



## **Migrating to the Avaya S8500 Media Server**

**Please disregard any references to the S8710 Media Server in this document. The S8700 Media Server is the currently available product. If you need additional information, please contact your Avaya representative or Avaya authorized business partner.**

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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.

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**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, or IEC 60950-1, 1st 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, or CAN/CSA-C22.2 No. 60950-1-03 / UL 60950-1.

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 used in Avaya equipment typically operate within the following parameters:

Typical Center Wavelength	Maximum Output Power
830 nm - 860 nm	-1.5 dBm
1270 nm - 1360 nm	-3.0 dBm
1540 nm - 1570 nm	5.0 dBm

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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

Power Line Emissions, IEC 61000-3-2: Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emissions.

Power Line Emissions, IEC 61000-3-3: Electromagnetic compatibility (EMC) – Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems.

### 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.

#### For all media gateways:

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/REN/ A.S. Code	Network Jacks
Off premises station	OL13C	9.0F	RJ2GX, RJ21X, RJ11C
DID trunk	02RV2-T	0.0B	RJ2GX, RJ21X
CO trunk	02GS2	0.3A	RJ21X
	02LS2	0.3A	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
120A4 channel service unit	04DU9-DN	6.0Y	RJ48C

### For G350 and G700 Media Gateways:

Manufacturer's Port Identifier	FIC Code	SOC/REN/A.S. Code	Network Jacks
Ground Start CO trunk	02GS2	1.0A	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

### For all media gateways:

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.

### Installation and Repairs

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect 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).

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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# About this documentation

## Overview

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This documentation, *Migrating to the Avaya S8500 Media Server*, 555-245-108, provides procedures for migrating existing DEFINITY, DEFINITY One, and IP600 servers to the Avaya S8500 Media Server.

## Audience

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This documentation is for the following audiences:

- Trained field installation and maintenance personnel
- Technical support personnel
- Authorized Business Partners

## Using this documentation

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Use this documentation as a guide to migrate DEFINITY, DEFINITY One, and IP600 communication servers to the S8500 Media Server. For information about a particular task, use the index or table of contents to locate the page number where the information is described.

Read the [Premigration setup on page 16](#) and [Documentation needed on page 18](#) sections first. The former section lists all tasks that must be complete prior to beginning the procedures described in this documentation. The latter section lists additional documentation you will potentially need before and during the migration process.

For the specific information that you need to migrate a system to the S8500 Media Server, see one or more of the following sections:

- [Basic Migration Steps](#) on page 19
- [Migrating translations](#) on page 20
- [Migrating Hardware](#) on page 28
- [Postmigration administration](#) on page 57

These sections contain step-by-step instructions to migrate the hardware and/or translations of DEFINITY and IP600 systems to an S8500 Media Server. Included are instructions to remove and install hardware, disconnect and reconnect equipment, turn the equipment off and on, and perform initial administration and testing.

# Conventions

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This section describes the conventions that we use in this book.

## General

We show commands and screens from the newest Communication Manager and refer to the most current documentation.

## Physical dimensions

All physical dimensions are in English units followed by metric units in parentheses. Wire gauge measurements are in AWG followed by the diameter in millimeters in parentheses.

## Terminology

We use the following terminology in this documentation:

- *Configuration* is a general term that encompasses all references to an Avaya media server with media gateways running Communication Manager.
- *Cabinet* refers to a stack of media gateways (such as the G650) that are TDM-cabled together. It is the same as a port network. It can also refer to the MCC1 (multi-carrier cabinet).
- *UUCSS* refers to a circuit pack address in cabinet-carrier-slot order.
- *Telephone* and *voice terminal* have the same meaning.
- *ASAI* is synonymous with the newer CallVisor ASAI.

## Typography

This section describes the typographical conventions for commands, keys, user input, system output, and field names.

### Commands

Commands are in **bold sans serif** type.

**Example**

Type **change-switch-time-zone** and press **Enter**.

Command variables are in **bold sans serif italic** type.

**Example**

Type **change machine *machine\_name***, where *machine\_name* is the name of the call delivery machine.

Command options are in **bold sans serif** type inside square brackets.

**Example**

Type **copybcf [-F34]**.

## Keys

The names of keys are in **bold** type.

**Example**

Use the **Down Arrow** key to scroll through the fields.

When you must press and hold a key and then press a second or third key, we separate the names of the keys are separated with a plus sign (+).

**Example**

Press **ALT+D**.

When you must press two or more keys in sequence, we separate the names of the keys are separated with a space.

**Example**

Press **Escape J**.

When you must press a function key, we provide the function of the key in parentheses after the name of the key.

**Example**

Press **F3 (Save)**.

## User input

User input is in **bold** type, whether you must type the input, select the input from a menu, or click a button or similar element on a screen or a Web page.

**Examples**

- Type **exit**, and then press **Enter**.
- On the **File** menu, click **Save**.
- On the Network Gateway page, click **Configure > Hardware**.

## System output and field names

System output on the screen is in `monospaced` type.

**Example**

- The system displays the following message:

```
The installation is in progress.
```

Field names on the screen are in **bold sans serif** type.

**Example**

- Type y in the **Message Transfer?** field.

## Downloading this book and updates from the Web

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You can download the latest version of this documentation from the Avaya Support Web site (<http://avaya.com/support>). You must have access to the Internet and a copy of Adobe Reader installed on your personal computer.

Avaya makes every effort to ensure that the information in this book is complete and accurate. However, information can change after we publish this documentation. Therefore, the Avaya Support Web site might also contain new product information and updates to the information in this book. You can also download these updates from the Avaya Support Web site.

To download the latest version of this documentation:

- 1 Access the Avaya Support Web site at <http://support.avaya.com>.
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  - **PDF Format** to download the book in regular PDF format
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## Safety labels and security alert labels

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Observe all caution, warning, and danger statements to help prevent loss of service, equipment damage, personal injury, and security problems. This documentation 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, including ESD damage to electronic components.



**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 access to a media server or use of a telecommunications system.

## Related resources

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See the other sections on the *Documentation for Avaya Communication Manager, Media Gateways and Servers*, 03-300151, for additional documentation.

## Technical assistance

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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, *Migrating to the Avaya S8500 Media Server*, 555-245-108.

# Migrating to an Avaya S8500 Media Server

These procedures are for migrating from existing DEFINITY systems to the Avaya S8500 Media Server. The existing systems supported for migrations must be standard reliability and direct connect—no systems using a center stage switch (CSS) or asynchronous transfer mode (ATM) are migratable. In all instances, the cabinets can be reused as port networks. You do not need a G650 Media Gateway. However, you can add a G650 Media Gateway port network if the existing system has only 1 or 2 port networks.

The existing systems that can migrate to an S8500 are

- DEFINITY ECS R in a Multicarrier Cabinet (MCC)
- DEFINITY ECS SI in a Single Carrier Cabinet (SCC) or MCC
- DEFINITY ECS CSI in a Compact Modular Cabinet (CMC)
- DEFINITY ONE in a CMC
- Avaya IP600/S8100 in a G600

The following tasks are included in this migration procedure:

- [Migration paths](#) on page 15
- [Premigration setup on page 16](#)
- [Documentation needed on page 18](#)
- [Basic Migration Steps](#) on page 19
- [Migrating translations](#) on page 20
- [Migrating Hardware](#) on page 28
- [Postmigration administration](#) on page 57

## Migration paths

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For a list of DEFINITY systems that can be migrated to the S8500 Media Server configuration, see [Table 1, DEFINITY Releases migratable to the S8500 Media Server configuration](#), on page 16.

When migrating to an S8500, you can use the existing translations. The only supported method of moving translations from legacy systems is to freeze the translations and send them to Avaya's Software Technical Support (STS) group. STS then returns the translation reports and translation files through email to the project manager before the migration. Contact the STS scheduling desk at 720-444-9418 for forms and additional information.

**Table 1: DEFINITY Releases migratable to the S8500 Media Server configuration**

DEFINITY ECS Release	R	SI	CSI	DEF ONE	IP600
Release G3V4	x	x			
Release G3s/si (w/Intel 386)		x			
Release 5	x	x	x		
Release 6	x	x	x	x	
Release 6 with SREPN	x				
Release 7	x	x	x	x	
Release 8	x	x	x	x	
Release 9	x	x	x	x	x
Release 10	x	x	x	x	x
Release 11/1.x	x	x	x	x	x
Release 2.0	x	x	x	x	x

## Premigration setup

The pre-migration team should have completed the following tasks. If they were not all done, do not continue with the migration.

### Before the day of migration

- About 2 weeks before the migration, freeze the translations.
  - For R, collect the translations locally via a spare tape or removable media (optical disk) and contact the STS scheduling desk at 720-444-9418 for information on where and how to send the translations.
  - For SI, CSI, and S8100, collect the translation locally via a spare flash card and contact the STS scheduling desk at 720-444-9418 for information on where and how to send the translations.

STS then updates the translations to the latest version; this process may take two weeks. STS returns the translation reports and translation files to the project manager by email who sends them to the field technician.

Contact the STS scheduling desk at 720-444-9418 for forms and additional information.

- Find out which adapters and cables are reusable. The following items are *not* reusable:
  - 982LS Current Limiter (CURL) for an SI; must replace with larger CFY1B CURL
  - C-LAN 259A adapter; must use adapter for IP Media Processor for 100 Mbps speed
  - CAT3 cable used with C-LAN; must use CAT5 for 100 Mbps speed.

