Examples:	craft		
	repeat <i>n</i>	test pkt port-network 1 l			
	clear	test pkt port-network 1 sh r 2 test pkt port-network 1 l r 25 test pkt port-network 1 test pkt port-network 1 c			



WARNING:

Since the **clear long** option 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.

test pms-link

S8700

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 403 for information about the PMS and interpreting its status. See [busyout pms-link](#) on page 79 for information on PMS links.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test pms-link	short	See Common Command Parameters on page 34. Examples: test pms-link sh r 5 test pms-link l test pms-link test pms-link c test pms-link c sch	init	short	
	long		inads		
	repeat <i>n</i>		craft		
	clear		1		
	schedule				

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 port

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command performs 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
test port	location	PCSSpp	init	short	none
	short	See Common Command Parameters on page 34.	inads	1	
	long		craft		
	repeat <i>n</i>	Examples:			
	clear	test port 01c1101 l test port 02e1502 sh r 2 test port 02d1201 r 4 test port 01c1101 c			



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.

test pri-endpoint

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command performs 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-endpoint	extension short long repeat <i>n</i> clear	PRI endpoint extension to be tested (must conform to dial-plan) See Common Command Parameters on page 34. 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	init inads craft nms	short 1	none

test pr-maintenance

S8100

The test pr-maintenance command tests the maintenance functions associated with the TN2314.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test pri-maintenance	short long repeat <i>n</i> clear	See Common Command Parameters on page 34.	init inads craft super-user any customer type login with Maintain Processor Circuit Packs permissions enabled	short 1	none

test signaling-group

S8700 | S8500 | S8300 | S8100

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 418 for information on how to access the additional data after running **test signaling-group**.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test signaling-group	group identifier	The station extension (must conform to dial-plan)	init inads craft	short	
	short	See Common Command Parameters on page 34.		1	
	long				
	repeat <i>n</i>	Examples: test signaling-group 1 test signaling-group 1 repeat 10			
	clear	test signaling-group 2 short test signaling-group 4 long test signaling-group 4 long clear			

test sp-link

S8700

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 403 for more information.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test sp-link	short	See Common Command Parameters on page 34. Examples: test sp-link test sp-link sh test sp-link l test sp-link schedule test sp-link sh sch	init inads craft	short	none
	long				
	schedule				

test station

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

This command performs 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
test station	extension	The station extension (per dial-plan)	init	short	none
	short	See Common Command Parameters on page 34. Examples: test station 81709 l test station 85136 s r 2 test station 85036 l r 25 test station 84297 r 4 test station 81709 c	inads	1	
	long		craft		
	repeat <i>n</i>		cust		
	clear		nms		



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.

test switch-control

[S8100](#)

Use **test switch-control** to test the archangel on the TN2314 processor board.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test switch-control	short	See Common Command Parameters on page 34.	init	short	none
	long		inads	1	
	repeat <i>n</i>		craft		
	clear		cust super-user		

test synchronization

[S8700](#) | [S8500](#) | [S8100](#)

test synchronization [**short** | **long**] [**repeat** *repeat#* | **clear**] [**schedule**]

The [**all** | **cabinet** *cab#*] parameters appear on [S8700 IP](#).

Use **test synchronization** to check the timing synchronization source and update circuit packs with the correct synchronization parameters. The synchronization-capable circuit packs are sent down-link messages to place them in the correct synchronization configuration given the current on-line synchronization reference. The synchronization-capable circuit packs include:

- DS1s
- IPSIs
- EIs ([S8700 MC](#))
- Tone-Clocks ([S8700 MC](#))

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	Feature Interaction
test synchronization	all	S8700 IP Check and update all cabinets	init	short	none
	cabinet <i>cab#</i>	S8700 IP Specify the cabinet to check and update	inads	1	
	short	See Common Command Parameters on page 34.	craft		
	long		cust		
	repeat <i>n</i>		super-user		
	clear				
	schedule				

test sys-link

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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).

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test sys-link	location	Port location associated with the system link.	init inads craft		none
	UUCSSpp				
	current	Current hardware path tested			
	faulted	Tests the hardware path of the system link as it was constituted when a fault last caused the link to go down.			
	short	See Common Command Parameters on page 34.			
	long	Examples: test sys-link 2e0201 current test sys-link 2e0201 faulted r 10			
	repeat <i>n</i>				
	clear				

test tdm

[S8700](#) | [S8500](#) | [S8100](#)

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	Feature Interaction
test tdm	pn number	<i>nn</i> = number of the port network to have its TDM bus tested. Both halves (“a” and “b”) of the TDM bus are tested.	init inads craft	short	
	short			1	
	long	See Common Command Parameters on page 34.			
	repeat <i>n</i>	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			
	clear				

test tone-clock

S8700

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 \(Tone-Clock Circuit\)](#) on page 1957, [TONE-PT \(Tone Generator\)](#) on page 1982, [TDM-CLK \(TDM Bus Clock\)](#) on page 1900 in the Maintenance Alarms Reference, 555-245-102.

test translation-store

S8100

This command tests the translation data used by Avaya Call Processing software that is stored on the hard disk.

Action/Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
test translation-store	short	See Common Command Parameters on page 34.	init	short	none
	long		inads		
	repeat <i>n</i>		craft		
	clear		cust		

test trunk

[S8700](#) | [S8500](#) | [S8300](#) | [S8100](#)

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	Feature Interaction
test trunk	group number	Administered group number	init	short	none
	member number	Administered number identifying a particular trunk within a trunk group	inads craft cust	1	
	short	See Common Command Parameters on page 34. Examples: test trunk 78 l test trunk 80/1 sh r 2 test trunk 78/2 l r 25 test trunk 80 test trunk 78 r 4 test trunk 78 c			
	long				
	repeat <i>n</i>				
	clear				

test tsc-administered

S8700

test tsc-administered *signaling-group# l 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
test tsc-administered	signaling group number/	Signaling group number	init inads craft		Additional data available after running the test. See status tsc-administered for how to access additional data.
	tsc index	The number associated with each TSC in a signaling group.		1	
	repeat <i>n</i>	The number of times each test in sequence is repeated.			

trace-route

S8700 | S8500 | S8100

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, the **IP Address** field contains stars (*), which indicates a timeout condition.

The primary use of **trace-route** is to determine quickly and unambiguously if the fault lies within Avaya-provided equipment, or if the fault is with the LAN or LAN administration to which the server switch is connected.

Action/ Object	Qualifier	Qualifier Description	Login	Default	Feature Interaction
trace-route	ip-address	Where IP address is www.xxx.yyy.zzz	init	primary	
	ip-address		inads	ip	
	node-name	From node-name screen	craft	address	
	node-name		cust		
	board	Cabinet-carrier-slot address of the IP circuit pack			
	clan-port	Port 1-17			
	source	An endpoint's virtual port ID			
	schedule	See Common Command Parameters on page 34.			
		Examples: trace-route ip-address 123.4.56.789 board 1C14 clan-port 2 trace-route node-name sr1clan1 source S00015			

NOTE:

The default DiffServ and 802.1p/Q parameters downloaded to a IP Media Processor board will be used in the execution of **ping** and **trace-route** commands which are sourced from that IP Media Processor. By convention, the recipient of a **ping** will reply with the same QoS value found in the received packet, hence 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.

Output

The following shows an example output for a CLAN **trace-route**. For Medpro boards, the clan-port (1-17) qualifier 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

Field Descriptions

clan-port	This CLAN entry identifies the port on the CLAN board from which trace-route is issued. This field appears only if the board is a CLAN board.
Hop	The node number (in sequence). The first node (0) 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: • ! Unable to reach port • !N Unable to reach network • !H Unable to reach host • !P Failure between endpoints • !F Need fragmentation of data packet • !S Source return failure • !X Packet blocked by filter • “ Timeout - no data available
IP Address	The 32-bit network address.

2 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>](#)
- [server \[-c\]](#)
- [statapp \[-c\]](#)
- [statuslicense \[-v\]](#)
- [swversion](#)

Troubleshooting Switch

Use these commands to see help troubleshoot the switch.

- [almclear \[-a\]](#)
- [almdisplay \[-v\]](#)
- [corevector \[-s, -c\]](#)
- [dkill \[-a\]](#)
- [fasttop](#)
- [ftpserv \[-on, -off\]](#)
- [modserv \[-v\]](#)
- [restartcause](#)
- [rtrenice](#)
- [topsting <*.mcd>](#)

Troubleshooting IPSI

Use these commands to help troubleshoot the IPSI circuit pack.

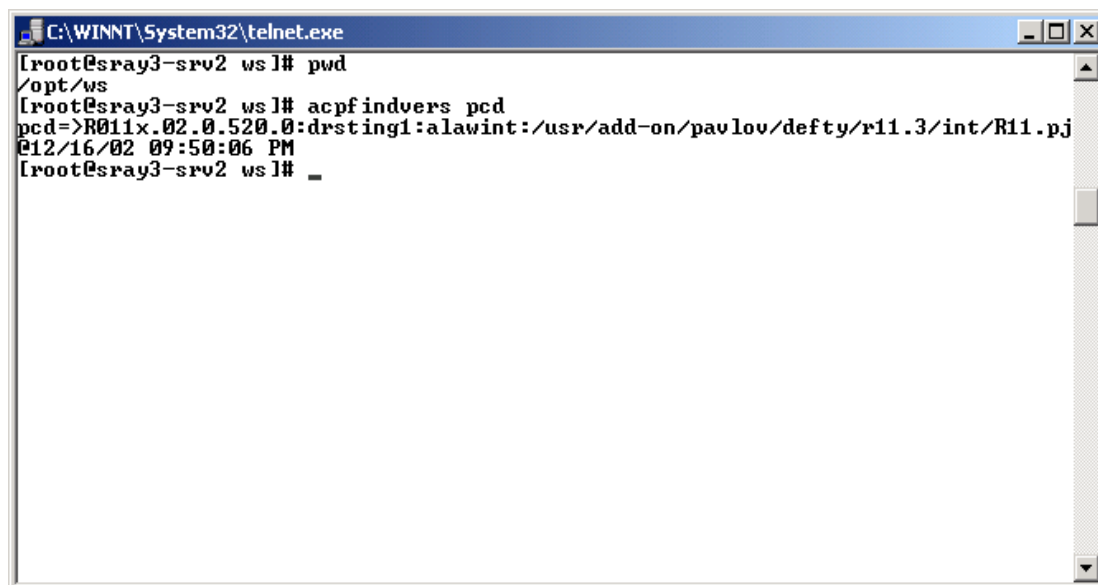
- [ipsiversion \[-a\]](#)
- [pingall \[-i, -a\]](#)
- [telnet <ip_addr> 2312](#)
- [telnetenable \[-p, <ip_addr>\]](#)

Linux Bash Command List

acpfindvers <process>

Shows the release string for an object located in /opt/ws, and where the object was built (the source code).

Example:



```
C:\WINNT\System32\telnet.exe
[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
012/16/02 09:50:06 PM
[root@sray3-srv2 ws]# _
```

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

almclear [-a]

Clears all server alarms from the switch. Also clears individual alarms.

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

almdisplay [-v]

Displays current alarms on the system, including messaging, Communication Manager, and server alarms.

Example:

```

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>

```

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

corevector [-s, -c]

Changes the options on the switch so that it takes core files of flagged processes.

Remember that core file generation is expensive, and can cause interchanges under circumstances that would normally not cause an interchange.

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

dkill [-a]

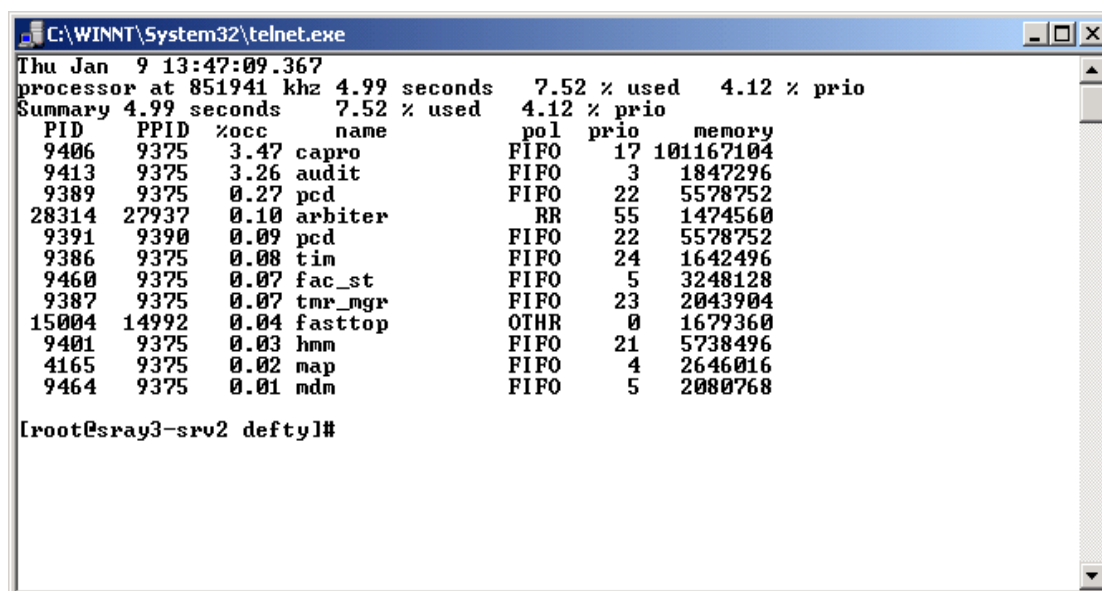
Sends a kill signal to processes in Communication Manager. Generally used with the -a flag (all) when a system is caught in a state where stop all failed.

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

fasttop

Shows occupancy results for Communication Manager processes running on the server. Default is every 5 seconds.

Example:



```
C:\WINNT\System32\telnet.exe
Thu Jan  9 13:47:09.367
processor at 851941 khz 4.99 seconds 7.52 % used 4.12 % prio
Summary 4.99 seconds 7.52 % used 4.12 % prio
  PID  PPID  %occ  name      pol  prio  memory
  9406  9375  3.47  capro     FIFO  17  101167104
  9413  9375  3.26  audit     FIFO  3   1847296
  9389  9375  0.27  pcd       FIFO  22  5578752
 28314 27937  0.10  arbiter   RR    55  1474560
  9391  9390  0.09  pcd       FIFO  22  5578752
  9386  9375  0.08  tim       FIFO  24  1642496
  9460  9375  0.07  fac_st    FIFO  5   3248128
  9387  9375  0.07  tmr_mgr   FIFO  23  2043904
 15004 14992  0.04  fasttop   OTHR  0   1679360
  9401  9375  0.03  hmm       FIFO  21  5738496
  4165  9375  0.02  map       FIFO  4   2646016
  9464  9375  0.01  mdm       FIFO  5   2080768

[root@sray3-srv2 defty]#
```

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

ftpserv [-on, -off]

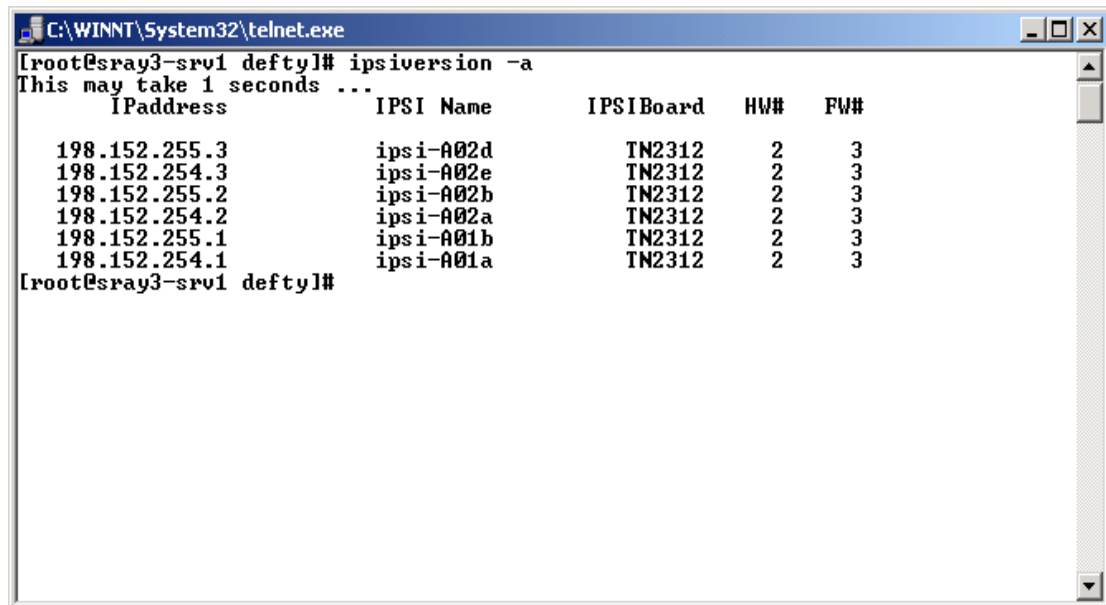
Turns ftp functionality on and off.