- Verify that the services laptop has the right hardware and software. See *Installing and Configuring the Avaya S8500 Media Server* (03-300143) for the list of computer specifications.
- Verify that you have the required, customer-provided network information in hand. See the filled-out Electronic Preinstallation Worksheet (EPW).
- Verify that the following items were redesigned, if applicable:
  - voice network
  - dial plan
  - E911 for remote locales
- Check the Minimum Vintage Table to make sure that all existing circuit packs work with the S8500 Media Server. Go to the Hardware and Software Compatibility Matrix (<ftp://ftp.avaya.com/incoming/Up1cku9/tsoweb/media/minhardwarevintages.pdf>).
- Replace any TN799B/C C-LAN circuit pack with TN799DP circuit pack. Also, replace the 259A adapter and CAT3 cable with the cable extender adapter (Comcode 848525887) and CAT5 cable.
- Rerecord the announcements on the TN750, TN750B, and TN750C announcement circuit packs to work with the TN2501 Voice Announcement over LAN (VAL) circuit packs.
- Replace any TN776 or TN570 EI circuit packs with TN570B, vintage 7, or higher circuit packs.
- Replace any TN775/B/C maintenance circuit packs with TN775D circuit packs in any EPNs that will have an IPSI.
- Verify that you have the CD with the current software and firmware. This is what you use to install the software on the media server and upgrade the firmware.
- Verify that you have the appropriate logins and passwords to access the media servers and server complex components.

When you have finished installing the authentication file, Communication Manager will have a password for the craft login. This password is unique to the customer's media server. You can use the password the next time you log in as craft, provided you access the media server through the services port. You do not need an ASG challenge/response to log in this way, even though every other means of craft access will still require an ASG challenge/response.

This unique craft password remains valid until it is changed by installing a new authentication file.



**CAUTION:**

The following must be done *before* freezing translations.

- Verify that existing logins do not begin with a number. Linux does not support logins that begin with a number.
  - Use Avaya Terminal Emulator or Avaya Site Administration to perform a **list logins** command
- Verify that the functions of the TN577 Packet Gateway and TN726B Data Line circuit packs (BX.25 links and mode 2 data modules) were converted to work through the C-LAN circuit pack. (The TN577 circuit pack cannot be reused.) Use the following command to confirm:
  - Use Avaya Terminal Emulator or Avaya Site Administration to perform a **list node-names** command.
  - Verify that peripherals (CMS, INTUITY) and Distributed Communication Service (DCS) links have been assigned node names and have an Ethernet address assigned.

## Day of migration

- Verify that the open, customer-supplied, EIA 310D (or equivalent) standard 19-inch (48-centimeter) 4-post, equipment rack is properly installed and solidly secured. Make sure that the screws that come with the rack are there. Make sure that the rail kit for the Avaya-supplied UPS is installed on the rack or available for installation. For information on installing the rail, refer to the documentation that comes with the rail kit.
- Verify that the 19-inch EIA 310D (48-centimeter) 4-post, open equipment rack was grounded per [Approved Grounds](#). 
- Verify that cabling for the TN2312BP Internet Protocol Server Interface (IPSI) circuit pack(s) is labeled and run from the control hardware rack to the port network(s) or that appropriate connectivity is provided.
- Verify that you have all the equipment on site. See *Installing and Configuring the Avaya S8500 Media Server* (03-300143) for the list of required hardware.
- Verify that the services laptop has the right hardware and software. See *Installing and Configuring the Avaya S8500 Media Server* (03-300143) for the list of computer and software specifications.
- Verify that media servers and uninterruptible power supplies are on the same subnet if the media servers are collocated.
- Verify that you have the license file from RFA and that it includes the feature right to use (RTU) and applicable hardware parts in the existing system and any hardware being added as part of the migration.
- Verify that you have the Avaya authentication file from RFA.

## Documentation needed

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We recommend that you have the following documents on hand for the migration. These are included in the *Documentation for Avaya Communication Manager, Media Gateways and Servers* (03-300151).

- *Quick Start for Hardware Installation: Avaya S8500 Media Server* (555-245-701)—a quick reference guide providing physical installation and connection information.
- Filled out *Electronic Preinstallation Worksheet (EPW)*—an Excel spreadsheet providing the customer's network information needed to use the Avaya Installation Wizard to configure the control network components. Get from the Avaya project manager, Avaya software technician, or customer network administrator. A blank one is available at the Avaya Installation Wizard Web site (<http://support.avaya.com/avayaiw/>).
- *Installing and Configuring the Avaya S8500 Media Server* (03-300143)—part of the library providing information to install the S8500 Media Server and configuring the control network components.
- *Installing the Avaya G650 Media Gateway* (03-300144)—provides procedures for installing a G650 Media Gateway, backplane, and endpoints.

- The following job aids available on *Documentation for Avaya Communication Manager, Media Gateways and Servers*:
  - *Approved Grounds* (555-245-772)—job aid providing description of all approved grounds.
  - *Connector and Cable Diagrams (Pinout Charts)* (555-245-773)—job aid providing diagrams for various components.
  - *Option Switch Settings* (555-245-774)—job aid providing settings for various components.
- *Upgrading Software and Firmware—Avaya S8500, S8700, and S8710 Media Server* (555-245-111)—part of the HTML library providing information on upgrading the Avaya Communication Manager and firmware for various components and circuit packs.
- *Administrator's Guide for Avaya Communication Manager* (555-233-506)—end-user documentation that includes information on administering trunks and telephones.
- *Administration for Network Connectivity for Avaya Communication Manager* (555-233-504)—documentation providing information on network connectivity.
- *Maintenance Commands for Avaya Communication Manager 2.1, Media Gateways and Servers* (03-300191)—documentation providing information on how to use command interfaces, command syntax, and output from maintenance-related commands.
- *Maintenance Alarms for Avaya Communication Manager 2.1, Media Gateways and Servers* (03-300190)—documentation providing information on how to use alarms, error codes, and tests to diagnose and repair problems.
- *Maintenance Procedures for Avaya Communication Manager 2.1, Media Gateways and Servers* (03-300192)—documentation providing information on how to troubleshoot and replace various components.

## Basic Migration Steps

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- Install the Avaya S8500 Media Server and, if Avaya supplied, the Ethernet switch and uninterruptible power supply (UPS) in the 19-inch rack as described in the *Quick Start for Hardware Installation: Avaya S8500 Media Server* (555-245-701).
- Convert the existing processor control cabinet/carrier to an *expansion* control cabinet/carrier (MCC, SCC)
- Convert the existing processor control cabinet/chassis to a port network (CMC, IP600)
- Replace the Tone-Clock, Processor, or both circuit packs with the IPSI circuit pack in the existing port network.
- Connect the media servers to the media gateways.
- Enable control of the IPSIs, switching control to the S8500 Media Server.
- Complete the post-migration administration.

# Migrating translations

---

This section provides information for migrating translation files from the existing system to the S8500 Media Server.

## Before the day of migration

- 1 The customer freezes translation changes.
- 2 The project manager or software specialist sends the translations on a flashcard, tape, or magneto optical (MO) disk to Avaya's Software Technical Support (STS).
- 3 STS emails the updated translation file to the project manager, who sends them to the software specialist or field technician.  
Files normally are in the 1-4 megabytes range.
- 4 The field technician saves the translation file to a directory on the services laptop.

## Day of migration

Before proceeding with this procedure, verify the following:

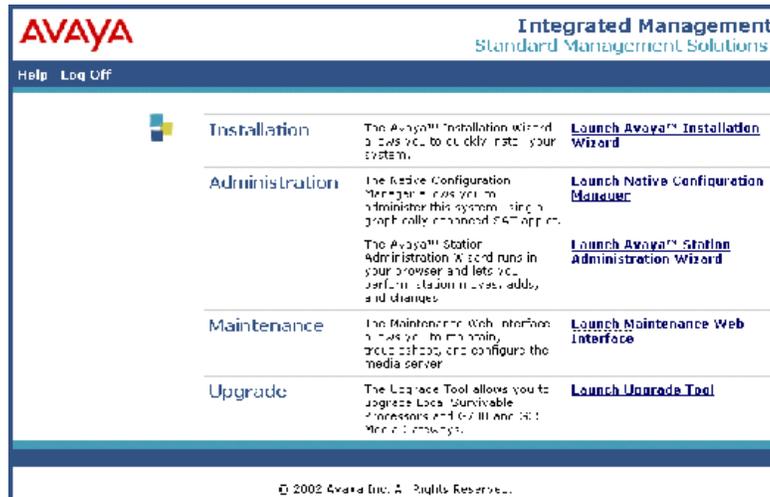
- The S8500 media server complex is installed, the software is installed on the media server, the media server is configured and operational.
- The license file and Avaya authentication files are installed and operational. Use the License File link on the Maintenance Web Interface to verify.

Once the translations are copied to the hard drive, you must administer the TN2312BP IP Server Interface circuit packs.

## Accessing the media server

- 1 Connect to the services port (2) on the back of the media server.
- 2 Launch the Web browser.
- 3 In the in the **Address** field, type **192.11.13.6** and press **Enter** to bring up the login Web page.
- 4 Log in as **craft** or **dadmin**.

- 5 When asked "Do you want to suppress alarms?", select "yes."



- 6 Click **Launch Maintenance Web Interface** to get to the Main Menu.

## Verifying license file

- 1 Under Security, click **License File**.

 **License File**

The License File Web page allows installation of Avaya license files.

MultiVantage License Mode: Normal  
Network used for License: Carrier MCP  
License Serial Number is 01DR12310260 on carrier MCP

Undo last install  
 Install the license file I previously downloaded  
 Install the license file specified below

File Path

URL

Proxy Server  e.g proxy.domain:3152)

- 2 Verify that the **MultiVantage License Mode:** field shows Normal.

## Copying translation files to media server

- 1 Under Miscellaneous, click **Download Files**.

 **Download Files**

The Download Files Web page lets you download files to the media server.

File(s) to download from the machine I'm using to connect to the server

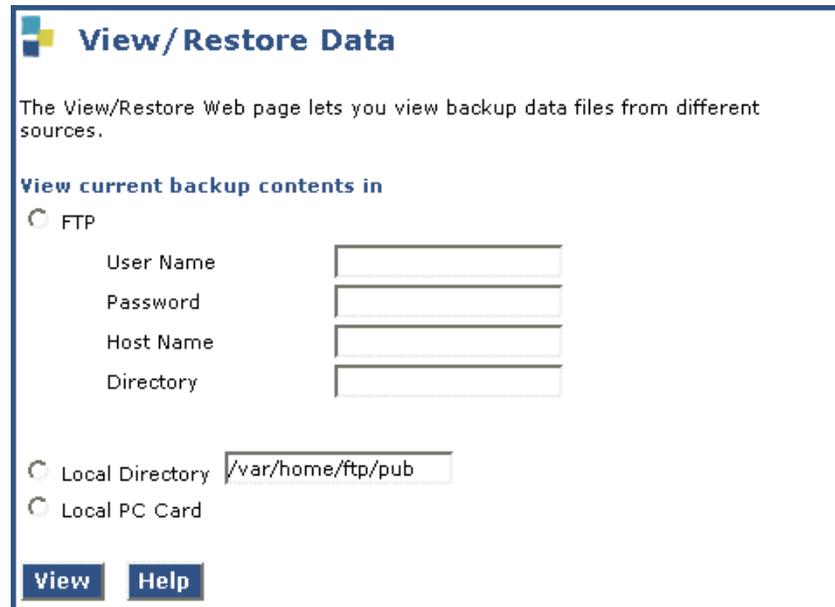
File(s) to download from the LAN using URL

Proxy Server  (e.g proxy.domain:3152)

- 2 Click **Browse** and select the file saved on the services laptop.
- 3 Click **Download** to place the file on the media server.

## Restoring translation files

- 1 Under Data Backup/Restore, click **View/Restore Data**.



**View/Restore Data**

The View/Restore Web page lets you view backup data files from different sources.

**View current backup contents in**

FTP

User Name

Password

Host Name

Directory

Local Directory

Local PC Card

**View** **Help**

- 2 Select **Local Directory** and click **View**. The field automatically displays the default directory.
- 3 Select the first file (the latest file should be at the top of the list), then select "Force restore if server name mismatch" and "Force restore if backup version mismatch."
- 4 Click **Restore** to restore the translation files.
- 5 Click **Restore Status**.
- 6 Select the first file, then scroll down and click **Review Status** to see the results of the restore.

When done, the screen displays `Restore is finished`.

- 7 Open a SAT session using Native Configuration Manager or Avaya Site Administration.
- 8 Type **reset system 4** and press **Enter** to load the restored translations.

If the restore process fails, you get an error message stating the reason for the failure. If that's the case, then the translation file is not restored. Resolve the reason for the failure and restart the process.

## Administering the IPSIs

- 1 Type **change system-parameters ipserver-interface** and press **Enter**

```

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: 172. 22. 0. 0*
      Secondary Control Subnet Address: . . .

OPTIONS

      Switch Identifier: A
      IPSI Control of Port Networks: disabled

NOTE: * indicates data changed on the server

```

- 2 Verify that the **Primary Control Subnet Address** field is correct.

The subnet address must match the most significant 3 octets (the first 3 groups of digits in the subnet address) of the Server IP address filled in on the control network entry from the filled-out Electronic Preinstallation Worksheet (EPW).

An Asterisk (\*) to the right of the **Subnet Address** field means that although a subnet address is displayed, it is not the correct one; Avaya Communication Manager does not have the subnet information. After verifying the displayed information, submit this form with or without changes to update the Communication Manager with the correct subnet information.



### CAUTION:

If the information displayed in the **Primary Control Subnet Address** field is not correct, it must be changed on the media server. Use the Maintenance Web Interface; under Server Configuration and Upgrades, click **Configure Server** to change the media server configuration. Then return here to perform this step.

- 3 Verify that the **Switch Identifier** field is set correctly for this installation. It is critical that the correct Switch Identifier is entered here before TN2312 IPSI circuit packs are administered.
- 4 Verify that the **IPSI Control of Port Networks:** field is set to **disabled**.
- 5 Press **Enter** to submit the form.

## Adding IPSI translations to Communication Manager

- 1 Type **add ipserver-interface PNumber** and press **Enter** to add the IPSI circuit pack information.

```

add ipserver-interface 8
      IP SERVER INTERFACE (IPSI) ADMINISTRATION - PORT NETWORK 8

IP Control? y                               Socket Encryption? n
                                           Enable QoS? n

Primary IPSI                                QoS Parameters
-----
Location: 8A02                               Call Control 802.1p: 6
      Host: 192.168.18.40                     Call Control DiffServ: 46
      DHCP ID: ipsi-A08a
  
```

- 2 When using static addressing, in the **Host:** field, type in the IP address for the IPSI in the port network listed in the **Location:** field.
- 3 Verify that the **IP Control?** field is set to **y**.
- 4 Verify that all the other fields are populated.
- 5 Press **Enter** to effect the changes.
- 6 Repeat steps 1 through 5 for each IPSI.

## Setting alarm activation level

- 1 Type **change system-parameters maintenance** and press **Enter**.

```

change system-parameters maintenance
                                                    Page 1 of 3

      MAINTENANCE-RELATED SYSTEM PARAMETERS

OPERATIONS SUPPORT PARAMETERS
      CPE Alarm Activation Level: none

SCHEDULED MAINTENANCE
      Start Time: 22 : 00
      Stop Time: 06 : 00
      Save Translation: daily
Update LSPs When Saving Translations: y
      Command Time-out (hours): 2
      Control Channel Interchange: no
      System Clocks/IPSI Interchange: no
  
```

- 2 Select none (default), warning, minor, or major, depending on the level the customer wants.

## Backing up translations

- 1 Under Data Backup/Restore, click **Backup Now**.

 **Backup Now**

The Backup Now Web page lets you store data separate from the Avaya media server. Select the type of data and the method to backup. Encrypting the data while backing up provides you a high level of security and is strongly encouraged.

**Data Sets**

Avaya Call Processing (ACP) Translations

Save ACP translations prior to backup

Do NOT save ACP translations prior to backup

Server and System Files

Security Files

**Backup Method**

FTP

    User Name

    Password

    Host Name

    Directory

Email

    User Name

    Domain Name

    Mail Server

**\*\*Please Note:** Depending on the size of the backup, the email may or may not work, as all mail servers have a maximum size they'll accept.

Local PC Card    Retain  data sets at destination

**Encryption**

Encrypt backup using pass phrase

- 2 Select the data sets and the backup method.

If you select "Save ACP translations prior to backup," the media server automatically saves the translations to its hard drive before saving it to the backup media.

- 3 Click **Start Backup** to begin the backup process.

# Migrating Hardware

---

These procedures are for migrating the hardware from existing DEFINITY systems to the Avaya S8500 Media Server with an Avaya G650 Media Gateway. The existing systems supported for migration must be standard reliability and either IP connect or direct connect—no systems with center stage switch (CSS) or asynchronous transfer mode (ATM) are migratable.

The existing systems that can migrate to an S8500 are

- DEFINITY ECS R in a Multicarrier Cabinet (MCC)
- DEFINITY ECS SI in a Single Carrier Cabinet (SCC) or MCC
- DEFINITY ECS CSI in a Compact Modular Cabinet (CMC)
- DEFINITY ONE/S8100 in a CMC
- Avaya IP600/S8100 with Avaya G600

This section assumes that the media server complex is installed, configured, and operational.

## DEFINITY ECS R or SI in an MCC

When migrating an existing DEFINITY ECS R or SI in an MCC, you use one TN2312BP IPSI circuit pack to control from 1 to 3 port networks. We recommend that you install the IPSI in the A carrier in the existing processor port network (PPN) rather than in one of the expansion port networks (EPNs). But before installing the IPSI, you must convert the PPN to a PN by replacing the processor control carrier with an expansion control carrier and removing all the control circuit packs. For specific information on how to do this, see [Converting a processor port network to a port network \(MCC\)](#) on page 34.

This is a service-affecting event. The PPN must be powered down to replace the carrier. Before powering down the cabinet, you must do some premigration administration (see [Preconversion administration \(R, SI, CSI\)](#) on page 30 for the specific steps.

## DEFINITY ECS SI in an SCC

When migrating an existing DEFINITY ECS SI in an SCC, you use one TN2312BP IPSI circuit pack to control from 1 to 3 port networks. We recommend that you install the IPSI in the cabinet in the A position in the existing processor port network (PPN) rather than in one of the expansion port networks (EPNs). But before installing the IPSI, you must convert the PPN to a PN by replacing the processor control cabinet with an expansion control cabinet and removing all the control circuit packs. For specific information on how to do this, see [Converting a processor port network to a port network \(SCC\)](#) on page 39.

This is a service-affecting event. The PPN stack must be powered down to replace the cabinet. Before powering down the cabinets, you must do some premigration administration (see [Preconversion administration \(R, SI, CSI\)](#) on page 30 for the specific steps.

## DEFINITY ECS CSI or DEFINITY ONE/S8100 in a CMC

When migrating an existing DEFINITY ECS CSI or DEFINITY ONE in a CMC, you use one TN2312BP IPSI circuit pack to control the port network. If CSI, you replace the Tone Clock circuit pack with the IPSI in the cabinet in the A position; you also remove the processor circuit pack. If DEFINITY ONE, you replace the processor circuit pack with the IPSI. For specific information on how to do this, see [Converting a processor port network to a port network \(CMC\)](#) on page 48.

This is a service-affecting event. The CMCs must be powered down to replace the processor and tone clock (if csi). Before powering down the cabinets, you must do some premigration administration (see [Preconversion administration \(R, SI, CSI\)](#) on page 30 or [Preconversion administration \(S8100\)](#) on page 32 for the specific steps.

## Avaya IP600/S8100 in G600

When migrating an existing Avaya IP600, you use one TN2312BP IPSI circuit pack to control the port network. You replace the processor circuit pack with the IPSI in the cabinet in the A position. For specific information on how to do this, see [Converting a processor port network to a port network \(IP600\)](#) on page 52.

This is a service-affecting event. The IP600 chassis must be powered down to replace the processor. Before powering down the chassis, you must do some premigration administration (see [Preconversion administration \(S8100\)](#) on page 32 for the specific steps.

# Converting a processor port network to a port network

---

This section assumes that the media server complex is installed, configured, and operational.

This section covers converting an existing Processor Port Network (PPN) to a Port Network (PN) for each type of cabinet.



## CAUTION:

This procedure is service affecting. When the PPN is powered down, all calls are dropped. Service returns when the media server takes control of the IPSIs.