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

ipsiversion [-a]

Queries each IPSI to determine its TN code, and the hardware and firmware vintages running on the system.

Example:



```

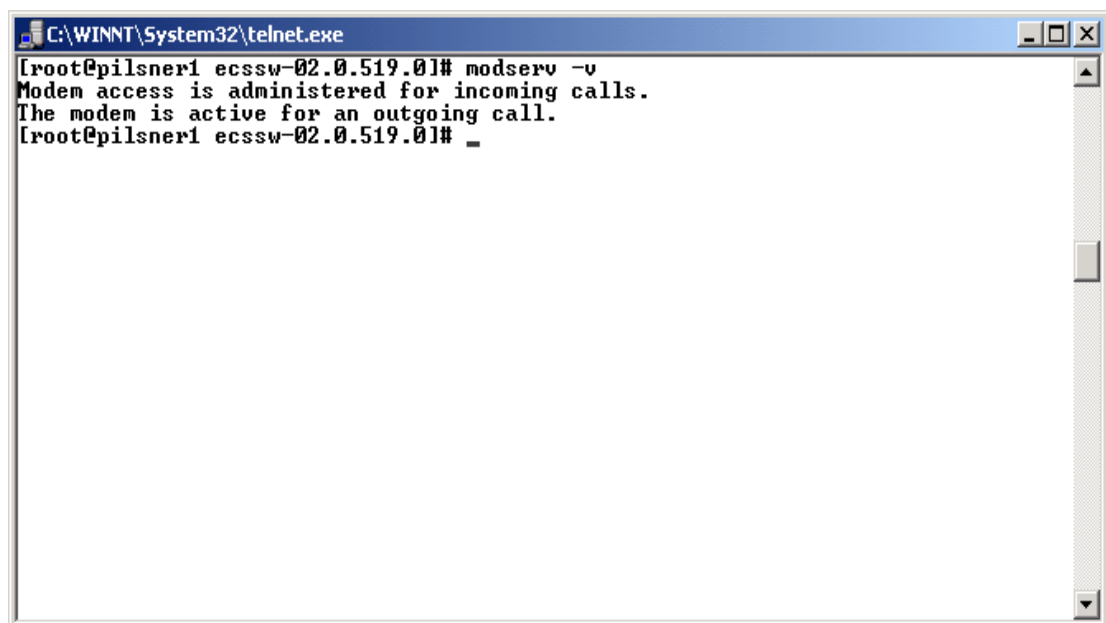
C:\WINNT\System32\telnet.exe
[root@sray3-srv1 defty]# ipsi version -a
This may take 1 seconds ...
      IPAddress      IPSI Name      IPSI Board      HW#      FW#
198.152.255.3      ipsi-A02d      TN2312          2        3
198.152.254.3      ipsi-A02e      TN2312          2        3
198.152.255.2      ipsi-A02b      TN2312          2        3
198.152.254.2      ipsi-A02a      TN2312          2        3
198.152.255.1      ipsi-A01b      TN2312          2        3
198.152.254.1      ipsi-A01a      TN2312          2        3
[root@sray3-srv1 defty]#
  
```

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

modserv [-v]

Shows if a modem is detected, and its status. Use when there is no remote access to the switch.

Example:



```

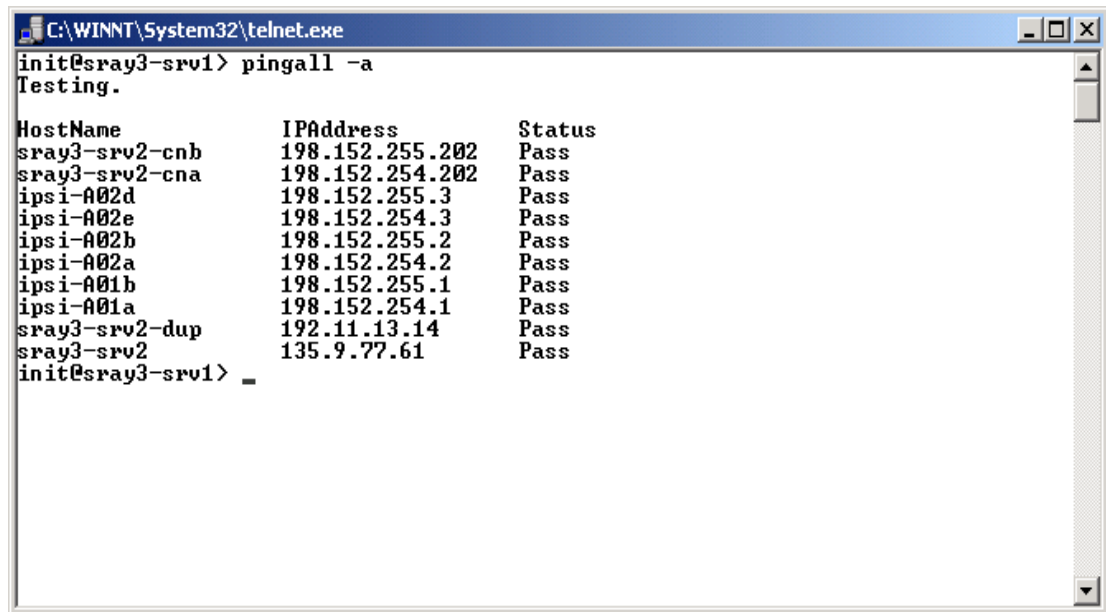
C:\WINNT\System32\telnet.exe
[root@pilsner1 ecssw-02.0.519.0]# modserv -v
Modem access is administered for incoming calls.
The modem is active for an outgoing call.
[root@pilsner1 ecssw-02.0.519.0]# _
  
```

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

pingall [-i, -a]

Performs a ping on all IPSIs (-i) or everything in the system based on /etc/hosts file (-a) (servers, routers, IPSIs, etc.). This establishes basic connectivity.

Example:



```
C:\WINNT\System32\telnet.exe
init@sray3-srv1> pingall -a
Testing.

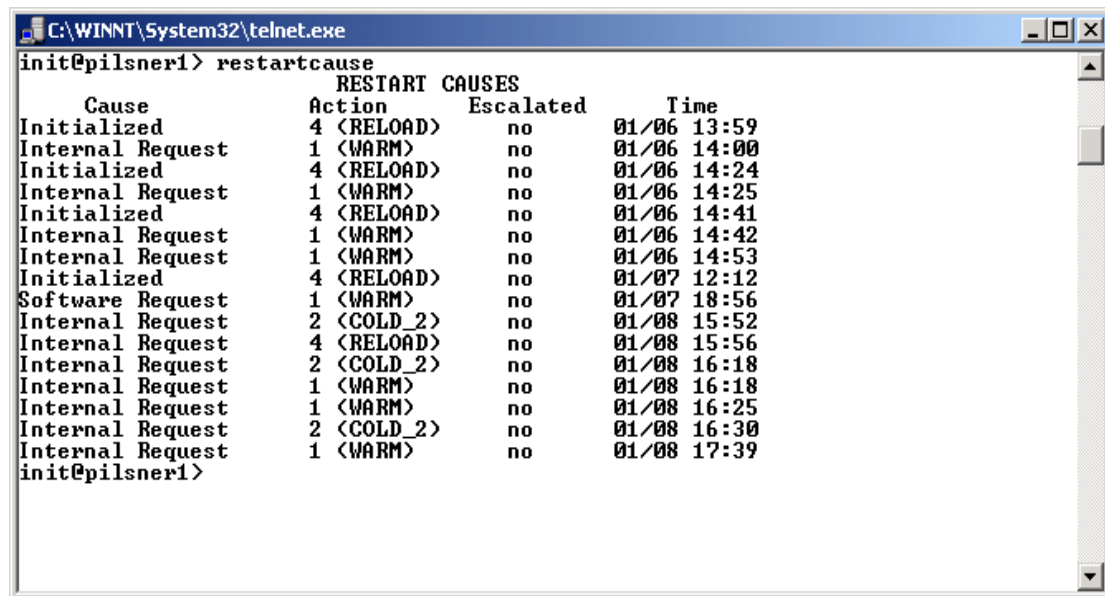
HostName      IPAddress      Status
sray3-srv2-cn  198.152.255.202 Pass
sray3-srv2-cna 198.152.254.202 Pass
ipsi-A02d      198.152.255.3  Pass
ipsi-A02e      198.152.254.3  Pass
ipsi-A02b      198.152.255.2  Pass
ipsi-A02a      198.152.254.2  Pass
ipsi-A01b      198.152.255.1  Pass
ipsi-A01a      198.152.254.1  Pass
sray3-srv2-dup 192.11.13.14   Pass
sray3-srv2     135.9.77.61    Pass
init@sray3-srv1> _
```

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restartcause

Displays how many restarts have taken place on the switch, and the level of restart (cold-2, warm, etc.). Use **restartcause** to help determine when an interchange or reload took place.

Example:



```

C:\WINNT\System32\telnet.exe
init@pilsner1> restartcause
          RESTART CAUSES
Cause      Action      Escalated      Time
-----
Initialized 4 <RELOAD>      no            01/06 13:59
Internal Request 1 <WARM>        no            01/06 14:00
Initialized 4 <RELOAD>      no            01/06 14:24
Internal Request 1 <WARM>        no            01/06 14:25
Initialized 4 <RELOAD>      no            01/06 14:41
Internal Request 1 <WARM>        no            01/06 14:42
Internal Request 1 <WARM>        no            01/06 14:53
Initialized 4 <RELOAD>      no            01/07 12:12
Software Request 1 <WARM>        no            01/07 18:56
Internal Request 2 <COLD_2>      no            01/08 15:52
Internal Request 4 <RELOAD>      no            01/08 15:56
Internal Request 2 <COLD_2>      no            01/08 16:18
Internal Request 1 <WARM>        no            01/08 16:18
Internal Request 1 <WARM>        no            01/08 16:25
Internal Request 2 <COLD_2>      no            01/08 16:30
Internal Request 1 <WARM>        no            01/08 17:39
init@pilsner1>

```

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rtrenice

Changes the current login's priority. Useful, but dangerous on a high occupancy customer switch.

Example:

```
rtrenice -r 99 $$ (as root)
```

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

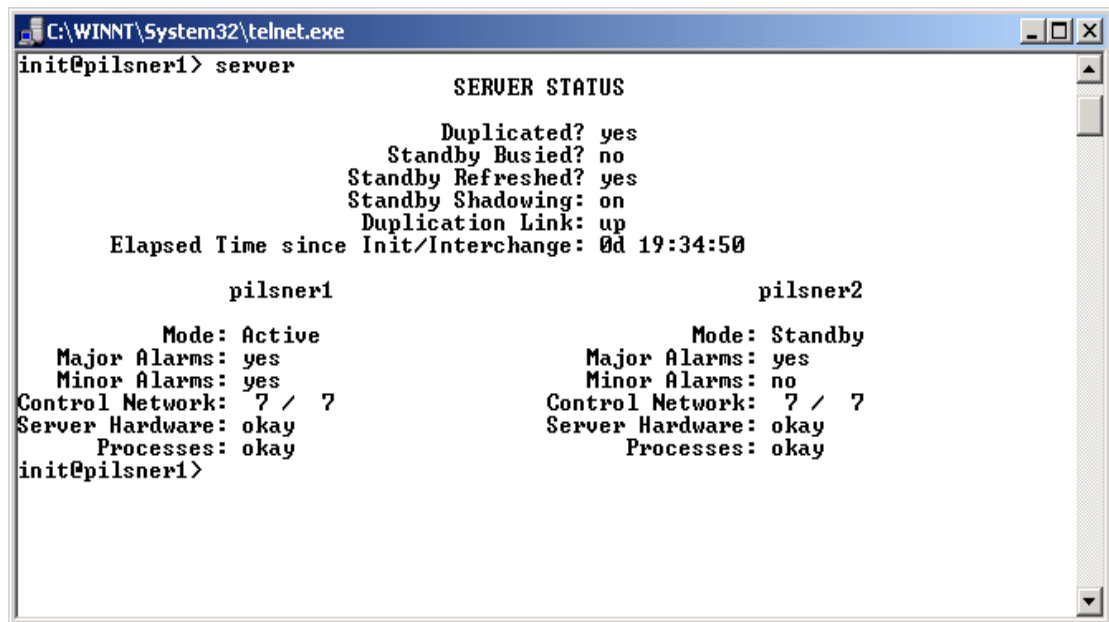
server [-c]

Shows the status of the server pair, including information on duplication, connectivity status, shadowing, and how long the servers have been up since the last restart.

Options:

- server -i Perform an interchange
- server -if Force an interchange
- server -b Busyout a standby server
- server -r Release a standby server

Example:



```
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: 7 / 7                               Control Network: 7 / 7
    Server Hardware: okay                                 Server Hardware: okay
    Processes: okay                                       Processes: okay
init@pilsner1>
```

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPS!](#)

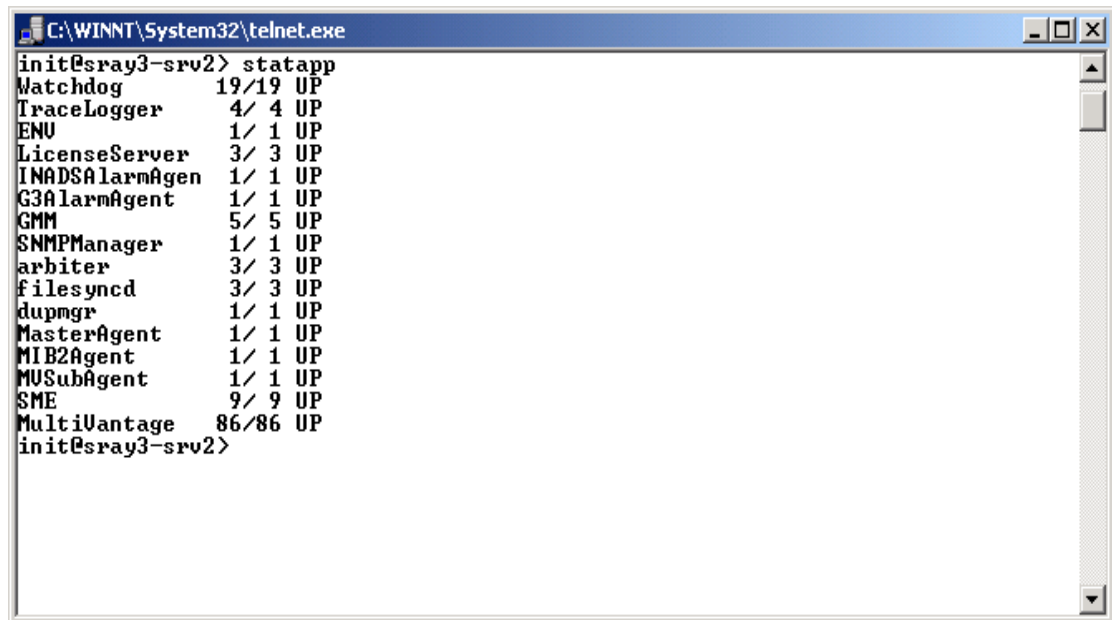
statapp [-c]

Shows how many processes are running on the system.

Option:

- statapp [-p] Shows which processes in Communication Manager are down.

Example:



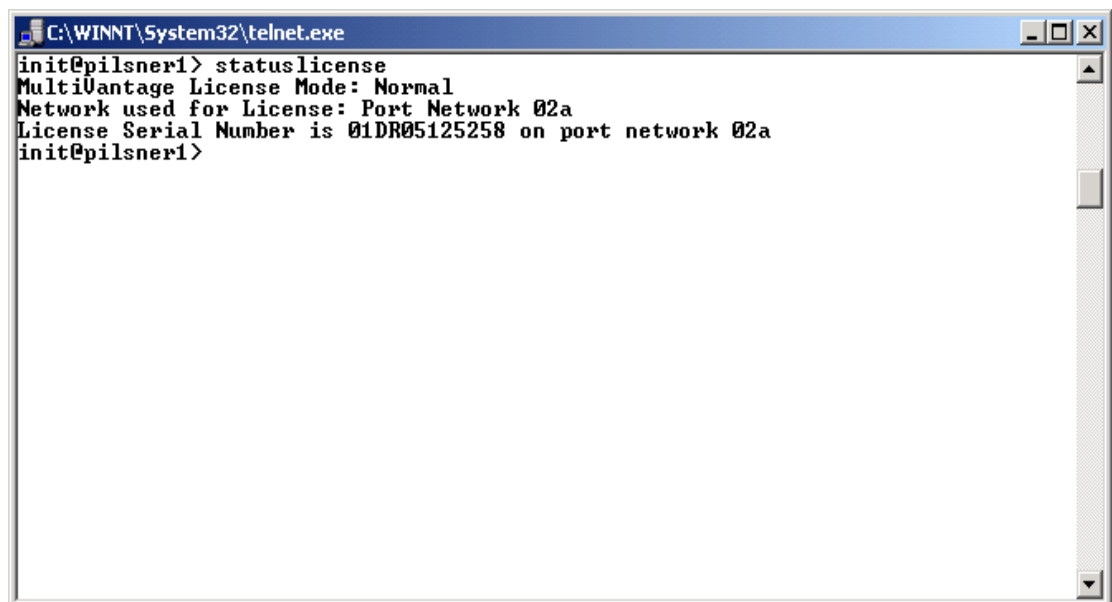
```
C:\WINNT\System32\telnet.exe
init@sray3-srv2> statapp
Watchdog      19/19 UP
TraceLogger   4/ 4 UP
ENU           1/ 1 UP
LicenseServer 3/ 3 UP
INADSAAlarmAgen 1/ 1 UP
G3AlarmAgent  1/ 1 UP
GMM           5/ 5 UP
SNMPManager   1/ 1 UP
arbiter       3/ 3 UP
filesyncd     3/ 3 UP
dupmgr        1/ 1 UP
MasterAgent   1/ 1 UP
MIB2Agent     1/ 1 UP
MUSubAgent    1/ 1 UP
SME           9/ 9 UP
MultiVantage  86/86 UP
init@sray3-srv2>
```

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

statuslicense [-v]

Shows license file information, including the serial number and location of the "Golden" IPSI.

Example:



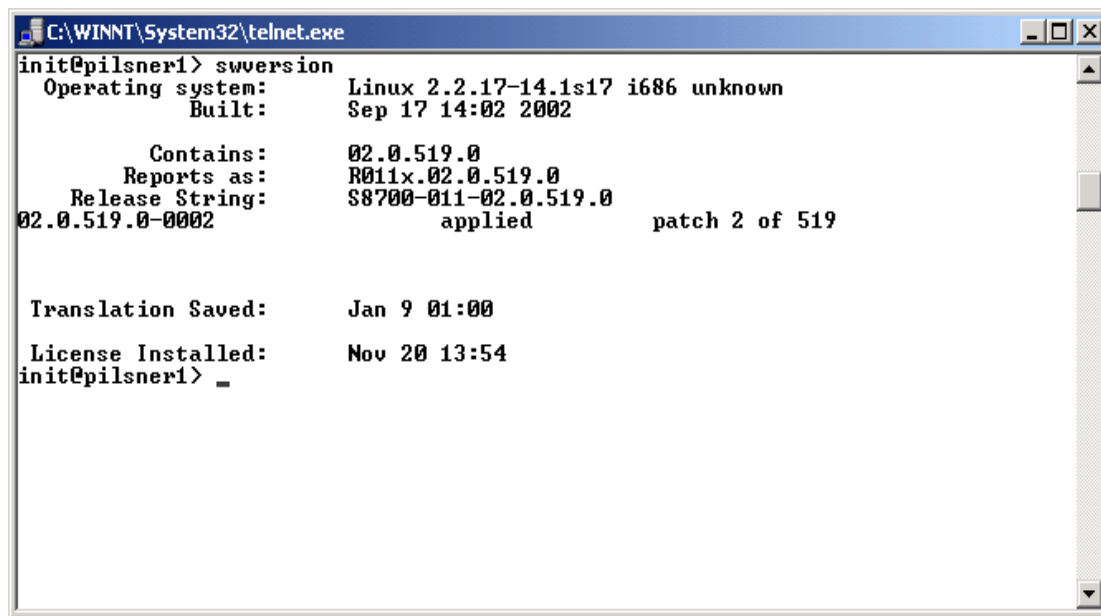
```
C:\WINNT\System32\telnet.exe
init@pilsner1> statuslicense
MultiVantage License Mode: Normal
Network used for License: Port Network 02a
License Serial Number is 01DR05125258 on port network 02a
init@pilsner1>
```

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

swversion

Shows the load of Communication Manager running on the switch, including patches. Also shows the last time that translations were saved.

Example:



```
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> _
```

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

telnet <ip_addr> 2312

Telnets into an IPSI board.

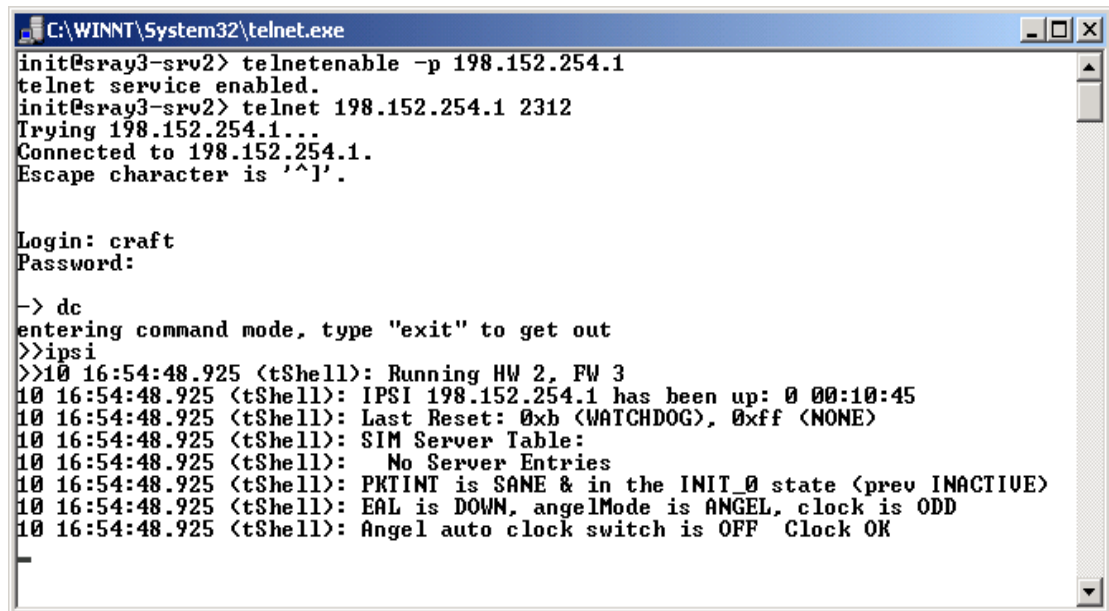
Use **telnetenable** before telneting into an IPSI board. At the prompt, type **dc** to enter command mode, then type **IPSI** to show board status. See the example under [telnetenable \[-p, <ip_addr>\]](#) on page 498.

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

telnetenable [-p, <ip_addr>]

Enables the telnet port on the IPSI board at the IP address <*ip_addr*>. Use **telnetenable** before telneting into an IPSI board.

Example:



```

C:\WINNT\System32\telnet.exe
init@sray3-srv2> telnetenable -p 198.152.254.1
telnet service enabled.
init@sray3-srv2> telnet 198.152.254.1 2312
Trying 198.152.254.1...
Connected to 198.152.254.1.
Escape character is '^]'.

Login: craft
Password:

-> dc
entering command mode, type "exit" to get out
>>ipsi
>>10 16:54:48.925 <tShell>: Running HW 2, FW 3
10 16:54:48.925 <tShell>: IPSI 198.152.254.1 has been up: 0 00:10:45
10 16:54:48.925 <tShell>: Last Reset: 0xb <WATCHDOG>, 0xff <NONE>
10 16:54:48.925 <tShell>: SIM Server Table:
10 16:54:48.925 <tShell>:   No Server Entries
10 16:54:48.925 <tShell>: PKTINT is SANE & in the INIT_0 state <prev INACTIVE>
10 16:54:48.925 <tShell>: EAL is DOWN, angelMode is ANGEL, clock is ODD
10 16:54:48.925 <tShell>: Angel auto clock switch is OFF Clock OK

```

[Server Information](#) | [Troubleshooting Switch](#) | [Troubleshooting IPSI](#)

topsting <*.mcd>

Pulls 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.

3 S8100 Global Administration Subsystem Commands

This chapter applies to the S8100 Media Server only

The **S8100** global administration subsystem (GAS) provides a command line interface for administration and maintenance functions in **S8100** that are not supported in other applications.

NOTE:

For maintenance-related SAT commands that apply to **S8100** and other systems, see [Chapter 1, “Maintenance SAT Commands”](#).

The GAS commands are executed from the command line of a telnet session to **S8100**.

To obtain a list of commands at the command line, type [lucent help](#) plus Enter. To expand options for a command, type the commands after lucent help.

NOTE:

For a summary of INTUITY AUDIX and other **S8100** commands you will encounter in **S8100**, see [Table , INTUITY AUDIX and S8100 Commands Summary](#), on page 532 at the end of this chapter.

GAS command structure

GAS commands are words and phrases that instruct the system to perform a specific function. The commands are arranged in a hierarchy of keywords. For example, enter 1 command to go to a different level. GAS commands contain these parts:

- Command name
- Parameters
- Options

Command name

The command name is typed in first at the telnet prompt. In this book, commands are displayed in **this type face**. Examples of GAS commands are **lucent help**, **alarmstat**, and **backup**.

Parameters

A command may require additional information to complete its function. If this is the case, type the parameter after the command. In this book, parameters are displayed inside of straight brackets [**in this typeface**], and listed in a table following the command with descriptions of each parameter.

Options

Options refers to characters that may be appended to the command line. Options may be prefaced with either a dash (-) or a slash (/). **Options are printed in this typeface**, and are enclosed in curly brackets {*h*h}.

LAC Parameters

The following options are available when you log into a LAC session.

AUDIX	Start Audix SAT session
Communication Manager	start Communication Manager SAT session
bash	start BASH session
cmd	start Windows command session

bash commands

The following commands are useful for administration and installation tasks. These commands are allowed for the lucent1 login. After choosing the bash shell, type the name of the command. The command formats and examples are described following [Table 11, Common bash commands for lucent1 login](#), on page 502.

Table 11: Common bash commands for lucent1 login 1 of 3

Command	Description
alarmorig on page 505	Turns on alarm origination from the GAM (INADS)
alarmstat on page 505	Gives global alarm status (major, minor, or none) for the GAM, Communication Manager, and INTUITY AUDIX
autobackup on page 506	Enables and disables backup commands
cleargamalarm on page 506	Clears alarms after analysis
downloadboot on page 507	Enables download of boot image to firmware
environment on page 507	Determines if a circuit pack is too hot.
ftpserv on page 509	Installs patches and license files (INADS)
fileversion on page 509	Queries Windows 2000 for executable file
fwversion on page 510	Displays command version number
1 of 3	

Table 11: Common bash commands for lucent1 login *Continued 2 of 3*

Command	Description
gamalarmstat on page 510	Displays GAM alarm information in the format: mm/dd/yyyy = month/day/year Win2000 Event Log Name= System Security Application Alarm Source= WIN2000 GAM LAC GSK VFM GAS Win2000 Event Type = Error Warn Info Alarm Type = Major Minor Event ID= Event field in Win2000 Event Log ACKed= ACKed, NACKED, FAILURE, NO_OSS_RESPONSE
identbackup on page 512	No help
installbackup	No help
installconfig on page 513	Installs license file (INADS)
lucent help on page 513	Lists all commands
oss on page 515	Sets telephone numbers for outgoing INADS calls
post on page 516	If no argument is given, postcodes are sent to the 860 firmware with the results sent to standard output.
productid on page 516	If no argument is given, the command displays product-id information for GAM and INTUITY AUDIX.
rasdrop on page 517	If no argument is given, rasdrop schedules the RAS service to stop and restart in 2 minutes from when it was run.
reboot on page 517	Reboots system as follows: nice: Shuts down applications and Windows 2000 in a graceful manner immediate: reboots the system without waiting for the applications to shut down, causing possible loss of voice messages that are being recorded and all calls drop
restartcause on page 518	Displays the restart causes for system (for technician/TSC)
serialnumber on page 520	Reads and displays the serial number of the circuit pack
setip on page 520	Sets the IP address, subnet mask, and default gateway of the LAN interface to the customer's LAN (out the splitter cable). Turns on RAS. Reboot is required for this to take effect.
2 of 3	

Table 11: Common bash commands for lucent1 login *Continued* 3 of 3

Command	Description
shutdown on page 522	Shuts down: all: S8100 system: all S8100 applications and Windows 2000 appname: the name of the application to be shut down camp-on: (INTUITY AUDIX feature) notifies users that a system shutdown will happen and waits for users to end their sessions before shutting down.
siteconfig on page 525	Prompts the user with a warning message and request confirmation
start on page 526	Called from a bash shell on Contry to start an application through Watchdog
statapp on page 527	Displays the status of all the applications groups running on the system. Lists all the processes associated with an application that is only partially up and the status of each process (+ => up and - => down). Lists all the processes associated with an application regardless of its state.
swversion on page 528	Returns current version of software and load numbers of all software components
terminate on page 529	Called from a bash shell on Contry to terminate applications
versiondiff on page 531	Compares Win2000 executable against version entered at the command line
vilog	Merges and displays the various log files in the system
3 of 3	

alarmorig

alarmorig {*on* | *off*}

Use **alarmorig** to enable, disable or display the status of alarm origination to the OSS.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
alarmorig	none	Displays current status	lucent1 lucent2 lucent3 (display only)	none	none
	on	Enable OSS alarm reporting			
	off	Disable OSS alarm reporting			

alarmstat

UseThis command displays alarms for all applications (Global, Communication Manager, INTUITY AUDIX) running on **S8100**.