See the following sections for specifics:

- [Preconversion administration \(R, SI, CSI\)](#) on page 30
- [Preconversion administration \(S8100\)](#) on page 32
- [Converting a processor port network to a port network \(MCC\)](#) on page 34 (R or SI)
- [Converting a processor port network to a port network \(SCC\)](#) on page 39 (SI)
- [Converting a processor port network to a port network \(CMC\)](#) on page 48 (CSI or S8100)
- [Converting a processor port network to a port network \(IP600\)](#) on page 52 (S8100).

The general procedures vary slightly, depending on the existing cabinet.

- Powering down the processor gracefully—pre-conversion administration.
- Replacing the processor control carrier/cabinet with an expansion control carrier/cabinet (MCCs and SCCs).
- Replacing the tone clock and maintenance circuit packs with an IP Server Interface (IPSI) and new maintenance circuit packs (MCCs and SCCs).  
  
Or replacing the processor or tone clock circuit pack with an IPSI circuit pack (CMC and IP600).
- Replacing old expansion interface circuit packs with new ones, if necessary (MCCs and SCCs)
- Replacing the WP cables with twisted pair cables (IP600 only).
- Connecting the IPSI circuit pack to the Ethernet switch on the customer's network.
- Assigning an IP address to the IPSI circuit pack.

## Preconversion administration (R, SI, CSI)

This section covers the following tasks:

- [Connecting to the processor](#) on page 31
- [Verifying system status](#) on page 31
- [Recording all busyouts](#) on page 31
- [Note node names and IP addresses](#) on page 31
- [Saving translations](#) on page 31

## Connecting to the processor

- 1 Use the computer used to access the cabinet
- 2 Open a SAT session using Native Configuration Manager or Avaya Site Administration.
- 3 Log in as **craft**.

## Verifying system status

You want to check which groups are in or out of service before the migration and compare the list after the migration to make sure they are the same.

- 1 Execute the following commands to see whether the system has administration:
  - a **list configuration all**
  - b **list trunk-group**
  - c **list hunt-group**

If any command does not complete successfully, escalate the problem immediately. After the conversion, check the same administration to be sure that the translations are intact.

## Recording all busyouts

- 1 Type **display errors** and press **Enter**. Look for type 18 errors and record any trunks that are busied out, so you can return them to their busy-out state after the conversion.

### NOTE:

Because of a change in Release 1.3 of Avaya Communication Manager, you no longer need to disable Terminal Translation Initialization (TTI) before a migration or an upgrade or enable it afterwards.

## Note node names and IP addresses

Note the node names and IP addresses assigned to the TN2302AP IP Media Processor and TN799C/DP C-LAN circuit packs. You want to make sure they are the same after the migration.

### NOTE:

If the existing system has TN799C C-LAN circuit packs, you must replace them with TN799DP circuit packs.

- 1 Type **display ip-interfaces** and press **Enter** to get the node names for the TN2302AP IP Media Processor and TN799C/DP C-LAN circuit packs.
- 2 Type **list node-names** and press **Enter** to get the IP addresses that match the node names.
- 3 Write the information down for after the migration.

## Saving translations

### NOTE:

When the source version is **csi** or **si**, save translations to a flash card. When the source version is **G3r**, save translations to disk, optical diskette, or tape.

Although the migrated translations are already copied to the S8500 Media Server, this step is important in case you need to back out of the migration.

- 1 Type **save translations** and press **Enter** to save translations to the system disk.  
Either a “Command successfully completed” message displays or all error messages are logged.

## Preconversion administration (S8100)

This section covers the following tasks:

- [Connecting to the processor](#) on page 32
- [Note node names and IP addresses](#) on page 32
- [Saving translations](#) on page 32
- [Note IP settings](#) on page 33

### Connecting to the processor

**NOTE:**

You need a crossover cable to connect your services laptop directly to the processor.

- 1 Connect the services laptop directly into the Avaya IP600 processor circuit pack
  - If a TN795 Processor circuit pack, place the NIC card into the slot on the faceplate.
  - If a TN2314 Processor circuit pack, plug the RJ45 connector directly into the RJ45 jack on the faceplate.
- 2 Start a terminal emulation application or Avaya Site Administration.
- 3 Log in as **lucent3**.

### Note node names and IP addresses

Note the node names and IP addresses assigned to the TN2302AP IP Media Processor and TN799C/DP C-LAN circuit packs. You want to make sure they are the same after the migration.

**NOTE:**

If the existing system has a TN799C C-LAN circuit pack, you’ll need to replace it with a TN799DP circuit pack.

- 1 Type **display ip-interfaces** and press **Enter** to get the node names for the TN2302AP IP Media Processor and TN799C/DP C-LAN circuit packs.
- 2 Type **list node-names** and press **Enter** to get the IP addresses that match the node names.
- 3 Write the information down for after the migration.

### Saving translations

This step is important in case you need to back out of the migration. You may want to print out the translations for reference.

- 1 Type **save translations** and press **Enter** to save translations to the system disk.  
Either a “Command successfully completed” message displays or all error messages are logged.

## Note IP settings

Note the IP settings assigned to the processor as they may be used for the Avaya S8500 Media Server. Verify against the filled-out *Electronic Preinstallation Worksheet*.

The following administration is done on the services laptop connected to the processor circuit pack using telnet.

- 1** Select **Start > Run** to open the **Run** dialog box.
- 2** Type **telnet 192.11.13.6** and press **Enter** to access the Avaya IP600.
- 3** Log in as **lucent3** to get to the LAC prompt.
- 4** Type **bash** and press **Enter** to start a BASH session.
- 5** Type **setip** and press **Enter** to display the current list of IP settings. You will see the following information:
  - *cust: IPaddress, subnet mask, gateway*
  - *dns: server name, domain name, 2 DNS server IP addresses*
  - *wins: 2 WINS server IP addresses*
  - *ras: 1 remote access server IP address*
- 6** Write down this information, *exactly* as it appears.

You must record this information exactly as it appears here. You cannot miss any periods, commas, or other punctuation marks. Record information in lower or upper case as it appears.

# Converting a processor port network to a port network (MCC)

This section covers the following tasks:

- [Removing the processor port network control carrier\(s\)](#) on page 35
- [Installing the expansion control carrier and](#) on page 35
- [Installing IPSI and maintenance circuit packs](#) on page 36
- [Connecting the CAT5 cables to the IPSI circuit packs](#) on page 38
- [Installing Expansion Interface circuit packs](#) on page 38
- [Postmigration administration](#) on page 57

## Verifying hardware

Make sure you have the conversion specific hardware on hand. See [Table 2, Required Migration Hardware](#), on page 34 for a list of hardware.

**Table 2: Required Migration Hardware**

Comcode	Description	Quantity
J58890-AF-2 L13	Port network expansion control carrier	1
NA	CFY1B current limiter (CURL) (if SI,can reuse existing one if R)	1
700260359	TN2312BP IP Server Interface circuit pack	1
700263502	IPSI adapter	1
700276389	Maintenance cable (attaches to IPSI adapter)	1
108865775	TN775D Maintenance circuit pack	1
700168727	Short ribbon cable—from maintenance board to IPSI in MCC1 A carrier	1
700170012	Green CAT5 Ethernet cable: – 5-meter (16 feet)	1
700178056	– 25-meter (82 feet)	1
700178064	– 50-meter (164 feet)	1
700060643	TN2302AP IP Media Processor circuit pack	1 or more
700055015	TN799DP C-LAN circuit pack (to replace TN799C)	1 or more
848525887	IP Media Processor adapter	1/MedPro 1/C-LAN
NA	CAT5 cables	1/MedPro 1/C-LAN
105679542	Z100C Apparatus blank (optional)	1 or more

## Removing the processor port network control carrier(s)

- 1 Label both ends of all the cables being removed from the control carriers. They may be reused.



### CAUTION:

All active calls processed through this port network are dropped when the cabinet is powered down. All trunks and lines within this cabinet are down until the cabinet is powered up and the media server controls the port network.



### CAUTION:

Do not power down the Survivable Remote Expansion Port Networks.

### NOTE:

If the system is equipped with Power Failure Transfer (PFT) units using ground start trunks, you must install a temporary ground wire to the PFT units to allow them to operate properly when the cabinet is powered down. The AUX cable, that normally supplies the ground, will be disconnected.

- 2 Connect a 10 AWG (#25) (2.6 mm<sup>2</sup>) wire to pin 49 of the connecting block associated with the power failure transfer panel.
- 3 Route the opposite end of the wire to an approved ground and connect.
- 4 Power down the cabinet.
- 5 Disconnect the power cable on the front of carrier A.
- 6 Remove all circuit packs from carrier A and place in an antistatic carrier.
- 7 Remove power supplies from carrier A.
- 8 Remove faceplate from carrier A
- 9 Disconnect the cables on the back of carrier A.
  - TDM/LAN (reused)
  - ICC-A, -B (Replaced)
  - AUX Cable (reused)
  - 9-pin D subminiature plug on right side of cabinet from the P1 connector on carrier (reused)
- 10 Remove the Current Limiter (CURL) unit from the back of the carrier. (Can be reused only if R.)
- 11 Remove all carrier grounds.
- 12 Remove carrier A from the cabinet.

## Installing the expansion control carrier and

- 1 Install the J58890-AF-2 L13 PN expansion control carrier in position A.
- 2 Connect the carrier grounds.
- 3 Install the CFY1B Current Limiter (CURL) unit on the back of control carrier A. (Reuse the CURL if R; replace the CURL if SI.)

- 4 Connect the cables to the back of the carriers.
  - TDM/LAN
    - Carrier A to D (if equipped)
    - Carrier A to B
    - Carrier B to C (if equipped)
  - ICC cables from carrier A to B (if required).
    - Simplex reliability: No ICC cables required.
  - AUX cable to carrier A.
  - 9 pin D subminiature plug to P1 connector on each carrier.
- 5 Install faceplates on carrier A.
- 6 Install power supplies in carrier A.

## Installing IPSI and maintenance circuit packs

- 1 Remove the TN2182 Tone Clock circuit pack from the control carrier and place it in an antistatic carrier.