- View individual Communication Manager and INTUITY AUDIX alarms in the appropriate applications. See [Chapter 3, “Server Alarms”](#) in [Maintenance Alarms Reference, 555-245-102](#) for how to view the alarm logs in the Communication Manager and INTUITY AUDIX applications.
- Use [gamalarmstat](#) on page 510 to view more details about global alarms.

Command name	Parameter	Parameter description	LoginLogin	Defaults	Feature interactions
alarmstat	none	View active alarms	lucent1 lucent2 lucent3	none	none

Output

```
System Alarm Status:
Global: {major | minor | none}
Definity: {major | minor | none}
AUDIX: {major | minor | none}
```

Both major and minor alarms can appear on the output for each application if both types of alarms are present.

autobackup

This command enables or disables automatic periodic backup of translation data. The backup time and selection of data are set with the “Schedbackup” command.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
autobackup	-y or /y -e or /e -n or /n -d or /d -v or /v	Enable automatic backup Enable automatic backup Disable automatic backup Disable automatic backup Display version number	lucent1 lucent2 lucent3	none	Command will fail if backup parameters have not been administered

Format

autobackup {-y | -n | -e | -d}

cleargamalarm

This command clears all global alarms.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
cleargamalarm	all	Clear all GAM alarms.	lucent1 lucent2 lucent3	none	cleargamalarm
	nnn	Clear the alarm with the alarm ID numbers specified by nnn			
	nnn,mmm, ...,xxx	Clear the list of alarms specified by the alarm ID numbers in the comma separated list.			
	nnn-xxx	Clear all the alarms whose IDs are between nnn and xxx, inclusive.			

Format

cleargamalarm {*all* | *nnn* | *nnn,mmm,...,xxx* | *nnn-xxx*}

Example

cleargamalarm all	clear all alarms
cleargamalarm 1099,3422	clear alarms 1099 and 3422
cleargamalarm 500-889	clear all alarms between 500 and 889

downloadboot

This command downloads a new version of boot firmware.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
downloadboot	source	Filename of the source file. This location must be accessible by S8100 .	lucent1 lucent2 lucent3	none	downloadboot

Format

downloadboot *source*

environment

This command displays environmental parameters on the TN2314 processor circuit pack.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
environment	none	Displays current operating environment of the TN2314 board.	lucent1 lucent2 lucent3	none	environment

Format

environment

Output

```

temperature:
temp1: 85.29 deg F (29.60 deg C)
temp2: 81.38 deg F (27.43 deg C)

current minor alarm state:      OFF
current UPS alarm state:       OFF
current cabinet power/fan state: ON
current alarm output state:    OFF

Voltages:
actual      min      max
48V         -47.99V   -52.80V     -43.20V
VCC         -5.12V    -5.50V      -4.50V
+VCC        +5.07V    +4.50V      +5.50V
+VEE        +12.04V   +10.80V     +13.20V
3.3V        +3.33V    +2.97V      +3.63V

DEFINITY Red LED: OFF
DEFINITY Green LED: OFFMajor Alarm LED: OFF
Minor Alarm LED: ON
ETR LED: OFF

```

exit

This command ends the LAC session.

NOTE:

This command will not terminate a remote access session (RAS). If multiple LAC sessions are active, only the session where the logoff command was entered will be terminated.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
exit	none	Terminates the LAC session. Telnet is still active.	lucent1 lucent2 lucent3	none	exit

fileversion

This command displays the version of the specified file.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
fileversion	filename	Displays the version number of the file <i>filename</i> .	lucent1 lucent2 lucent3	none	Version information must be stored in the same manner as an “.exe” file.

Format

fileversion *filename*

ftpserv

The **ftpserv** command is used to turn on and off the file transfer protocol on **S8100**. If you attempt to ftp into **S8100** and you get a “connection refused” message, ftp is not running.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
ftpserv		Starts ftpserv	lucent1 lucent2 lucent3	none	ftpserv
	-c	Stops (closes) the service			

Format

ftpserv

ftpserv -c

fwversion

This command displays the version of the firmware executing on the TN2314 processor circuit pack.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
fwversion	none	Displays the firmware version on the TN2314 board	lucent1 lucent2 lucent3	none	none

Format

fwversion

Output

TN2314 application firmware version = nnnnnn

gamalarmstat

This command displays all the global alarms that are not cleared.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
gamalarmstat	none	displays the global alarms that are not cleared	lucent1 lucent2 lucent3	none	gamalarmstat

Output

Alarms are displayed in the following format:

```
refnum: mm/dd/yyyy hh:mm:ss nt-event-log-name source event-type severity event-ID  
ID ACKed
```

where

Alarm parameter	Description	Valid values
refnum	Alarm ID. Use this number to clear the alarm with the cleargamalarm command	Any alphanumeric sequence
mm/dd/yyyy	Date when the alarm was generated (Month, day, year format)	Any valid date
hh:mm:ss	Time when the alarm was generated (hour:minute:second format)	Any valid time
nt-event-log-name	Indicates in which Win2000 event log this alarm can be found.	application security system
source	Indicates which application is the source of the alarm. Use this information in conjunction with the alarm tables in Alarms in the S8100 Media Server and Windows 2000 Log Events in Maintenance Alarms Reference (555-245-102) for troubleshooting.	NT Win2000 operating system GA global alarm manager M Lucent access control LAC global sanity keeper GSK virtual fabric manager VFM GAS global administration system
event-type	The type of event, as defined by Windows 2000	Error Warning info
severity	The alarm severity	Major Minor
event-ID	An identification number given to the event by the Windows 2000 operating system	Any valid alphanumeric
ACKed	Indicates that the alarm has been acknowledged. This field will be blank if the alarm has not been acknowledged.	ACK {blank}

identbackup

This command displays the identification information from an existing backup set.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
identbackup	dest	Destination of backup file: pcmcia, or \xxx\yyy for a network drive directory	lucent1 lucent2 lucent3	none	identbackup

Format

identbackup {*pcmcia* | *\xxx\yyy*}

Output

The following displays (example):

Backup Set Identification:

Version	1.01
Time	06/21 - 21:45
Data Sets	all security vmannounce vmtran

where

Parameter	Definition
Version	S8100 version
Time	Date and time the backup was made in month/day - hour:minute format, using a 24-hour time.
Data Sets	The data included in the backup. See cleargamalarm on page 506 for meaning of the data set keywords.

installconfig

This command installs the login and license server data bases from a file received from the TSC/COE, and reboots the system.

NOTE:

This file must be present in order to run INTUITY AUDIX, Cornerstone, or Communication Manager applications.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
installconfig	filename	Installs the file filename on S8100 .	lucent1 lucent2 lucent3	none	Required to run DEFINITY, Cornerstone and INTUITY AUDIX applications.

Format

installconfig *filename*

lucent help

This command displays the list of commands supported by GAS.

NOTE:

To get help for an individual command, type -? (or /?) after the command.

net user

This command is used to add Windows 2000 level logins, change Windows 2000 level passwords, and enable/disable current Windows 2000 accounts.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
net user	login PW /active login PW	Adds Win2000 level login activates a currently disabled login change existing PW	lucent1 lucent2 lucent3	none	net user

Format

net user *login password* - adds new login

net user *login /active* - enables login

net user *login new password* - sets new password

OSS

This command administers or displays parameters to control alarm call-out to the OSS system. The parameters are stored in the Windows 2000 registry.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
oss	none	Displays current settings of the oss parameters	lucent1 lucent2 lucent3 agent1		oss
	telephone-number	The telephone number of the OSS to call for alarms.		Any number with 1 to 30 digits. Use commas to insert pauses in the dial string.	
	retries	How many retries will be attempted if an alarm call fails.		0 - 10, and 99 - indicates continuous retries.	
	period	The time between retries in minutes.		1 - 1440	

Format

oss telephone-number retries period

Output

TTTT....TTTT, NN, PPPP

Parameter	Definition
TTTT....TTTT	telephone number
NN	retries
PPPP	period

post

This command displays the last set of POST codes that resulted from the current boot of Windows 2000. This is to diagnose BIOS problems, and will not likely be useful in the field.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
post	none	Display the set of hexadecimal codes produced at the last Windows 2000 boot.	lucent1 lucent2 lucent3	none	

productid

This command sets or displays the OSS product IDs for **S8100** software.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
productid	none	Displays the 10-digit numeric product ID.	lucent1 lucent2 lucent3	none	productid
	AUDIX-product-id	Displays product ID for INTUITY AUDIX alarms			
	GAM-product-id	Displays product ID for GAM alarms			

Format

To set the product ID:

productid system-id

To view the product ID:

productid

Output

Product ID: System=xxxxxxxxxx

rasdrop

The rasdrop command is executed from a bash shell, it causes the Remote Access Server (RAS) service to be stopped and started again, there is a two minute delay from the time the command is executed till the service is toggled.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
rasdrop		stops and starts ras service after a two minute delay	lucent1 lucent2 lucent3	none	rasdrop

Format

rasdrop

reboot

This command causes **S8100** system to reboot.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
reboot	nice	Shuts down all applications and Windows 2000 in a graceful manner before rebooting.	lucent1 lucent2 lucent3		reboot
	immediate	Reboots the system without shutting any software or processes down.			

Format

reboot {*nice* | *immediate*}



CAUTION:

Using the command **reboot** will cause all calls to be dropped. Any messages currently being recorded will likewise be lost.

restartcause

This command displays the causes for system restart.

restartcause will search the Windows 2000 event log from the most recent entry, and display any restart event with a time stamp at or after the time entered in the command line.

NOTE:

Communication Manager and INTUITY AUDIX restarts are not displayed.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
restartcause	none	Display all restart entries in the Windows 2000 event log.	lucent1 lucent2 lucent3		restartcause
	mm/dd/yy yy hh:mm	Display all restart entries at or after the date and time specified in month/day/year hour:second format.			

schedbackup

This command is used to administer or display the time and destination of the backup service.

NOTE:

If a network destination is entered for the destination parameter, **S8100** attempts to access the location. If the location is not accessible, the destination parameter is saved, and a warning message is displayed.



CAUTION:

When entering a parameter description, do not enter the brackets.

Table 12: schedbackup parameter descriptions 1 of 2

Command name	Parameter	Parameter description	Login	Feature interactions
schedbackup	list	list=[dataset]	lucent1 lucent2 lucent3	

Table 12: schedbackup parameter descriptions 2 of 2

Command name	Parameter	Parameter description	Login	Feature interactions
	dest	dest=[destination] dest=//machineName/share name or pcmcia		
schedbackup	days	days=[Su,M,T,W,Th,F,S]		
schedbackup	time	time=[hh:mm]		The directory is E:/backup The network backup drive is fixed as drive F:
	none	Displays the list of data sets administered for backup.	lucent1 lucent2 lucent3	
	all	All data sets with a in the “defaults” column are backed up with this command parameter.		Yes
	defann	Communication Manager Announcements		
	deftran	Backup Communication Manager translations		
	registry	Backup Windows 2000 system registry		
	sam	Windows 2000 passwords and permissions		
	security	Avaya LAC and license files		
	vmannoun ce	Backup voice announcements		
	vmmsgtra n	Backup voice messages and translations		
	vmnamms gtran	Backup voice names, messages, and translations		
	vmnamtra n	Backup voice names and translations		
	vmtran	Backup voice mail translations		

serialnumber

This command displays the serial number of the TN2314 processor circuit pack.

Command name	Parameter	Parameter description	Login	Defaults
serialnumber	none	Display serial number of TN2314	lucent1 lucent2 lucent3	none

Format

serialnumber

Output

```
croatia-lucent1> serialnumber Ryon serial number:  
  
99DR01263695  
  
TNcode:  
  
TN2314
```

setip

The setip command is used to set system parameters including:

- LAN IP Address
- LAN subnet mask
- LAN Default Gateway
- RAS IP Address
- System Name

Options for setting system network options. IP addresses are all dotted decimal, for example, 10.0.0.1.
The GUI graphical equivalent (through a normal Windows 2000 logon using the monitor) are also given.

Table 13: setip options 1 of 3

Command name	Parameter	Parameter description	Login	Defaults
setip	none		lucent1 lucent2 lucent3	

Table 13: setip options 2 of 3

Command name	Parameter	Parameter description	Login	Defaults
	-s	Be silent. Don't print before/after settings		
	-v	Print out the version of the command		
	-z	Debug. Show commands that will execute, but don't execute them.		
	-?	Help. Print this help string		
	name=systemname	Set the windows Networking name of the system. The name will be converted to uppercase. Reboot needed for this to take effect. GUI: NetworkNeighborhood->Properties->Identification->Computer Name:		
	cust=ip-addr, netmask [gateway]			
	cust=DHCP	Set the IP address, subnet mask, and default gateway of the LAN interface to the customer's LAN (out the splitter cable). Reboot required for this to take effect. DHCP will be enabled if that is the address specified. GUI: Network Neighborhood->Properties-> IP Address->Adaper: [1]		
	dns=[name, domain, primary-ip-addr[,secondary-ip-addr]...]	Set the DNS host name, domain name, and a list of name server IP addresses. DNS will be turned off if no arguments are given. GUI: NetworkNeighborhood->Properties->Protocols->DNS		
	wins-[ip-addr-primary [,ip-addr-backup]]	Set the IP address of the primary and secondary Window NetBios on the TCP name server. Reboot required for this to take effect. WINS will be turned off if no address is given. GUI: NetworkNeighborhood-.Properties-.Protocols->WINS-. Adapter: [1]		

Table 13: setip options 3 of 3

Command name	Parameter	Parameter description	Login	Defaults
	ras=[ip-addr]	Set the modem RAS/PPP interface IP address. This also causes RAS to be automatically started and programs default IP routes for Avaya Services Access. Reboot required for this to take effect. RAS will be turned off if no address is given. GUI: NetworkNeighborhood->Properties->Services-.Remote Access-. Properties->COM1-.Network->TCP/IP Configure->Begin:		

Example

setip cust- 155.9.162.121, 255.255.255.252, 155.9.162.2

setip ras-10.21.011

The following displays:

```
avayas8100-lucent1> setip
name=BRONCO
cust=135.9.142.101,255.255.255.0,135.9.142.254
dns=estonia,dr.lucnet.com,135.9.1.29,135.9.1.30,135.9.1.39
wins=135.9.140.1,135.9.140.4
ras=10.0.0.1
Command succeeded: No changes made
```

shutdown

This command instructs the named target process(es) to perform an orderly shutdown. If the shutdown is not completed in 60 seconds, an automatic terminate (see [terminate](#) on page 529) will be sent to the process(es).

One parameter must be selected from the list of processes. The parameter **campon** is optional.

Table 14: shutdown parameter options 1 of 2

Command name	Parameter	Parameter description	Login	Notes
shutdown	all	Shut down all S8100 applications. NOTE: <i>shutdown all</i> does <u>not</u> shut down Windows 2000 or the TN2314 firmware. NOTE: Commands should be executed from a bash window. Otherwise the bash may disappear.	lucent1 lucent2 lucent3 agent1	When all applications are selected for shut down, they will close in the following order: 1 INTUITY AUDIX 2 INTUITY AUDIX Networking 3 CornerStone 4 Communication Manager 5 VFM 6 GMM 7 License Server 8 Backup Restore 9 LACr 10 LucentLogger 11 watchdog The campon option is valid for this command parameter
	AUDIX	Shut down the INTUITY AUDIX application.		The campon option is valid for this command parameter
	AUDIXNetw	Shut down the INTUITY AUDIX Networking application		
	BackupRestore	Shut down the backup/restore process.		
	campon	AUDIX option only. Using this option causes INTUITY AUDIX to notify users that the system is shutting down, and then wait for all users to end their sessions.		There is no shutdown wait time limit for this option. INTUITY AUDIX will wait indefinitely until all users have ended their sessions, or a shutdown is commanded without the campon option.

Table 14: shutdown parameter options 2 of 2

Command name	Parameter	Parameter description	Login	Notes
	CornerStone	Shut down the Cornerstone application. If you shut it down, it will shut down INTUITY AUDIX as well.		
	DEFINITY	Shut down Communication Manager		
	GMM	Shut down the GMM application		Alarming will not occur until GMM is restarted
	LAC	Shut down the LAC application		
	LicenseServer	Shut down the licence server application.		You will not be able to run any applications until the license server has been restarted.
	LucentLogger	Shut down the Lucent logger process.		
	system	Shut down all S8100 processes, Windows 2000 and the TN2314 firmware.		When multiple processes are selected for shut down, they will close in the following order: 1 INTUITY AUDIX 2 CornerStone 3 Communication Manager 4 VFM 5 GMM 6 License Server 7 Backup Restore 8 LAC 9 LucentLogger 10 watchdog The campon option is valid for this command parameter
	VFM	Shut down the VFM process.		

Format

shutdown *target {campon}*

Feature interactions

If the **campon** option is used with the target **all** or **system**, shutdown will wait for INTUITY AUDIX to terminate before continuing to close the other processes. INTUITY AUDIX will wait for all users to end their sessions, with no time limit. When INTUITY AUDIX is waiting indefinitely, a shutdown of INTUITY AUDIX may be required.

If a target is not running, an error message is displayed.

The [siteconfig](#) on page 525 command is used to start a target previously shut down or terminated.

siteconfig

This command installs the login and license server data bases from a file received from the TSC/COE. This command is only available to the lucent1 login group.

NOTE:

This command can only be executed on a previously installed system.

Command name	Parameter	Parameter description	Login	Defaults	Feature interactions
siteconfig	filename	Installs the encrypted system security file <i>filename</i> on S8100 .	lucent1	none	siteconfig is logged in the event log, and can only be executed on a previously installed system.

Format

siteconfig *filename*

NOTE:

When **siteconfig** is executed, an event is logged, and may optionally send an alarm to the OSS.

NOTE:

Login and license server data must be present in order to run INTUITY AUDIX, Cornerstone, or Communication Manager applications.

start

This command restarts selected processes previously stopped by a [shutdown](#) or a [terminate](#) command.

NOTE:

You cannot restart Windows 2000 or the TN2314 firmware with the **start** command.

Table 15: start command options 1 of 2

Command name	Parameter	Parameter description	Login	Notes
start	all	Restart all S8100 processes. NOTE: <i>start all</i> does <u>not</u> restart Windows 2000 or the TN2314 firmware.	lucent1 lucent2 lucent3	The processes that are restarted are (not in order): INTUITY AUDIX INTUITY AUDIX Networking Backup/Restore CornerStone CornerStone Logger Communication Manager GMM LAC License Server LucentLogger VFM
	AUDIX	Restart the INTUITY AUDIX application.		
	AUDIXNetw	Restart the INTUITY AUDIX Networking application		
	BackupRestore	Restart the backup/restore process.		
	CornerStone	Restart the Cornerstone application.		
	DEFINITY	Restart Communication Manager		
	GMM	Restart the GMM application		
	LAC	Restart the LAC application		
	LicenseServer	Restart the licence server application.		
				You will not be able to run any applications until the license server has been restarted.

Table 15: start command options 2 of 2

Command name	Parameter	Parameter description	Login	Notes
	LucentLogger	Restart the Lucent logger process.		
	VFM	Restart the VFM process.		

Format

start *process-name*

Feature interactions

Issuing the **start** command on a process already running will generate an error message.

statapp

Displays the status of all the applications groups running on the system. By default all the groups and their status are listed. If a particular application group's name or a set of names are specified, then the output is restricted to the set of groups.

Possible applications groups:

NT	Windows basic services
*NTras	Remote Access server
NTweb	Web server
NTconsole	A user logged in to the monitor/keyboard/mouse
NTplatform	Third party software
CoReserv	Co Resident services
DEFINITY	Phone call processing/PBX
CornerStone	Voice processing platform
AUDIX	Voice Mail
AUDIXNet	Mail interchange with other servers
MISC	other

* = not required to be "up" for fully functional system

Command name	Parameter	Parameter description	Login	Defaults
statapp	none	Displays the status of all the applications groups running on the system.	lucent1 lucent2 lucent3	
	-l	List all the processes associated with an application which is only PARTIALLY UP and the status of each process (+ => and - => down)		
	-lv	List all the process associated with an application regardless of its state.		

Format

statapp

Example

The following displays:

avayas8100- lucent1>statapp				
NT	11/11	UP		
NTras	2/ 2	UP		
NTweb	1/ 1	UP		
NTconsole	2/ 2	UP		
NTplatform	6/ 6	UP		
CoResServ	5/ 5	UP		
DEFINITY	51/51	UP		
CornerStone	4/ 4	UP		
AUDIX	33/33	UP		
AUDIXNet	0/ 5	DOWN		
MISC	24/ 0	UP		
nero- lucent1>				

swversion

This command displays the software version and load number of all **S8100** software components.

Command name	Parameter	Parameter description	Login
swversion	none	Display the software version and load number for all installed applications.	lucent1 lucent2 lucent3

Output

The following displays:

```
Software Versions and Loads:
Release=DefinityOne.02.0.009.0
NT=4.0 1381 Service Pack 5
CYGNUS=CYGWIN_NT-4.0
GAM=G3V8c.00.0.510.0
LAC=G3V8c.00.0.510.0
Watchdog=G3V8c.00.0.510.0
Definity=G3V8c.00.0.510.0
AUDIX=N5.0
CornerStone=1.0.0
ASA=not installed
```

NOTE:

If a particular component is not installed, the version number will be replaced with the text not installed.

terminate

This command kills the named target process(es). The target process will not be notified, and is not expected to wait for I/O or user activity to cease.

Use [shutdown](#) to stop a process in an orderly way. The **shutdown** command is the preferred method of stopping processes. Use **terminate** only as a last resort.

Table 16: terminate command options 1 of 2

Command name	Parameter	Parameter description	Login	Notes
terminate	all	Terminate all S8100 processes. NOTE: <i>terminate all</i> does <u>not</u> terminate Windows 2000 or the TN2314 firmware.	lucent1 lucent2 lucent3	When multiple processes are selected for termination, they will stop in the following order: 1 INTUITY AUDIX 2 CornerStone 3 Communication Manager 4 VFM 5 GMM 6 License Server 7 Backup Restore 8 LAC 9 LucentLogger 10 watchdog
	AUDIX	Terminate the INTUITY AUDIX application.		
	BackupRestore	Terminate the backup/restore process.		
	CornerStone	Terminate the Cornerstone application and INTUITY AUDIX.		
	DEFINITY	Terminate Communication Manager		
	GMM	Terminate the GMM application		Alarming can not occur until the GMM is restarted.
	LAC	Terminate the LAC application		
	LicenseServer	Terminate the licence server application.		You will not be able to run any applications until the license server has been restarted.
	LucentLogger	Terminate the Lucent logger process.		

Table 16: terminate command options 2 of 2

Command name	Parameter	Parameter description	Login	Notes
	system	Terminate all S8100 processes, Windows 2000 and the TN2314 firmware.		
	VFM	Terminate the VFM process.		

Format

terminate *process-name*

Feature interactions

If a target is not running, an error message is displayed.

The [siteconfig](#) on page 525 command is used to start a previously terminated target.

versiondiff

This command lists all files in the specified directory that have different Windows 2000 version numbers than the one specified in the command.

Use **versiondiff** to locate patch files on a particular **S8100**.

Command name	Parameter	Parameter description	Login	Defaults
versiondiff	version	A Windows 2000 version number. All files which do not have the specified version number will be displayed. Only files with version information in the header in “.dll” format will be checked. Others will be ignored.	lucent 1 lucent 2 lucent 3	none
	directory	The directory, including sub-directories, to search for files		

Format

versiondiff *version directory*

INTUITY AUDIX and S8100 Commands Summary

Most of the commands listed in the command column of [Table , INTUITY AUDIX and S8100 Commands Summary](#), on page 532 are INTUITY AUDIX commands.

Table 17: INTUITY AUDIX and S8100 Commands Summary 1 of 8

Command	Description
alogdump	Dumps contents of VM activity log in ASCII format S8100: Same as INTUITY AUDIX
assign	Assign a group number to a card/channel or service to channel S8100: NA
audit	Voice mail audits S8100: INTUITY AUDIX screens: audit or Command line: Use runmp - Example: runmp <AUD_NIGHTLY, AUD_WEEKLY> No platform audit
audit_nwdb	Runs audits on the networking databases S8100: Same as INTUITY AUDIX
busy_nwchan	Busy a networking channel S8100: Use Web page screens only (What key word or phrase here?)
cat	S8100: Reads a file in sequence and writes it to standard output Example: cat [filename] (Ctrl C to stop a long cat)
cleardb clean_sys, (M4)	Removes all data files from INTUITY AUDIX file systems. Must be done before installing the VM-dfltddb (voice mail default databases) (Is this all one command or 2 separate commands? What's M4? Not yet indexed) S8100: Use/LucentSoftware/Audix/tools/postinstall.sh -Tt -d all The "-d all option" says clear all INTUITY AUDIX databases
crtindexed	Creates an empty indexed VM database file S8100: NA
clearlog	S8100: Used to clear the logs maint, res, alarm, & fax Example: clearlog -i maint
cleargamalarm	S8100: Backup of Communication Manager, INTUITY and the registry (This is in gas_cmd chapter. Should it be moved or added to that appendix table?) Where dataset = deftran, vmnamtran, vmmsgtran, vmannounce, vmnammsgtran, registry the destination would be PCMCIA unless you have a mapped network drive d1backup [datasets] [destination_path] [-c]/[c] [-?]/[?][-v]/[v] Example: d1backup deftran registry pcmcia

Table 17: INTUITY AUDIX and S8100 Commands Summary 2 of 8

Command	Description
d1restore	S8100: Restore of Communication Manager, INTUITY and the registry (This is in gas_cmd chapter. Should it be moved or added to that appendix table?) Where dataset = deftran, vmnamtran, vmmsgtran, vmannounce, vmnammsgtran, registry the destination would be PCMCIA unless you have a mapped network drive d1restore [source_path datasets] [-c]/[c] [-?]/[?][-v]/[v] Example: d1restore deftran registry pcmcia
dconstruct	Create/populate VM database file by reading an ASCII file and converting it into a binary database file (Is the command dconstruct as in Command column or deconstruct as in example below?) S8100: Same as INTUITY AUDIX Example: deconstruct -C -f syp < syp.out
delete	Removes a card/channel from a service group S8100: NA
dflt_annc	Checks /VM/audix/sd/sdata/annc.name for current permissions and corrects them if need be S8100: Use /LucentSoftware/Audix/tools/postinstall.sh -Tt
dformat	Converts a binary database file into ASCII readable form S8100: Same as INTUITY AUDIX Example: dformat -f syp > syp.out
diagnose	Test a card while it is in service S8100: Communication Manager screen: test board 1A12
diskok	Checks to see if all hard disks are working properly S8100: diskok is not available on S8100. The Windows 2000 diskeeper command is available. From Windows 2000 start button -> programs -> executive software -> diskeeper
disp_nwstat	Display networking channel status S8100: Same as INTUITY AUDIX
display card	Displays information about given card(s) S8100: Communication Manager screen: list config all
display chan	Displays information about given channel(s) S8100: Communication Manager screen: display station
displot	Displays administration, maintenance, active/resolved alarms S8100: Same as INTUITY AUDIX
dx	Converts a decimal integer into it's hexadecimal equivalent S8100: Same as INTUITY AUDIX
ftp	S8100: Use to transfer files to another machine on the LAN

Table 17: INTUITY AUDIX and S8100 Commands Summary 3 of 8

Command	Description
hostname	S8100: Displays the name of the S8100 machine
init_nwdb	Initializes the networking database S8100: Same as INTUITY AUDIX
ipconfig	S8100: Displays Windows 2000 IP Configuration
kill_vm	Sends a kill signal to all voice mail processes S8100: Do Not Use (does this mean it's N/A or should this be a Caution?)
ksh -o vi	S8100: Invokes k-shell so you don't have re-type commands. After typing ksh -o vi press Esc key, then - key to find a previously used command. Commands are buffered so you step through the list by pressing the “-” key.
less	S8100: A filter that displays the contents of a text file on the terminal, one screen at a time. Example: ps -ef less
load_nwdb	Loads the networking databases from ASCII data files that were previously generated with the unload_nwdb command S8100: Same as INTUITY AUDIX Use load_nwdb -init to clear the networking database.
logsend	Generate event to be logged. This command is used to resolve active alarms by generating a resolved alarm event. Located in /mtce/tools/bin S8100: Same as INTUITY AUDIX Located in /LucentSoftware/CornerStone/bin
lucent help	S8100: Displays a list of commands that can be run from the lucent1 login (This is in gas_cmd chapter. Should it be moved or added to that appendix table?)
mkindexed	Will expand a flat file copy of an indexed file into an indexed file S8100: NA
midlands	Test for the presence of a symbolic link between /VM/audix/[nm/annc] and /voiceX/[nm/annc] S8100: Use /LucentSoftware/Audix/tools/postinstall.sh -Tt
mkindexed	Will expand a flat file copy of an indexed file into an indexed file S8100: NA
more	A filter that displays the contents of a text file on the terminal, one screen at a time S8100: No “more” command on S8100 . See “less” command
net	S8100: To share a drive from the command line. net share CDR=D:\\LucentData\\CDR
netstat	S8100: Use to get general route information
ping	S8100: Use to test IP configuration

Table 17: INTUITY AUDIX and S8100 Commands Summary 4 of 8

Command	Description
ps	S8100: Prints information about active processes. The most common use of this command is “ps -ef” to see a list if all active processes on the system ps -ef grep audix/ to view all actively running INTUITY AUDIX processes ps -ef grep audixN/ to view all actively running Networking processes
pstat	Displays current status of voice port S8100: Communication Manager screen: status station
pulist	S8100: Process User list. Details all the processes running in the system and who is using the process
rel_nwchan	Release a networking channel S8100: Use Web screen (what key word or phrase?)
remove	Places card/channel in the manual-out-of-service (MANOOS) state S8100: Communication Manager Screen: busy board1A12 or busy station x
reset_nw	Resets the networking module in background by executing stop_nw and start_nw S8100: A two step operation: shutdown AudixNetw start AudixNetw
reset_nwbrd	Reset networking ACCX board S8100: NA
restore	Places a card/channel in-service (INSERV) state S8100: NA
rstfiles	Restores from backup tape the Datatype (e.g. System Data, Voice Names) and one or more pathnames to get a specific file(s); this is very useful when less than an entire Datatype is needed from the backup tape S8100: NA
rtname	Translates resource types to numeric resources and vice versa S8100: Same as INTUITY AUDIX
serial_diag	This command executes the Equinox diagnostic command /mtce/bin/megadiag S8100: NA
setip	display and change TCIP network properties (This is in gas_cmd chapter. Should it be moved or added to that appendix table?) S8100: setip with no arguments displays current network properties on the system. Valid data types are: name, cust, dns, wins, ras
softboot	Executes an init 6 reboot of the system after stopping VS S8100: reboot nice