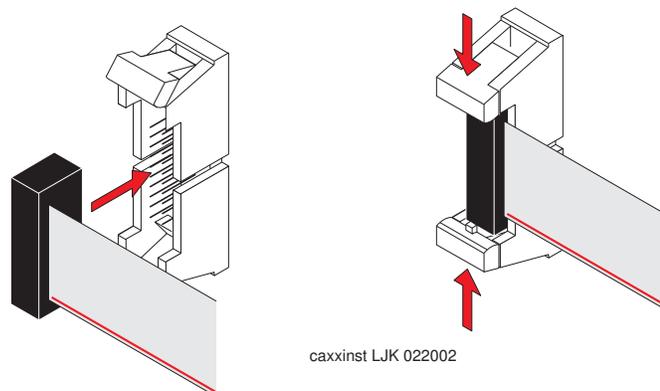
**NOTE:**

If present, do not remove the TN771 Maintenance/Test circuit pack.

- 2 Remove the TN775B/C Maintenance (EPN) circuit pack from the expansion control carrier and place it in an antistatic carrier.
- 3 Insert the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack part way into the TONE-CLOCK slot.
- 4 With the red line on the bottom (pin 1), attach one end of the short ribbon cable to the connector on the component side of the TN2312BP circuit pack. See [Figure 1, Ribbon Cable Connector](#), on page 36.

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**Figure 1: Ribbon Cable Connector**

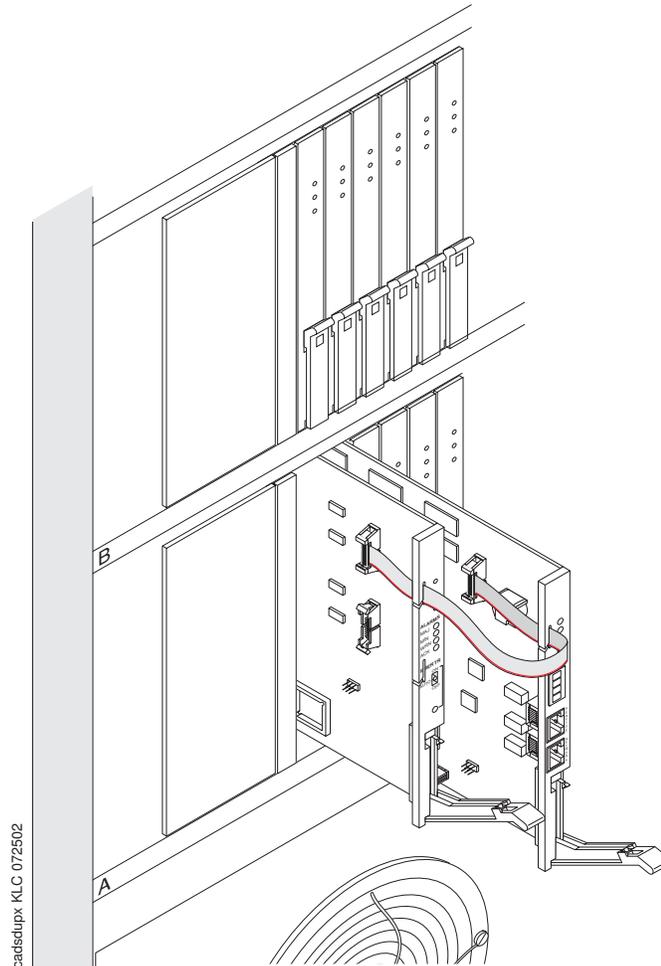


- 5 Push the tabs on the ends of the connector inward to lock the connector in place.

- 6 Thread the ribbon through the slot on the front panel. See [Figure 2, Simplex Reliability Ribbon Cable Connection, on page 37.](#)

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**Figure 2: Simplex Reliability Ribbon Cable Connection**



- 7 Insert the TN775D Maintenance (EPN) circuit pack part way into the MAINTENANCE slot.
- 8 Attach the other end of the short ribbon cable to the *top* connector on the component side of the TN775D Maintenance (EPN) circuit pack (red line on the bottom). See [Figure 2, Simplex Reliability Ribbon Cable Connection, on page 37.](#)
- 9 Push the tabs on the ends of the connector inward to lock the connector in place.
- 10 Thread the ribbon through the slot on the front panel.
- 11 Fully insert the circuit packs.
- 12 In the remainder of the empty slots, insert Z100C Apparatus blanks.
- 13 Assign the Switch and Cabinet ID to the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack just inserted. See [Assigning IP addresses to the IPSI circuit packs](#) on page 57.

Although you can use ICCV for connectivity, for consistency just use the ribbon in the front.

## Connecting the CAT5 cables to the IPSI circuit packs

See *Quick Start for Hardware Installation: Avaya S8500 Media Server* (555-245-701) and the job aid titled *Cabling Guide - MCC1 and SCC1 Media Gateway* for a connectivity guide.

- 1 Connect the GREEN CAT5 cable to the IPSI in the A carrier.

## Installing Expansion Interface circuit packs

### NOTE:

If the existing PPN has a TN776 or TN570 Expansion Interface circuit packs, you must replace them with a TN570B, vintage 7, or higher circuit pack.

- 1 Remove the existing circuit pack and place in an antistatic container.
- 2 Insert the TN570B Expansion Interface, vintage 7, or higher EI circuit packs into the EXPN INTFC slots (A01).

## Powering up the media gateway(s)

- 1 Power up the media gateways.
- 2 Remove the emergency ground wire if used.

# Converting a processor port network to a port network (SCC)

---

This section covers the following tasks:

- [Verifying hardware](#) on page 39
- [Removing the processor port network control cabinet](#) on page 40
- [Installing the expansion control media gateway](#) on page 40
- [Stacking the port media gateways](#) on page 41
- [Installing IPSI and maintenance circuit packs](#) on page 41
- [Connecting the CAT5 cables to the IPSI circuit packs](#) on page 43
- [Installing Expansion Interface circuit packs](#) on page 47
- [Postmigration administration](#) on page 57

## Verifying hardware

Make sure you have the conversion specific hardware on hand. See [Table 3, Required Migration Hardware](#), on page 39 for a list of hardware.

**Table 3: Required Migration Hardware 1 of 2**

Comcode	Description	Quantity
J58890N	Port network expansion control carrier	1
NA	CFY1B current limiter (CURL) (if SI; can reuse existing one if R)	1
700260359	TN2312BP IP Server Interface circuit pack	1
700263502	IPSI adapter	1
700276389	Maintenance cable (attaches to IPSI adapter)	1
108865775	TN775D Maintenance circuit pack	1
700168727	Short ribbon cable—from maintenance board to IPSI in MCC1 A carrier	1
	Green CAT5 Ethernet cable:	
700170012	– 5-meter (16 feet)	1
700178056	– 25-meter (82 feet)	1
700178064	– 50-meter (164 feet)	1
700060643	TN2302AP IP Media Processor circuit pack	1 or more
700055015	TN799DP C-LAN circuit pack (to replace TN799C)	1 or more
848525887	IP Media Processor adapter	1/MedPro 1/C-LAN

**Table 3: Required Migration Hardware 2 of 2**

Comcode	Description	Quantity
NA	CAT5 cables	1/MedPro 1/C-LAN
106696081	TN570B Expansion Interface circuit pack (optional)	1
105679542	Z100C Apparatus blank (optional)	1 or more

## Removing the processor port network control cabinet

- 1 Label both ends of all the cables being removed from all the cabinets. They are reused.



### CAUTION:

All active calls processed through this port network are dropped when the cabinet stack is powered down. All trunks and lines within this cabinet stack are down until the cabinet stack is powered up and the media server controls the port network.

### NOTE:

If the system is equipped with Power Failure Transfer (PFT) units using ground start trunks, you must install a temporary ground wire to the PFT units to allow them to operate properly when the cabinet is powered down. The AUX cable, that normally supplies the ground, will be disconnected.

- 2 Connect a 10 AWG (#25) (2.6 mm<sup>2</sup>) wire to pin 49 of the connecting block or to pin 49 of the CAP (cable access panel) on the power-failure transfer panel.
- 3 Route the opposite end of the wire to an approved ground and connect.
- 4 Power down the cabinets in the SCC1 stack.
- 5 Remove all circuit packs from the cabinets and place them in an antistatic carrier.
- 6 Disconnect the cables on the front of the cabinets.
- 7 Disconnect the cables on the back of the cabinets.
  - CURL (cannot be reused)
  - TDM/LAN (reused)
  - ICC-A, -B (reused)
- 8 Remove all cabinet grounds.
- 9 Remove the top cabinet.
- 10 Remove the subsequent cabinets, including control cabinet A.

## Installing the expansion control media gateway

- 1 Install the J58890N expansion control media gateway.
- 2 Connect the media gateway grounds and power.

## Stacking the port media gateways

- 1 If needed, stack a port media gateway (J58890H) on top of the expansion control media gateway.
- 2 If needed, stack a third and fourth port media gateway on top of the first port media gateway.
- 3 Install the new CFY1B CURL unit on the back of control cabinet A.
- 4 Connect all the cables to the back of all the media gateways.
  - TDM/LAN
  - ICC-A, -B

## Installing IPSI and maintenance circuit packs

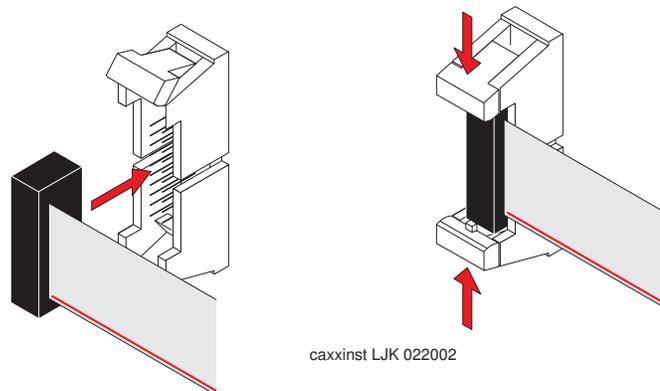
- 1 Remove the TN2182 Tone Clock circuit pack from the control carrier and place it in an antistatic carrier.