Table 17: INTUITY AUDIX and S8100 Commands Summary 5 of 8

Command	Description
ss	Displays system status. For each module (Maintenance, Platform, Voice Mail and Networking) a count of the number of processes and a list of all significant processes that are running S8100: d1stat gives the number of processes active For actual process names: AUDIX: ps -ef grep audix/ AudixNetworking: ps -ef grep AudixN
start_nw	Start networking S8100: start AudixNetw
start_vs	Start voice system up to a fully operational state S8100: start CornerStone Audix AudixNetw Start Cornerstone starts Cornerstone, INTUITY AUDIX and INTUITY AUDIX Networking Start AUDIX starts INTUITY AUDIX and INTUITY AUDIX Networking Start AUDIXNetw starts INTUITY AUDIX Networking (is it AUDIX Netw or AudixNetw without space and with initial capital as shown in reset_nw command and similar shutdown command in note below?) To stop applications: shutdown AudixNetw Audix CornerStone
startvm	Starts up the voice mail application S8100: Start Audix (Is Start capitalized? Note D1 command in start_nw above is not capped. Is Audix capped?)
status	Displays the status line that appears on the INTUITY AUDIX screens S8100: Same as INTUITY AUDIX
stop_nw	Stop networking S8100: stop AudixNetw
stop_vm	Shuts down the voice mail system in a 'synchronous' mode (same as vmshut -s)\ S8100: shutdown Audix
stop_vs	Stops the voice system software S8100: shutdown CornerStone
sys_software	Creates a list of installed software by doing a pkginfo -l, and puts the output into /mtce/text/soft_inst S8100: sw_version

Table 17: INTUITY AUDIX and S8100 Commands Summary 6 of 8

Command	Description
sysmon	Displays system monitor which allows user to see incoming activity on voice channels dynamically S8100: From Windows 2000 Explorer: /LucentSoftware/CornerStone/mtce/sysmon/sysmon.exe (double click) From Command line: /LucentSoftware/CornerStone/mtce/sysmon/sysmon.exe
tail	S8100: Copies a file to standard output beginning at a designated place Example: tail -f /vm/misc/tracelog.a Note: do not leave the system with an active tail running; Ctrl-c to quit the tail
telnet	S8100: Use to connect to another machine on the LAN
test_nwconn	Test remote machine connectivity on optionally specified channel S8100: Same as INTUITY AUDIX
test_nwloop	Run loop around test on a networking channel S8100: NA
toggle	Toggles the function keys on the INTUITY AUDIX terminal S8100: Same as INTUITY AUDIX Example: term type: vt131 from command line: toggle f (to better position the function keys) useful keystrokes: F1 enter F2 choices ctrl x cancel ctrl p prev page ctrl n next page ctrl l refresh ctrl c choices ctrl e enter
trace	Modifies trace levels of selected voice mail modules. The trace output is in /VM/misc/tracelog.a S8100: vm/bin/vmtrace
trace_nw	turn networking trace on/off and display current trace levels, initialize tracing, get list of valid trace levels S8100: Same as INTUITY AUDIX
unload_nwdb	Unloads networking database into ASCII readable files. By default the entire database is unloaded S8100: Same as INTUITY AUDIX

Table 17: INTUITY AUDIX and S8100 Commands Summary 7 of 8

Command	Description
vdf	Displays the hours-of-speech information (purchased, used, potential) S8100: audix screen: list measurements load day
ve_backup	With no Datatype(s) given, an unattended backup (nightly - System-Data only) will be done, otherwise a restore of the given Datatypes will be done S8100: Use S8100 Web screens for Backup or d1backup (See d1backup)
ve_restore	With no Datatype(s) given, the whole set of Datatypes on the tape will be restored. Otherwise a restore of the given Datatypes will be done S8100: Use S8100 Web screens for Restore or d1restore
Vex	Displays the INTUITY AUDIX Administration Menu (is Vex capitalized? not shown in chapter 3 or 4) S8100: use Fc for Audix screens (Does Fc stand for something that should be indexed here?) CornerStone does not have any screens and the INTUITY AUDIX Networking screens are web accessible.
vmrestart	Stops and starts the voice mail system S8100: A two step operation: shutdown Audix start Audix
vmshut	Graceful shutdown of the voice mail system in a camp-on manner. Use '-f' to force-busy the voice ports which will drop all current calls. (Recommend vmshut -f & to put into background) S8100: shutdown Audix campon To force a shutdown after the campon has been started: shutdown Audix
vprmdchk	Checks permissions of all /voiceX directories and corrects them as required S8100: Use /LucentSoftware/Audix/tools/postinstall.sh -Tt
vs_status	Displays voice system information S8100: d1stat
vscstat	Displays the number of VSC's (Voice Sessions Controller) running S8100: Same as INTUITY AUDIX
vsdisable	Disables the automatic restarting of the voice system after a reboot S8100: Manually edit the /LucentSoftware/ECSplatform/watchdog/watchd.ini file
vsenable	Enables the automatic restarting of the voice system after a reboot S8100: Manually edit the /LucentSoftware/ECSplatform/watchdog/watchd.ini file

Table 17: INTUITY AUDIX and S8100 Commands Summary 8 of 8

Command	Description
who -b	Used to figure out when the INTUITY AUDIX last completed a restart S8100: restartcause
xd	Converts 32-bit hexadecimal number to it's decimal equivalent S8100: Same as INTUITY AUDIX
Sw, Hw, Fw Version (leave as is or change to audix command names?)	INTUITY AUDIX: Various ways (any specific audix commands for command column?) S8100: Hardware and Firmware: fwversion Software: swversion

4 G700 MGP CLI Commands

Introduction

This chapter is the Command Line Interface reference for the Avaya G700 Media Gateway Processor (MGP).

To go to the reference section for a command, hold down the **Ct r l** and **Alt** buttons on your keyboard, and click on a command name in the category tables at the beginning of the chapter. To return to the respective category table at the beginning of the chapter, click on the category name at the bottom of the command reference section.

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.

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
hostname	Places 'hostname' in the command prompt
nvram initialize	Clears NVRAM and reload factory defaults
reset	Resets a specified system resource
retstatus	Shows pass/fail status of last command
sat	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

Processor

Use these commands to work on the G700 Media Gateway processor.

<u>set mgp bootimage</u>	Specifies boot image source
<u>set mgp icc-monitoring</u>	Enables/Disables heartbeat monitoring of an S8300 /LSP
<u>set mgp reset times</u>	Sets the MGP recovery process timers
<u>show mgp bootimage</u>	Identifies memory bank used for mgp boot
<u>show mgp icc-monitoring</u>	Displays the current state of the S8300 monitoring watchdog
<u>show mgp recovery</u>	Shows the MGP monitoring and recovery setup
<u>show restart-log</u>	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.

<u>clear mgc list</u>	Removes one or all entries within the MGC list
<u>set mediaserver</u>	Sets up media server management ports
<u>set mgc list</u>	Adds one or more entries to the MGC list
<u>show mediaserver</u>	Shows media server management ports
<u>show mgc</u>	Currently active MGC state and setup parameters
<u>show mgc list</u>	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.

<u>set qos bearer</u>	Sets QoS bearer configuration
<u>set qos control</u>	Defines source of QoS parameters
<u>set qos rsvp</u>	Establishes RSVP parameter settings
<u>set qos rtcp</u>	Sets RTCP operation mode and parameters
<u>set qos signal</u>	Sets the DSCP or 802.1Q priority value
<u>show qos-rtcp</u>	Shows QoS parameters
<u>show voip-parameters</u>	Shows a VoIP engine's setup and state

Network

Use these commands to set/display /change IP parameters associated with the MGC and VOIP engines.

<u>clear arp-cache</u>	Deletes all ARP cache entries
<u>clear ip route</u>	Removes entry(ies) from routing table
<u>netstat</u>	Displays all active connections on IP sockets
<u>ping</u>	Tests network path to target IP address
<u>session</u>	Creates a session to the MGC, SAT, or stack
<u>set interface</u>	Sets up IP for MGP or VoIP engine
<u>set ip route</u>	Adds a route to routing table
<u>show interface</u>	Shows defined IP interface
<u>show ip arp</u>	Shows the ARP cache

<u>show ip route</u>	Shows IP routing table
<u>telnet</u>	Initiates a TELNET session
<u>traceroute mgp</u>	Shows route of IP packet from origin to destination

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

<u>busyout test release voip-dsp</u>	Provides the ability to busyout/test/release a VoIP engine
<u>clear snmp trap</u>	Removes one or all trap receivers
<u>copy mgp-config tftp</u>	Uploads the MG configuration file
<u>copy tftp</u>	Downloads all configuration data to RAM
<u>set snmp trap</u>	Sets up SNMP trap group reporting
<u>show faults</u>	Shows active faults
<u>show isdn bri link</u>	Shows the status of all MM BRI links
<u>show isdn link summary</u>	Displays summary of ISDN links for MG
<u>show isdn pri link</u>	Displays status of MM ISDN PRI link
<u>show snmp</u>	Shows all SNMP trap receivers' setup
<u>show temp</u>	Shows CPU and DSP temperature
<u>show tftp status</u>	Shows TFTP command status
<u>show voltages</u>	Shows power supply status
<u>test led</u>	Tests the MG's LED operation

E1/T1 CSU

Use these commands to display CSU status conditions.

<u>show csu loopbacks</u>	Shows CSU loopback status
<u>show csu status</u>	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

Privilege: Configure

Description: **busyout | test | release voip-dsp <voip ID>**

Initiates a Busyout, Test, or Release (BTR) of the specified VoIP engine. Output for tests shows PASS or FAIL. Only VoIP MM is supported in CLI. Not supported on T1/Analog/BRI MM's which are controlled by the SAT.

The **test** option runs only non-disruptive tests if the VoIP engine is not busied out. Status changes create a SNMP trap.

Release option 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.

Parameters: **<voip ID>** is the slot number where the VoIP Engine is installed. Valid values are **v0** to **v4**, where **v0** means motherboard

Sample Display:

```
MG-001-3(configure)# busyout voip-dsp v1
```

[Administration](#) | [Processor](#) | [CC](#) | [QOS](#) | [Network](#) | [Maintenance](#) | [E1/T1 CSU](#)

clear arp-cache

Privilege: All

Description: **clear arp-cache**

Removes non-permanent entries from the ARP cache.

Parameters: None

Sample Display:

```
MG-001-3> clear arp-cache
```

[Administration](#) | [Processor](#) | [CC](#) | [QOS](#) | [Network](#) | [Maintenance](#) | [E1/T1 CSU](#)

clear ip route

Privilege: Privileged

Description: clear ip route *<ipaddress>* [*<ipgateway>*] *

Use **clear ip route** to delete IP routing table entries for the MGP or for specified VoIP engine.

Parameters:

- *<ipaddress>* is the IP address
- *<ipgateway>* is the default gateway
- * clears all routes from the routing table

Sample Display:

```
MG-001-3(configure)# clear ip route *
```

[Administration](#) | [Processor](#) | [CC](#) | [QOS](#) | [Network](#) | [Maintenance](#) | [E1/T1 CSU](#)

clear mgc list

Privilege: Configure

Description: clear mgc list [*<ipaddr>* [,*<ipaddr>* [,*<ipaddr>* [,*<ipaddr>*]]]]

Removes one or more entries on the MGC list. Only entries that match the arguments are removed. 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.

Parameters: *<ipaddr>* is an INET address of an administered call controller in the MGC list.

Sample Display:

```
MG-001-3(configure)# clear mgc list 132.236.73.2
```

[Administration](#) | [Processor](#) | [CC](#) | [QOS](#) | [Network](#) | [Maintenance](#) | [E1/T1 CSU](#)

clear screen

Privilege: All

Description: clear screen

Erases the screen, and displays a welcome message and the firmware version number.

Parameters: None

Sample Display:

```
MG-001-3>clear screen

                Welcome to Media Gateway Processor
                FW version 100

MG-001-3>
```

[Administration](#) | [Processor](#) | [CC](#) | [QOS](#) | [Network](#) | [Maintenance](#) | [E1/T1 CSU](#)

clear snmp trap

Privilege: Configure

Description: clear snmp trap {<ipaddress> | all}

Removes a trap receiver table entry, or clears all trap receiver table entries.

Parameters: <ipaddress> is the IP address of a trap receiver.

Sample Display:

```
MG-001-3(configure)# clear snmp trap all
MG-001-3(configure)# clear snmp trap 132.236.73.1
```

[Administration](#) | [Processor](#) | [CC](#) | [QOS](#) | [Network](#) | [Maintenance](#) | [E1/T1 CSU](#)

clear sync interface

Privilege: Configure

Description: clear sync interface <primary | secondary>

Disassociates a previously specified interface as the primary or secondary sync source.

NOTE:

The primary interface must be disassociated before the secondary interface is disassociated.

Parameters: None

Sample Display:

```
MG-001-3(configure)# clear sync interface primary
```

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configure

Privilege: Privileged

Description: configure

This is a special sub-level within the Privileged/Supervisor model. It permits the user to use any ‘set’ commands. The word “configure” is added to the command prompt string.

To return to the previous mode, enter **exit**.

Parameters: None

Sample Display:

```
MG-001-3# configure
MG-001-3(configure)#
```

[Administration](#) | [Processor](#) | [CC](#) | [QOS](#) | [Network](#) | [Maintenance](#) | [E1/T1 CSU](#)

copy mgp-config tftp

Privilege: Configure

Description: copy mgp-config tftp <filename> <ipaddress>

Permits the upload of a customer's configuration file from NVRAM to a destination via TFTP.

Parameters:

<filename> is the name of the destination file

<ipaddress> is the IP address of the destination.

Sample Display:

```
MG-001-3(configure)# copy mgp-config tftp tffs.dat 128.256.98.211
```

[Administration](#) | [Processor](#) | [CC](#) | [QOS](#) | [Network](#) | [Maintenance](#) | [E1/T1 CSU](#)

copy tftp

Privilege: Configure

Description: copy tftp {mgp-config | [mgp-image {A | B}] | [mm-image <mmID>]} <filename> <ipaddress>

Permits the download of the Media Gateway configuration from a source to NVRAM or download a firmware image from a source to flash memory for the Media Gateway Processor or the Media Modules.