**NOTE:**

If present, do not remove the TN771 Maintenance/Test circuit pack.

- 2 Remove the TN775B/C Maintenance (EPN) circuit pack from the expansion control carrier and place it in an antistatic carrier.
- 3 Insert the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack part way into the TONE-CLOCK slot.
- 4 With the red line on the bottom (pin 1), attach one end of the short ribbon cable to the connector on the component side of the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack. See [Figure 3, Ribbon Cable Connector](#), on page 41.

**Figure 3: Ribbon Cable Connector**

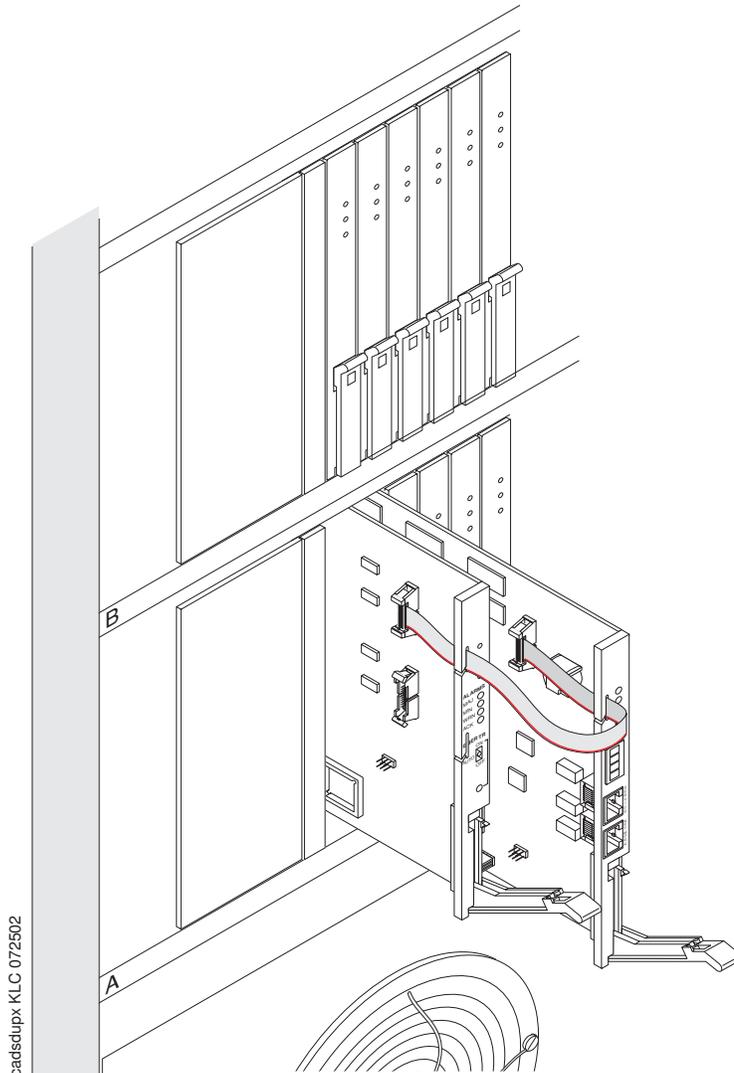


- 5 Push the tabs on the ends of the connector inward to lock the connector in place.
- 6 Thread the ribbon through the slot on the front panel. [Figure 4, Simplex Reliability Ribbon Cable Connection, on page 42.](#)
- 7 Insert the TN775D Maintenance (EPN) circuit pack part way into the MAINTENANCE slot.

- 8 Attach the other end of the short ribbon cable to the *top* connector on the component side of the TN775D Maintenance (EPN) circuit pack (red line on the bottom). See [Figure 4, Simplex Reliability Ribbon Cable Connection, on page 42](#).

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**Figure 4: Simplex Reliability Ribbon Cable Connection**



- 9 Push the tabs on the ends of the connector inward to lock the connector in place.
- 10 Thread the ribbon through the slot on the front panel.
- 11 Fully insert the circuit packs.
- 12 In the remainder of the empty slots, insert Z100C Apparatus blanks.
- 13 Assign the Switch and Cabinet ID to the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack just inserted. See [Assigning IP addresses to the IPSI circuit packs](#) on page 57.

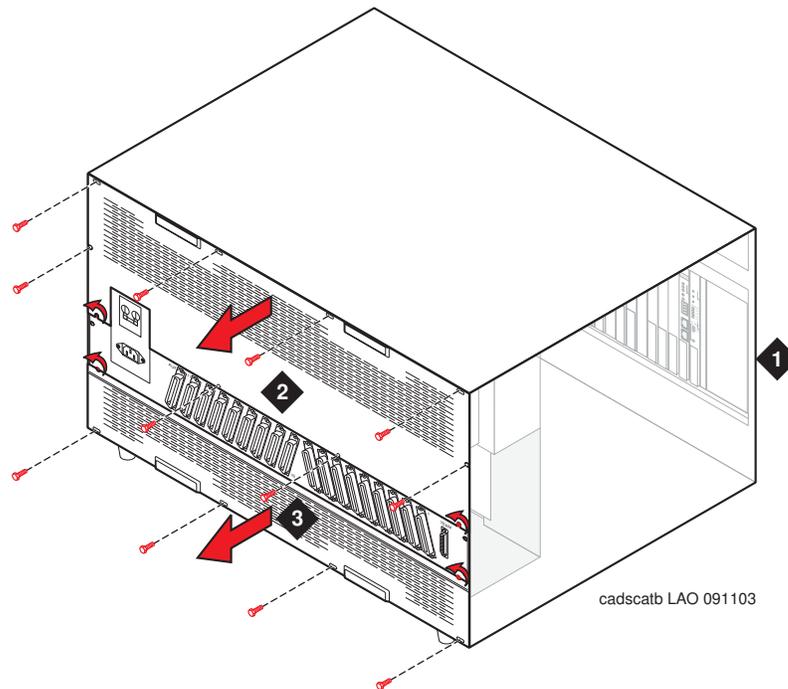
Although you can use ICCV for connectivity, for consistency just use the ribbon in the front.

## Connecting the CAT5 cables to the IPSI circuit packs

See *Quick Start for Hardware Installation: Avaya S8500 Media Server* (555-245-701) for a connectivity guide.

- 1 Connect the GREEN CAT5 cable to the IPSI in the A carrier or cabinet in the A position.
- 2 Remove the upper and lower rear covers from the media gateway. See [Figure 5, Removal of the upper and lower rear covers](#), on page 43.

**Figure 5: Removal of the upper and lower rear covers**

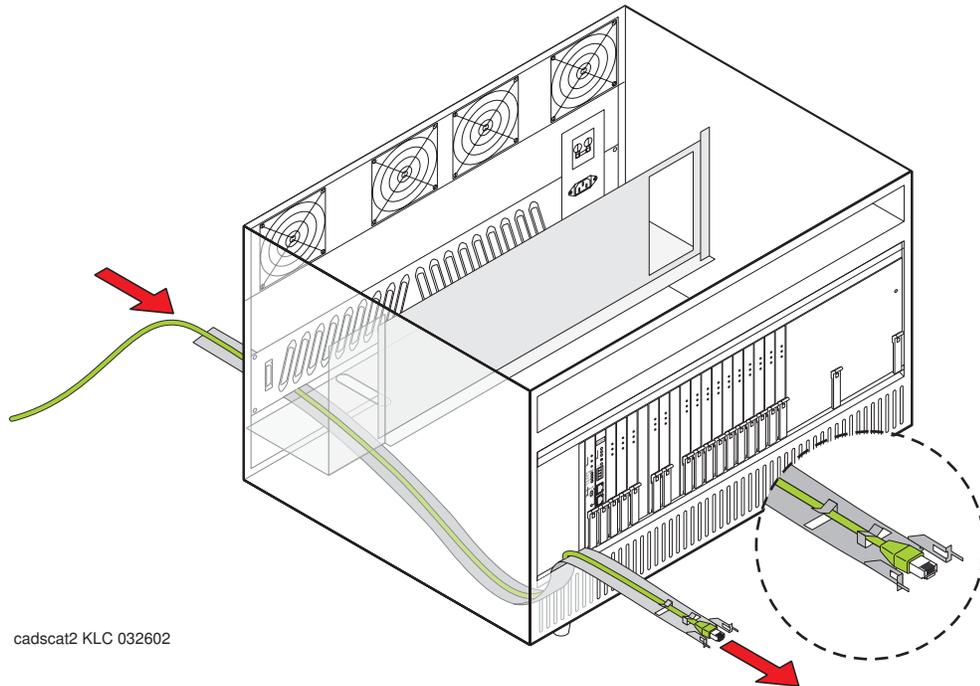


**Figure notes**

- |   |                  |   |                  |
|---|------------------|---|------------------|
| 1 | Media Gateway A  | 3 | Lower rear cover |
| 2 | Upper rear cover |   |                  |

- 3 Run the 25- or 50-m GREEN CAT5 cable from the Ethernet switch or customer network through the media gateway, using a cable pass-thru kit. See [Figure 6, CAT5 cable in pass-thru kit](#), on page 44.

**Figure 6: CAT5 cable in pass-thru kit**



- 4 Install the clamp on ferrite on the CAT5 Ethernet cable. See [Figure 7, CAT5 cable run through the clamp-on ferrite](#), on page 45.



**WARNING:**

The ferrite must be located as close to the exit of the media gateway as possible.

Figure 7: CAT5 cable run through the clamp-on ferrite

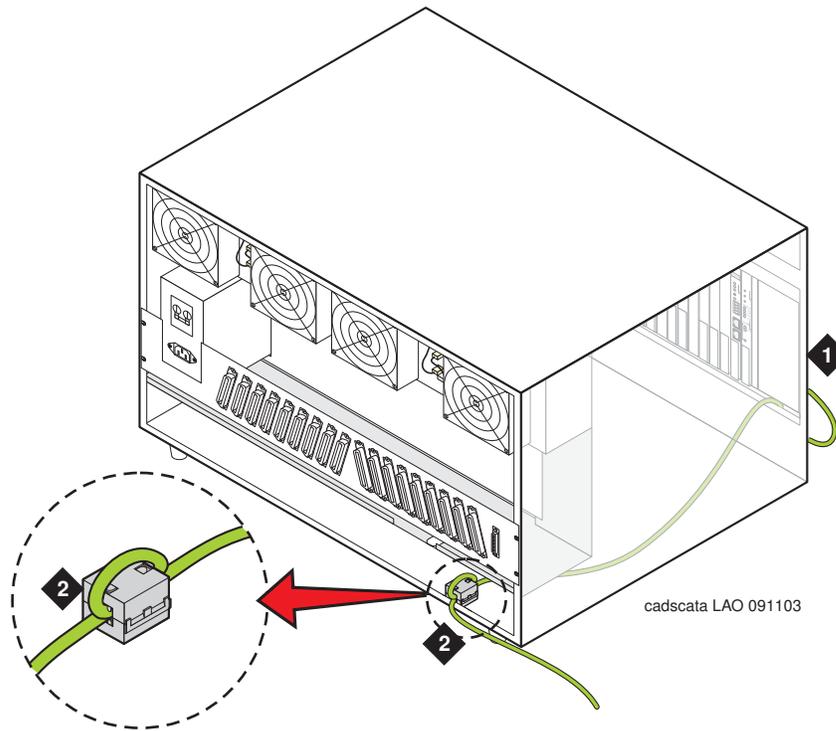


Figure notes

- 1 Media Gateway A                      2 Clamp on Ferrite

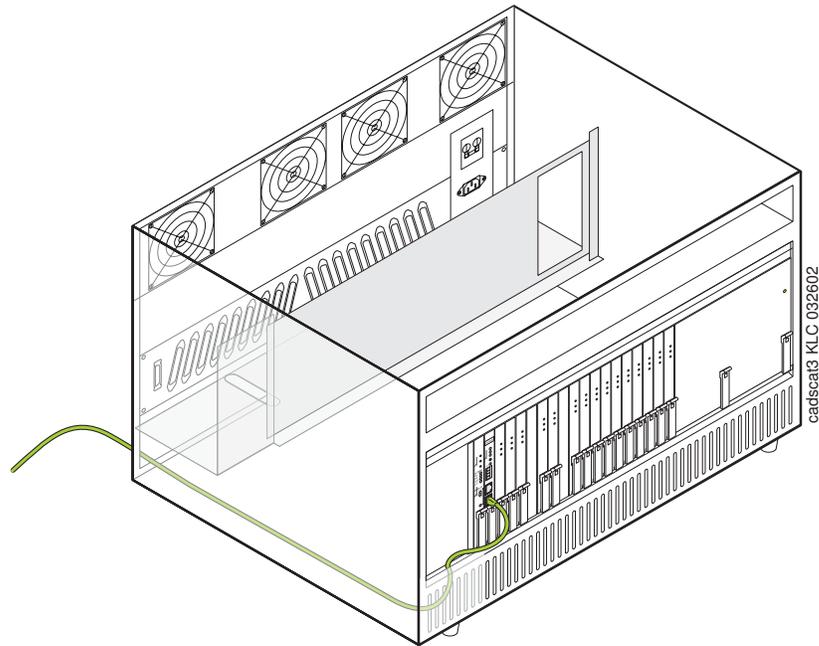
**! WARNING:**

The ferrite must be located as close to the exit of the media gateway as possible.

- 5 Connect the GREEN CAT5 cable to the bottom connector on the front of the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack in media gateway A. See [Figure 8, CAT5 cable connected to the IPSI](#), on page 46.

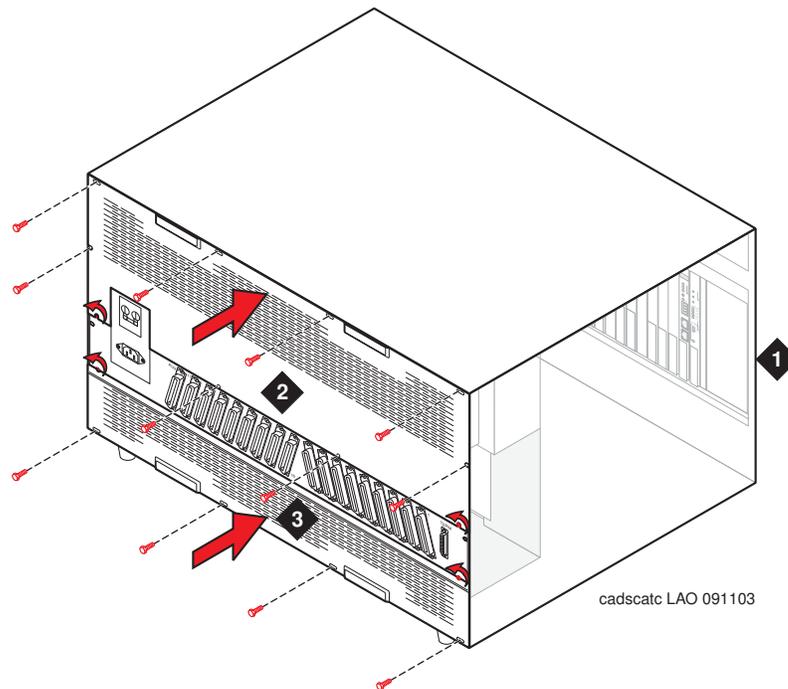
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**Figure 8: CAT5 cable connected to the IPSI**



- 
- 6** Replace the rear covers and the ground plate. Dress the CAT5 Ethernet cable to exit either the left or right side of the media gateway. See [Figure 9, Replacement of the upper and lower rear covers](#), on page 47.

**Figure 9: Replacement of the upper and lower rear covers**



**Figure notes**

- |  |                           |
|--|---------------------------|
| <p>1 Media Gateway A</p> <p>2 Upper rear cover</p> | <p>3 Lower rear cover</p> |
|--|---------------------------|

## Installing Expansion Interface circuit packs

**NOTE:**

If the existing PPN has a TN776 or TN570 Expansion Interface circuit pack(s), you must replace them with a TN570B Expansion Interface, vintage 7, or higher circuit pack.

- 1 Remove the existing circuit pack and place in an antistatic container.
- 2 Insert the TN570B Expansion Interface, vintage 7, or higher EI circuit packs into the EXPN INTFC slots (A01).

## Powering up the media gateway(s)

- 1 Power up the media gateways.
- 2 Remove the emergency ground wire if used.

# Converting a processor port network to a port network (CMC)

---

You may reuse the translations from the existing system when migrating to an S8500 Media Server.

**NOTE:**

This section applies only to the S8700 or S8710 IP-Connect configuration.

**NOTE:**

The new license file should be installed on the media server before making the conversion.

This section covers the following tasks:

- [Verifying hardware](#) on page 48
- [Converting the control cabinet to a port network](#) on page 49
- [Powering down the control cabinet](#) on page 50
- [Replacing the processor circuit pack](#) on page 50
- [Replacing the TN799C C-LAN circuit pack \(if necessary\)](#) on page 50
- [Connecting to the media server](#) on page 51
- [Postmigration administration](#) on page 57

## Verifying hardware

Make sure you have the conversion specific hardware on hand. See [Table 4, Required Migration Hardware](#), on page 48 for a list of required hardware.

**Table 4: Required Migration Hardware 1 of 2**

Comcode	Description	Quantity
700260359	TN2312BP IP Server Interface circuit pack	1
700263502	IPSI adapter	1
700276389	Maintenance cable (attaches to IPSI adapter—optional)	1
	Green CAT5 Ethernet cable:	
700170012	– 5-meter (16 feet)	1
700178056	– 25-meter (82 feet)	1
700178064	– 50-meter (164 feet)	1
700060643	TN2302AP IP Media Processor circuit pack	1 or more
700055015	TN799DP C-LAN circuit pack (to replace TN799C)	1 or more
848525887	IP Media Processor adapter	1/MedPro 1/C-LAN
NA	CAT5 cables	1/MedPro 1/C-LAN

**Table 4: Required Migration Hardware 2 of 2**

Comcode	Description	Quantity
106689516	TN771 Maintenance/Test circuit pack (optional)	1 or more
108772583	TN2501AP Voice Announcement over LAN circuit pack (optional)	1
NA	ED-1E568-70G1 (optional)	1

**NOTE:**

If customers are currently using the Audix feature on the S8100 Media Server, they need to purchase a separate Audix system. The TN795 or TN2314 Processor circuit pack containing the Audix feature is being replaced with a TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack that does not have that feature. The existing processor circuit pack must be returned to Avaya.

**NOTE:**

Customers also need to add an ED-1E568-70G1 DEFINITY Audix Slim board and a TN2501AP Voice Announcement over LAN (VAL) circuit pack for announcements.

## Converting the control cabinet to a port network

To convert the control cabinet to a port network, you must

- If CSI, remove the TN798 or TN2402 Processor circuit pack and replace the TN2182 Tone Clock circuit pack with a TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack.
- If S8100 Media Server, replace the TN795 or TN2314 Processor circuit pack with a TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack.
- Connect a CAT5 straight-through cable from the IPSI to the media server through the customer's network.

**NOTE:**

If replacing a TN795 Processor circuit pack, you may not need the TN744D/E Call Classifier-Detector circuit pack. The TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack has call classifier functionality; however, increased voice and data traffic may require the TN744D/E Call Classifier-Detector circuit pack.

**NOTE:**

If you have a TN799C or earlier C-LAN circuit pack, you must replace it with a TN799DP C-LAN circuit pack.

## Powering down the control cabinet



### CAUTION:

Make sure you have done the premigration administration. See [Preconversion administration \(R, SI, CSI\)](#) on page 30 if csi or [Preconversion administration \(S8100\)](#) on page 32 if S8100.

- 1 Press and hold the shutdown button on the processor's faceplate until the shutdown process starts. Make sure you see the green light indicating the system has shut down before continuing.