Parameters:

- <mmID> is the slot number of the destination Media Module
- <filename> is the name of the origin file
- <ipaddress> is the IP address of the source host

Sample Display:

```

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
Destination 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

Privilege: All

Description: 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.

Parameters: None

Sample Display:

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	Running Cfg	NVRAM	100	Avaya G700 Media Gateway
DCP	56	Runtime Img	NVRAM	2	DCP Telephone Port Board
E1T1	55	Runtime Img	NVRAM	4	T1E1 Media Module

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exit

Privilege: All

Description: exit

Exit the session or leave the current mode.

Parameters: None

Sample Display:

```
MG-003-2> exit
```

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help

Privilege: All

Description: help [keyword] or <command> help

Use help to display a mode-specific alphabetical list of available commands along with the terse help string.

help <x>, where <x> is a key word, displays the verbose help message for the key word.

To see help for a specific command, type the command followed by a space and a question mark. To see on-line help, type a question mark (?), or the word **help** on the command line, or press the F1 key.

Example: **P330-N(super)# exit ?**

Parameters: [keyword] displays verbose help on keyword

Sample Display:

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 pro-
cess
show mgp recovery            Shows the MGP monitoring and recovery setup
-----
```

The following command is equivalent to the previous example:

```
MG-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 pro-
cess
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(configure)# 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> - INET 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 all active connections on IP sockets
-----
```


no	Use 'no help' for more info
nvrnm	Use 'nvrnm 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

Privilege: All

Description: [no] hostname [<hostname_string>]

Enter **hostname** to see the current hostname, and set the 'MG' moniker in the command line prompt with the entered string. A hostname of an empty string or NULL does not change the prompt. A prefix of **no** sets the prompt to the default string ('MG'). This command affects all sessions.

Parameters: String of 1-20 characters representing the desired hostname to be displayed.

Sample Display:

```
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

Privilege: All

Description: netstat

Shows all active connections on IP sockets.

Parameters: None

Sample Display:

```
MG-001-1(configure)# netstat
Active Internet connections (including servers)
PCB      Proto Recv-Q Send-Q Local Address Foreign Address (state)
-----
3f13e98  TCP        0      2  135.9.41.118.23  135.9.38.63.4523 ESTABL
ISHE
3f14234  TCP        0      0  135.9.41.118.1025 135.9.41.121.2945 ESTABL
ISHE
3f1412c  TCP        0      0  0.0.0.0.5012     0.0.0.0.0 LISTEN
3f13fa0  TCP        0      0  0.0.0.0.5051     0.0.0.0.0 LISTEN
3f13f1c  TCP        0      0  0.0.0.0.5050     0.0.0.0.0 LISTEN
3f13b80  TCP        0      0  0.0.0.0.23       0.0.0.0.0 LISTEN
3f141b0  UDP        0      0  0.0.0.0.0        0.0.0.0.0
3f140a8  UDP        0      0  0.0.0.0.2050     0.0.0.0.0
3f14024  UDP        0      0  0.0.0.0.161      0.0.0.0.0
3f13d90  UDP        0      0  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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nvram initialize

Privilege: Configure

Description: nvram initialize

Clears out the NVRAM areas and reloads them with the factory default.

Parameters: None

Sample Display:

```
MG-001-1(configure)# nvram initialize

This command will reset the MGP to Factory Default.
Do you want to continue (Y/N)? n
```

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ping

Privilege: All

Description: ping {mgp | [voip <mmid>]} <ipaddress> [number]

Provides a means to determine whether or not a two-way transmission path is open between the sending equipment and the target host. Uses identical command syntax and output as Avaya Cajun P330. For VoIP, the ping returns only the statistics.

Parameters:

- <ipaddress> is the IP address of the target host
- [number] is an optional count of the number of packets to transmit. If none is specified then 5 packets will be transmitted.
- <mmid> is the Media Module ID. If none is specified, v0 is assumed.

Sample Display:

```

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

Privilege: Configure

Description: **reset {mgp | voip <voipID> | {mm <mmID>}}**

Use **reset** to reset a specified system resource. It permits a hard reset of the specified system resource, returns any selectable parameters to the configuration in place before the reset, and sets all hardware and firmware to a known state.

Parameters:

- **mgp** - Use **reset mgp** to reset the motherboard.
- **voip**
- **<mmID>** valid entries are **v1-v4**. **v0** is not allowed, because it is the motherboard ID.
- **<voipID>** valid entries are **v0-v4**

Sample Display:

```

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

Privilege: All

Description: retstatus

Use **retstatus** to see if the last CLI command you performed was successful. Shows the pass/fail status of the last command that was run.

Parameters: None

Sample Display:

```
MG-001-2> retstatus  
Succeeded
```

```
MG-01 > retstatus  
Failed
```

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sat

Privilege: All

Description: sat

Provides a shortcut to access the SAT so that Avaya Communication Manager translation work can be performed. See the description for **session mgc sat** for more information. The Media Server must configure the SAT port to 5023.

Parameters: None

Sample Display:

```
MG-001-3> sat
```

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session

Privilege: All

Description: session {mgc [sat] | icc [sat] | stack}

Provides the means to establish a session with the active MGC, SAT, or the stack. The destination **sat** takes the user to the SAT login. **session mgc** takes the user to the LINUX shell login.

NOTE:

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. For **session mgc** and **session icc**, the Media Server should allow access to telnet port 23.

Parameters: None

Sample Display:

```
MG-001-3> session icc

Login:craft
Password: *****
craft@doc-icc1> exit
MG-001-3>
```

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set hostname

Privilege: All

Description: set hostname [<hostname_string>]

Places <hostname_string> in the command prompt. Sets the 'MG' moniker in the command line prompt with the entered string. A hostname of an empty string or NULL will not change the prompt. Enter **set hostname** to display the current hostname.

Parameters: <hostname_string> is 1-20 alphanumeric characters. Must be enclosed in quotes if >= 2 words.

Sample Display:

```
MG-001-3> set hostname Mickey
Mickey-001-3>
```

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set interface

Privilege: Configure

Description: **set interface** [mgp <vlan> <ipaddress> <netmask> | voip <voipid> <ipaddress>]

Sets the local static IP addresses for the Media Gateway Processor and VoIP engines. The VoIP engines will inherit the <netmask> defined by **set interface mgp**.

Parameters:

- <vlan> is the VLAN number
- <voipid> is in the range v0-v4, where v0 represents the VoIP engine on the motherboard
- <ipaddress> is the IP address of the interface
- <netmask> is the IP netmask

Sample Display

```
MG-001-3(configure)# set interface mgp 2 132.236.73.23 255.255.255.0
MG-001-3(configure)# set interface voip v2 123.23.44.21
```

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set ip route

Privilege: Privileged

Description: **set ip route** <destination> <mask> <gateway>

Use **set ip route** to add IP addresses to the IP routing table. You can configure from one to ten default gateways.

Parameters:

- <destination> is the IP address of the destination
- <mask> is the destination mask
- <gateway> is the IP address of the gateway to the destination

Sample Display:

```
MG-001-3# set ip route 132.236.73.0 255.255.255.0 132.236.73.1
```

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set logout | timeout

Privilege: Configure

Description: set [logout | timeout] <minutes>

Both **logout** and **timeout** perform the same. Sets the CLI inactivity time-out value in minutes. A value of **0** implies no timeout. When the timer is set greater than **0**, the user is automatically logged out if idle time is greater than the set value. No <minutes> entry implies a 15 minute time-out value.

Parameters: **0-999** minutes, the number of elapsed minutes for timing out the CLI connection. **0** results in no time-out.

Sample Display:

```
MG-001-3(configure)# set logout 20
Sessions will be automatically logged out after 20 minutes of idle time.

MG-001-3(configure)# set logout 0
Sessions will not be automatically logged out.
```

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show mediaserver

Privilege: All

Description: 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.

Parameters: None

Sample Display:

```
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

Privilege: Configure

Description: **set mediaserver** *<mgcaddress>* *<ipaddress>* *<port-number>* *<service-name>*

Use **set mediaserver** 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.

Parameters:

- *<mgcaddress>* is the controller IP address used for registration
- *<ipaddress>* is the management interface IP address
- *<port-number>* is the service port number
- *<service-name>* is the service type, SAT or TELNET

Sample Display:

```
MG-001-3> set mediaserver 135.8.45.120 135.8.45.121 5023 sat
```

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set mgc list

Privilege: Configure

Description: **set mgc list** [*<ipaddr1>*[, *<ipaddr2>*[, *<ipaddr3>*[, *<ipaddr4>*]]]]

Use **set mgc list** to create a list of valid MGC(s), up to 4 IP addresses separated by commas.

Parameters: *<ipaddr1>* is the IP address of the first call controller in the list.

Sample Display:

```
MG-001-3(configure)# set mgc list 132.236.73.2
```

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set mgp bootimage

Privilege: All

Description: set mgp bootimage [a | b]

Use **set mgp bootimage** to specify MGP bootup on either flash memory A or B.

Parameters: a or b are the flash memory units in the Media Gateway.

Sample Display:

```
MG-001-3(configure)# set mgp bootimage a
```

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set mgp icc-monitoring

S8300

Privilege: Configure

Description: 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.

Parameters: None

Sample Display:

```
MG-001-3(configure)# set mgp icc-monitoring enable
```

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set mgp reset times

Privilege: Configure

Description: set mgp reset-times [[[total-search | primary-search] <minutes>] | [transition-point <value>]]

The MGP has a set of 3 timers that are used as part of the recovery process if the MG and MGC lose their connectivity. They are configuration dependant.

Parameters: <value> is in minutes. total-search (1-60, [30]) minutes; primary-search (1-60, [15]) minutes; transition-point(aka, "entry number") (1-10, [1]).

Sample Display:

```
MG-001-3(configure)# set mgp reset-times total-search 24
```

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set qos bearer

Privilege: Configure

Description: set qos bearer {bbedscp | efdscp | 802p | rtpmin | rtpmax} <value>

Permits the setting of 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.

Parameters:

- bbedscp (0-63 [43])
- efdscp (0-63 [46])
- 802p (0-7 [6])
- rtpmin (1-65533 [2048])
- rtpmax (3-65535[65535])

Sample Display:

```
MG-001-3(configure)# set qos bearer bbedscp 43
```

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set qos control

Privilege: Configure

Description: set qos control [local | remote]

Defines the source for QoS control parameters. **Local** means that the user configures QoS values via the CLI. **Remote** means that QoS values are obtained from the Media Gateway Controller.

Parameters: None

Sample Display:

```
MG-001-3(configure)# set qos control local
```

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set qos rsvp

Privilege: Configure

Description: set qos rsvp {enable | disable | refresh <secs> | failure [retry | noretry] | profile [guaranteed | controlled]}

Sets the current value(s) for the RSVP parameters of the VoIP engines; **enabled/disabled**, **refresh rate (secs)**, **failure retry (y/n)**, **service profile** (guaranteed-service or controlled load service).

NOTE:

These settings WILL NOT take effect unless QoS source control setup is **local**.

Parameters: <secs>(1-99 [15])

Sample Display:

```
MG-001-3(configure)# set qos rsvp refresh 15
MG-001-3(configure)# set qos rsvp failure noretry
MG-001-3(configure)# set qos rsvp profile controlled
MG-001-3(configure)# set qos rsvp enable
```

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set qos rtcp

Privilege: Configure

Description: `set qos rtcp [enable | disable | monip <ipaddress> | reportper <seconds> | listenport <portno>]`

Permits the setup of RTCP parameters; enabling or disabling RTCP reporting capability, setting the IP address of the monitor, setting the reporting period, and defining the listening port number.

Parameters:

- `<ipaddress>` is the IP address of the monitor
- `<portno>` = (1-65535, [5005])
- `<seconds>` = (5-30 seconds)

Sample Display:

```
MG-001-3(configure)# set qos rtcp monip 132.123.23.12
MG-001-3(configure)# set qos rtcp reportper 10
MG-001-3(configure)# set qos rtcp listenport 5000
MG-001-3(configure)# set qos rtcp enable
```

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set qos signal

Privilege: Configure

Description: `set qos signal [dscp | 802q] <value>`

Provides the means to set up QoS signaling parameters (DSCP, 802.1Q) for the Media Gateway Processor.

Parameters: `dscp <value>` = (0-63, [34]); `802q <value>` = (0-7, [7])

Sample Display:

```
MG-001-3(configure)# set qos signal dscp 43
```

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set snmp trap

Privilege: Configure

Description: set snmp trap <ipaddress> [enable | disable]
[all|power|temp|app|module|config|voice|operations]

Sets the IP address of the SNMP trap receiver that will receive the traps from this Media Gateway, and sets what group's traps are sent to the specified receiver. If no keywords follow the IP address entry, **all** traps are enabled for the specified receiver. If **enable** or **disable** are used without a trap designation keyword, **all** traps is assumed. Up to 10 trap receivers can be configured.

Parameters: <ipaddress> is the IP address of the trap receiver that will receive the designated trap(s).

Sample Display:

```
MG-001-3(configure)# set snmp trap 132.236.73.3 enable
```

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set sync interface

Privilege: Configure

Description: set sync interface [primary | secondary] [<mmID>|<portID>]

Defines a potential stratum clock source (E1/T1 MM, ISDN-BRI). Setting source to primary, normal failover will occur. Setting source to secondary overrides normal failover, generates a trap, and asserts a fault. Not stored in persistent storage.

Parameters:

- <mmID> is the Media Module ID of a MM stratum clock source of the form "vn" where "n" is the MM slot number.
- For Avaya BRI MM720, a <portID> is depicted by combining the mmID of the MM720 to the port number of the BRI port furnishing the source.

Sample Display:

```
MG-001-3(configure)# set sync interface primary v2
MG-001-3(configure)# set sync interface secondary v403
```

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set sync source

Privilege: Configure

Description: **set sync source [primary | secondary | local]**

Defines the stratum clock source (E1/T1 MM, ISDN-BRI). Setting source to primary, normal failover will occur. Setting source to secondary overrides normal failover, generates a trap, and asserts a fault. Not stored in persistent storage.

When a sync source in use is experiencing excessive failures and therefore causing excessive switching to an alternate source (secondary or local) the unstable source will be "locked out" and an alarm (and SNMP trap) raised of severity "minor". The unstable source shall remain "locked out" until the appropriate variant of the "set sync source {primary|secondary|local}" command is manually issued which will "unlock" the referenced source and clear the associated minor alarm. The output from the "show sync timing" MGP CLI command shall also reflect that the source is locked out. The criteria for automatically locking out a source is 5 incidents of switching sync

Parameters: None; **local** is default option.

Sample Displays:

```
MG-001-3(configure)# set sync source primary
MG-001-3(configure)#
```

If the secondary interface is not configured, the sync source set operation will fail.

```
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

Privilege: All

Description: **set sync switching [enable | disable]**

Enables/disables 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.

Parameters: None

Sample Display:

```
MG-01-3(configure)# set sync switching enable
```

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set system contact

Privilege: All

Description: **set system contact** [*<string>*]

Permits the setting of a contact name for the system. If an empty string is entered, the current system contact name will be erased.

Parameters: *<string>* defines the name of the site contact. Must be enclosed in quotes if ≥ 2 words. Length = 1 - 20 characters.

Sample Display:

```
MG-01-3(configure)# set system contact "Jon Smith"
```

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set system location

Privilege: All

Description: **set system location** [*<string>*]

This command is used to set the name of the site location. If an empty string is entered, the current location name will be erased.

Parameters: *<string>* defines the site location. Must be enclosed in quotes if ≥ 2 words. Length = 1 - 20 characters.

Sample Display:

```
MG-01-3(configure)# set system location Disneyland
```

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set system name

Privilege: All

Description: set system name [*<string>*]

Permits the setting of a system name for the system. If an empty string is entered, the current system name will be erased.

Parameters: *<string>* defines the name of the system. Must be enclosed in quotes if ≥ 2 words. Length = 1 - 20 characters.

Sample Display:

```
MG-01-3(configure)# set system name "Goofy"
```

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set timeout | logout

Privilege: Configure

Description: set [timeout | logout] *<minutes>*

Both **set logout** and **set timeout** perform the same. Sets the CLI inactivity time-out value in minutes. A value of **0** implies no timeout. When the timer is set to greater than **0**, the user is automatically logged out if idle time is greater than the set value. No *<minutes>* entry results in a 15 minute time-out value.

Parameters: **0-999**, the number of elapsed minutes for timing out the CLI connection. Enter **0** for no time-out.

Sample Display:

```
MG-001-3(configure)# set timeout 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 csu loopbacks

Privilege: All

Description: show csu loopbacks [*<mmID>*]

Displays the state of the server SAT-controlled CSU loopbacks for a specified Media Module.

Parameters: *<mmID>* is the slot number where the CSU is installed. Values can be v1 to v4.

Sample Display:

```
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

Privilege: All

Description: 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).

Parameters: None

Sample Display:

```
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
LOF: OFF     YEL : ON
```

E1 version of csu status

CSU NETWORK INTERFACE STATUS

```
-----
LOS: ON      OOF : OFF
EER: OFF     LOOPD: OFF
AIS: OFF     PDV : OFF
LOF: OFF     LMA : OFF
RMA: OFF     LCM : ON
```

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show faults

Privilege: All

Description: **show faults [all]**

Use **show faults** to display all currently active faults, traps identified as such in the SNMP MIB fault masks. For G700 Release 2, additional key words are added so to help filter the output.

Parameters: None

Sample Display:

```
MG-001-3> show faults

Currently Active Faults
=====
PSU Fan
CPU temperature: Warning
```

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show hostname

Privilege: All

Description: show hostname

Shows the current command line prompt string.

Parameters: None

Sample Display:

```
Mickey-001-3> show hostname

Session hostname is 'Mickey'
```

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show interface

Privilege: All

Description: show interface [mgp | {voip <mmID>}]

Displays the IP interface configurations.

Parameters: <mmID> is the Media Module ID of the VoIP engine, where v0=motherboard, v=1-4 is a VoIP engine on a Media Module. No parameters specified results in the display of all defined interfaces.

Sample Display:

```
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	135.7.64.234	255.255.255.0	00-04-0D-02-06-68
voip-v0	S	1	135.8.48.223	255.255.255.0	00-04-0D-02-20-68

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show ip arp

Privilege: All

Description: show ip arp

Displays a list of ARP resolved MAC/IP addresses.

Parameters: None

Sample Display:

```
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
135.8.48.220	00:00:50:09:bd:b	405	1	1119	motfec0

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show ip route

Privilege: All

Description: show ip route [mgp | static | voip <mmID>]

Display the IP routing table contents.

Parameters: <mmID> is the Media Module identification.

Sample Display:

```
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

```
MG-001-3> show ip route static
```

DESTINATION	MASK	MASK
0.0.0.0	0.0.0.0	135.8.48.1

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show isdn bri link

Privilege: All

Description: show isdn bri link [<mmID>]

Displays the current status of all BRI links in the specified Media Module.

Parameters: <mmID> is Media Module ID of the desired Media Module.

Sample Display:

```
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

Privilege: All

Description: show isdn link summary

Displays a summary of all established links in the current Media Gateway.

Parameters: None

Sample Display:

```
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

Privilege: All

Description: show isdn pri link <mmID>

Displays the current status of all PRI links in the specified Media Module.

Parameters: <mmID> is Media Module ID of the desired Media Module.

Sample Display:

```
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

Privilege: All

Description: show [logout | timeout]

This command shows the auto-logout time. Timeout and logout are synonymous to support user preference. It displays the configured value of the terminal inactivity timer.

Parameters: None

Sample Display:

```
MG-001-3> show logout
CLI logout is 15 minutes
```

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show mediaserver

Privilege: All

Description: show mediaserver

This command shows 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".

Parameters: None

Sample Display:

```
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

Privilege: All

Description: show mgc

This command displays the currently active Media Gateway Controller state and setup parameters.

Parameters: None

Sample Display:

```
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

Privilege: All

Description: show mg list_config

This command shows the installed Media Gateway equipment. It displays the current hardware and firmware configurations of the Media Gateway, providing at least the same level of detail as the server **list config media-gateway** command.

Parameters: None

Sample Display:

```
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	DSL	MM710	A	2	55	N/A

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show mgc list

Privilege: All

Description: show mgc list

Displays the list of available MGC's; showing their respective IP addresses.

Parameters: None

Sample Display:

```
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

Privilege: All

Description: show mgp bootimage

Displays which flash memory bank the next boot will occur from as defined by the **set mgp bootimage [a | b]** command. The currently running image source is displayed via the **show mg list_config** command. In contrast, the present command shows which image will become active on the next mgp boot.

Parameters: None

Sample Display:

```
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

Privilege: All

Description: show mgp icc-monitoring

Displays the current state of the **S8300** monitoring watchdog.

Parameters: None

Sample Display:

```
MG-001-1> show mgp-icc monitoring
ICC Monitoring Status: Disabled
```

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show mgp recovery

Privilege: All

Description: show mgp recovery

Displays the currently configured values associated with the monitoring actions of and recovery parameters used by the MGP.

Parameters: Noe

Sample Display:

```
MG-001-3> show mgp recovery

MGP RECOVERY TIMES
-----
Primary Search   : 2
Total Search     : 30
Transition Point : 1
```

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show mm

Privilege: All

Description: show mm [<mmID>]

This command shows G700 Media Module information. It displays the type(s) and serial numbers of Media Modules installed on the Media Gateway. The information reflects the SNMP MIB Media Module "cmgModule..." group. The faults field is an interpretation of the MM's fault mask.

Parameters: <mmID> is the Media Module ID. Absence of specifying a Media Module ID displays information on all Media Modules.

Sample Display:

```
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

Privilege: All

Description: show post

Displays the results of the Power On Self Test (POST) for the G700 Media Gateway Firmware.

Parameters: None

Sample Display:

MG-001-3> show post

NCE0 DIAGNOSTICS

```
-----
NCE Reset          PASS
Internal RAM       PASS
FIFO Loop Around   PASS
Internal CH Loopback PASS
TDM Bus Master LB  PASS
External CH Loopback PASS
```

DSP DIAGNOSTICS

```
-----
DSP Memory         PASS
DSP Memory Download PASS
DSP Checksum       PASS
```

ENV DIAGNOSTICS

```
-----
Fan #1            PASS
Fan #2            PASS
Fan #3            PASS
Fan #4            PASS
Main Power Supply PASS
Aux Power Supply  PASS
ADC               PASS
```

NCE1 DIAGNOSTICS

```
-----
NCE Reset          PASS
Internal RAM       PASS
FIFO Loop Around   PASS
Internal CH Lpbk    PASS
TDM Bus Master LB  PASS
External CH Lpbk    PASS
```

SPITFIRE DIAGNOSTICS

```
-----
FIFOs              PASS
SPI Loopback       PASS
```

MISC DIAGNOSTICS

```
-----
Ethernet Local LB  PASS
Ethernet Phys LB   PASS
HDLC               PASS
Port I/O Read     PASS
```

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show qos-rtcp

Privilege: All

Description: show qos-rtcp

Displays the locally configured and downloaded QoS parameters.

Parameters: None

Sample Display:

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
Retry Delay(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

Privilege: All**Description:** show restart-log

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.

Parameters: None

Sample Display:

```

MG-001-3( developer )# show restart-log
RESET ID    MM/DD-hh:mm:ss.hs STR
-----
00000000596 02/02-19:33:38.67 User reboot
00000000595 02/02-19:33:31.67 MSY-TRPCRINO-00042 REBOOT from Recovery-
EngineUtlity::reboot()
00000000594 02/01-21:35:13.08 MSY-TRPCRINO-00042 REBOOT from Recovery-
EngineUtlity::reboot()
00000000593 02/01-20:02:20.55 MSY-TRPCRINO-00042 REBOOT from Recovery-
EngineUtlity::reboot()
00000000592 02/01-19:50:55.88 User reboot
00000000591 02/01-19:50:48.88 MSY-TRPCRINO-00042 REBOOT from Recovery-
EngineUtlity::reboot()
00000000590 02/01-13:32:16.36 User reboot
00000000589 02/01-13:32:09.36 MSY-TRPCRINO-00042 REBOOT from Recovery-
EngineUtlity::reboot()
00000000588 01/31-12:53:01.67 User reboot
00000000587 01/31-12:52:54.67 MSY-TRPCRINO-00042 REBOOT from Recovery-
EngineUtlity::reboot()
00000000586 01/31-08:04:27.94 User reboot
00000000585 01/31-08:04:20.94 MSY-TRPCRINO-00042 REBOOT from Recovery-
EngineUtlity::reboot()

```

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show snmp

Privilege: All

Description: show snmp

Shows the community strings and trap targets for each configured trap receiver. One page per trap receiver is displayed.

Parameters: None

Sample Display:

```

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

Privilege: All

Description: show sync timing

Displays the status of the primary, secondary, and the local clock sources. Status can be 'Active', 'Standby', or 'Not Configured' in the case where such a source has not been defined. For example, when there are no T1 cards installed.

Parameters: None

Sample Display:

```

MG-001-3> show sync timing

SOURCE      MM      STATUS      FAILURE
-----
Primary
Secondary
Local       v0      Active      None

```

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show system

Privilege: All

Description: show system

Displays the uptime, system name, system location, and contact name.

Parameters: None

Sample Display:

```
MG-001-1(super)# show system
Uptime(d,h:m:s): 31, 01:37:59
System Name      : -- Empty --
System Location  : -- Empty --
System Contact   : -- Empty --
MAC Address      : 00-04-0D-02-06-CA
Serial No       : 01DR12310260
Model No        : G700
HW Uintage      : 00
HW Suffix       : A
FW Uintage      : 20.15.0

Media Gateway Power Supplies
VOLTAGE(U) ACTUAL(U) STATUS
-----
DSP Complex     3.4      3.380 OK
MGP             5.1      5.090 OK
Media Modules   -48.0    -47.990 OK
VoIP DSP        1.6      1.590 OK
VoIP 8260       2.5      2.480 OK

MG-001-1(super)#
```

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show temp

Privilege: All

Description: show temp

Displays the current temperature of the CPU and DSP complex in degrees Celsius and the thresholds for warning and shutdown.

Parameters: None

Sample Display

```
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

Privilege: All

Description: show tftp [download | upload] [software {<mmID>} | config] status

Used to display the status of the current TFTP file copy process into/from the device.

Parameters: <mmID> is the Media Module ID.

Sample Display:

```
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

Privilege: All

Description: show [timeout | logout]

This command shows the auto-logout time. Timeout and logout are synonymous. It displays the configured value of the terminal inactivity timer.

Parameters: None

Sample Display:

```
MG-001-3> show timeout  
  
CLI timeout is 15 minutes
```

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show voip-parameters

Privilege: All

Description: show voip-parameters [<mmID>]

Displays the specified VoIP engine's MAC address, static/DHCP IP addresses, RTP port, and whether the VoIP engine setup is controlled via DHCP.

Parameters: <mmID> is the Media Module ID. Absence of a specification implies the motherboard VoIP engine.

Sample Display:

```
MG-001-1(super)# show voip-parameters
VOIP ENGINE PARAMETERS
-----
Slot Number       : 00
Current IP Address : 135.9.41.119
Static IP Address  : 135.9.41.119
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
MG-001-1(super)# _
```

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show voltages

Privilege: All

Description: show voltages

Displays the status of power supply voltages by indicating whether or not the output is within the predefined limits.

Parameters: None

Sample Display:

```
MG-001-1(super)# show voltages
VOLTAGE(U) ACTUAL(U) 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 8260    2.5      2.490    OK
MG-001-1(super)# _
```

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tech

Privilege: Privileged

Description: **tech**

Use **tech** to change to the **tech** mode where additional tech-related commands are available.

Parameters: None

Sample Display:

```
MG-001-3# tech
Password:

MG-001-3(tech)#
```

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telnet

Privilege: All

Description: **telnet** [<hostname>] [<port-number>]

Initiates a login session via TELNET to a network host.

Parameters:

- <**hostname**> is the IP address of the target host
- <**port-number**> is the TELNET port number; [23] is the default

Sample Display:

```
MG-001-3# telnet 135.9.41.121

login:
```

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terminal length

Privilege: All

Description: terminal length [<lines>]

Provides the means to set the terminal length expressed in the number of lines per screen (default = 24 lines). Shows the current setting if argument is not provided.

Parameters: <lines> represents the terminal length measured in lines per screen; (3-200, [24]), where 3-200 represents the range possible, with 24 as the default.

Sample Display:

```
MG-001-3> terminal length 24

MG-001-3> terminal length

terminal length: 24
```

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terminal width

Privilege: All

Description: terminal width [<chars>]

Provides the means to set the terminal width expressed in the number of characters (default = 80 characters). Shows the current setting if the argument is not provided.

Parameters: <chars> represents the terminal width measured in characters; (10-200, [80]), where 10-200 represents the range possible, and 80 is the default.

Sample Display:

```
MG-001-3> terminal width 80

MG-001-3> terminal width

terminal width: 80
```

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test led

Privilege: All

Description: test led

Illuminates 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. LED self-extinguishes.

Parameters: None

Sample Display:

```
MG-001-3> test led

Box-level LED should be ON for 5 seconds.
```

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traceroute mgp

Privilege: All

Description: traceroute mgp <ipaddress>

Used to diagnose IP routing and network performance. It is useful for locating slow routers and for finding IP routing problems. Output shows the TTL, address of the gateway, and round trip time (in milliseconds) for each of 3 probes. In a future release, the capability will be added to permit traceroute activity from a VoIP resource.

Parameters: <ipaddress> is the IP address of the targeted host.

Sample Display:

```
MG-014-1(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 50 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

Privilege: All

Description: tree

Use **tree** to see an alphabetical list of the commands in the CLI hierarchy available at your location.

Parameters: None

Sample Display:

```
MG-001-3> tree

clear screen
session
show dhcp
show interface
terminal length
terminal width

--type q to quit or space key to continue--
```

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5 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 598.

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 [IPSICLOCK] for IPSI clock and clock synchronization details.

IPSI user access commands

Use access commands to connect to the IPSI ipadmin application:

- [telnet](#) on page 606
- [exit \(or quit\)](#) on page 598
- [logout](#) on page 599

Basic IPSI ipadmin commands

Any ipadmin user may execute Basic IPSI apadmin commands. All other commands require that the user authenticate.

- [exit \(or quit\)](#) on page 598
- [help \(or ?\)](#) on page 598
- [ipsilogin](#) on page 598
- [show firmware version](#) on page 603
- [show servers](#) on page 605
- [telnet](#) on page 606

Basic diagnostic commands

These are the most commonly used IPSI and network diagnostic commands.

- [reset](#) on page 599
- [show control interface](#) on page 603
- [show control stats](#) on page 603
- [ping](#) on page 599

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 600
- [set control gateway](#) on page 599

Additional IPSI / network diagnostic commands

Most of the following diagnostic utilities were derived from VxWorks.

- [show arp](#) on page 603
- [show host](#) on page 603
- [show network stats](#) on page 604
- [show internet stats](#) on page 603
- [show ip stats](#) on page 604
- [show route](#) on page 604
- [show route stats](#) on page 605
- [show tcp stats](#) on page 606
- [traceroute](#) on page 606

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 or on **S8700 IP**.



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 602
- [set services gateway](#) on page 602

- [set port negotiation](#) on page 601
- [set port speed](#) on page 601
- [set port duplex](#) on page 600
- [set port flowcontrol](#) on page 601
- [show port](#) on page 604
- [show services interface](#) on page 605
- [show services stats](#) on page 605

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 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.

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 **S8700 MC**, 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.

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