### DANGER:

**The latch on the power supply acts as the DC power switch and only removes DC power from the backplane, *not* the AC power. To remove the AC power from the cabinet, pull the AC power cord from the back of the cabinet.**

- 2 Power down the cabinet by unplugging the power cord from the back of the cabinet.

## Replacing the processor circuit pack

- 1 Remove the entire processor circuit pack and place it in an antistatic carrier or bag. You want it intact if you need to back out of the migration.
- 2 If csi, remove the TN2182 Tone Clock circuit pack.
- 3 Remove the octopus cable from the connector associated with slot 2 on the connector panel.
- 4 Install the IPSI adapter to the connector associated with slot 2 on the connector panel.
- 5 Install the maintenance cable onto the 9-pin D-sub connector on the Adapter. This cable is for emergency transfer and "auxsig" signal.

### NOTE:

The TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack takes up only one slot.

- 6 Insert the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack into slot 2.
- 7 Attach the new label above the circuit pack slots.

## Replacing the TN799C C-LAN circuit pack (if necessary)

- 1 Remove the TN799C Control-LAN (C-LAN) circuit pack and place it in an antistatic carrier or bag.
- 2 Insert the new TN799DP C-LAN circuit pack into the same slot.
- 3 Replace the 259A adapter and CAT3 cable on the connector panel with the Amphenol adapter used for the TN2302AP IP Media Processor circuit pack and a CAT5 cable.

## **Adding TN2302AP IP Media Processor**

### **Installing TN771 Maintenance/Test**

Install a TN771 Maintenance/Test circuit pack in slot 1. There must be one TN771 Maintenance/Test circuit pack per location. Maintenance functions were present on the TN798 or TN2402 Processor circuit pack and must be replaced by the TN771. This carrier does not have a TN775 Maintenance (EPN) dedicated slot.

If the cabinet does not have a TN2302AP IP Media Processor (CSI did not require it), then you must install one in slot 10. See the *Adding New Hardware* book, Install and Administer IP Connectivity Hardware section.

### **Connecting to the media server**

Connect one end of the GREEN CAT5 straight-through cable to the Ethernet switch on the customer's network and the other to the IPSI adapter on the back of the media gateway.

# Converting a processor port network to a port network (IP600)

---

You may reuse the translations from the existing system.

**NOTE:**

This section applies only to the S8700 or S8710 IP-Connect configuration.

This section covers the following tasks:

- [Verifying hardware](#) on page 52
- [Converting the IP600 control chassis to a port network](#) on page 53
- [Powering down the control chassis](#) on page 54
- [Replacing the WP cables](#) on page 54
- [Replacing the processor circuit pack](#) on page 56
- [Replacing the TN799C C-LAN circuit pack \(if necessary\)](#) on page 56
- [Connecting to the media server](#) on page 56
- [Postmigration administration](#) on page 57

## Verifying hardware

Make sure you have the conversion specific hardware on hand. See [Table 5, Required Migration Hardware](#), on page 52 for a list of required hardware.

**Table 5: Required Migration Hardware 1 of 2**

Comcode	Description	Quantity
700260359	TN2312BP IP Server Interface circuit pack	1
700263502	IPSI adapter	1
700276389	Maintenance cable (attaches to IPSI adapter—optional)	1
	Green CAT5 Ethernet cable:	
700170012	– 5-meter (16 feet)	1
700178056	– 25-meter (82 feet)	1
700178064	– 50-meter (164 feet)	1
700060643	TN2302AP IP Media Processor circuit pack	1 or more
700055015	TN799DP C-LAN circuit pack (to replace TN799C)	1 or more
848525887	IP Media Processor adapter	1/MedPro 1/C-LAN
NA	CAT5 cables	1/MedPro 1/C-LAN
	Migration kit (PEC code 63275):	
700234032	– Upper circuit pack slot label	1
700181118	– Twisted pair I/O cables	10

**Table 5: Required Migration Hardware 2 of 2**

Comcode	Description	Quantity
106689516	TN771 Maintenance/Test circuit pack (optional)	1 or more
108772583	TN2501AP Voice Announcement over LAN circuit pack (optional)	1
NA	ED-1E568-70G1 (optional)	1

**NOTE:**

If customers currently are using the Audix feature on the S8100, they need to purchase a separate Audix system. The TN795 or TN2314 Processor circuit pack containing the Audix feature is being replaced with a TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack that does not have that feature. The existing processor circuit pack must be returned to Avaya.

**NOTE:**

Customers also need to add an ED-1E568-70G1 DEFINITY Audix Slim board and a TN2501AP Voice Announcement over LAN (VAL) circuit pack for announcements.

## Converting the IP600 control chassis to a port network

To convert the Avaya IP600 control chassis to a port network, you must

- Replace the existing straight-wire WP cables, if present, with new twisted pair I/O cables.
- Replace the processor circuit pack with a TN2312BP IP server interface (IPSI) circuit pack.
- Connect a CAT5 straight-through cable from the IPSI to the media server through the customer's network.

**NOTE:**

If replacing a TN795 Processor circuit pack, you may not need the TN744D/E Call Classifier-Detector circuit pack. The TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack has call classifier functionality; however, increased voice and data traffic may require the TN744D/E Call Classifier-Detector circuit pack.

**NOTE:**

If you have a TN799C or earlier C-LAN circuit pack, you must replace it with a TN799DP C-LAN circuit pack.

**NOTE:**

The new license file should be installed on the media server before making the conversion.

## Powering down the control chassis



### CAUTION:

Make sure you have done the premigration administration. See [Preconversion administration \(R, SI, CSI\)](#) on page 30 if CSI or [Preconversion administration \(S8100\)](#) on page 32 if S8100 Media Server.

- 1 Press and hold the shutdown button on the processor's faceplate until the shutdown process starts. Make sure you see the green light indicating the system has shut down before continuing.



### DANGER:

**The latch on the power supply acts as the DC power switch and only removes DC power from the backplane, *not* the AC power. To remove the AC power from the chassis, pull the AC power cord from the back of the chassis.**

- 2 Power down the chassis by unplugging the power cord from the back of the chassis.

## Replacing the WP cables

WP cables have straight, not twisted, wires. They may be mostly white with two red, or multi-colored. You must replace the WP cables, which connect the backplane to the rear connector panel, with Twisted Pair I/O cables. If the cables have multi-colored, tightly twisted wires, no replacement is necessary.

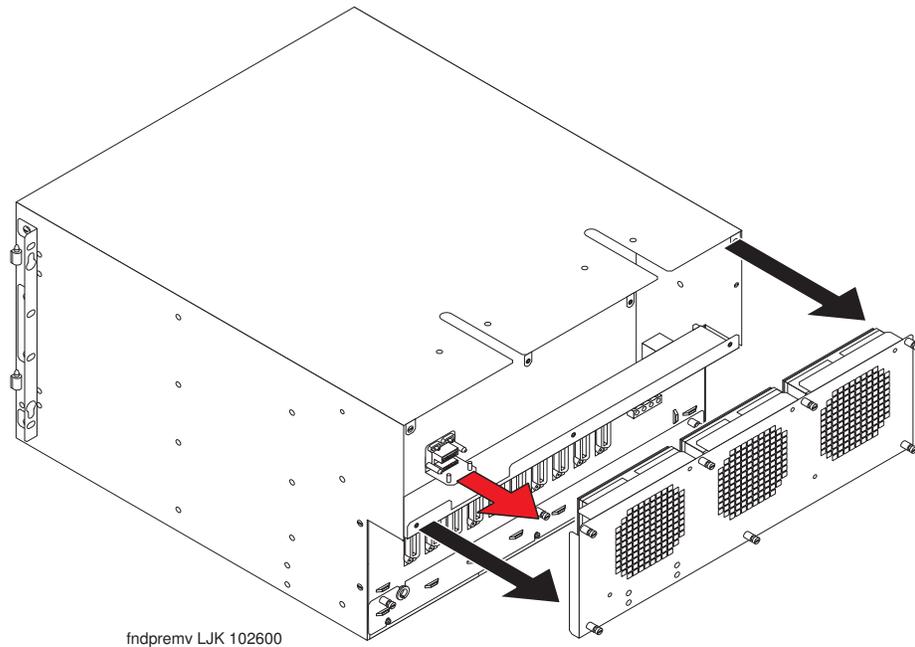
- 1 Loosen the thumb screws on the fan assembly and pull it straight out as shown in [Figure 10, Fan Assembly Removal](#), on page 55. Leave the fan assembly off until all the wires are installed.
- 2 Note the orientation of the existing 10 cables (WP-90753, LI). The WP cables may be white and red or multicolored.
- 3 Remove the nontwisted pair WP cables from the backplane and the connector panel slots.
- 4 In their place install the 10 tight-twisted pair I/O cables (700181118) onto the backplane, according to the proper orientation shown in [Figure 11, Proper Orientation for the Twisted Pair I/O Cables](#), on page 55. Observe the white outline printed on the backplane for the location of each connector.
- 5 When viewed from the "wiring" side of the twin connectors (that is, while plugging them into the backplane) and with the connectors oriented properly for plug-in, they should look like [Figure 11, Proper Orientation for the Twisted Pair I/O Cables](#), on page 55.

The circled pin locations are "No-Connects"; that is, they have no wires in them. At the top there is an orange-black pair on the right and a violet-brown pair on the left.

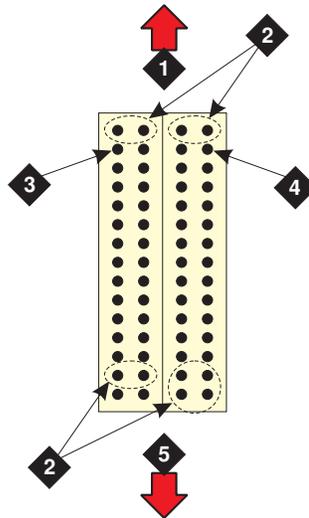
The 50-position metal shell D connectors should be installed into the connector panel with the longer side of the D (pins 1–25) toward the right when viewed from the rear of the media gateway.

- 6 Replace the fan unit if no other media gateways are to be installed. If you are adding more media gateways to the rack, leave the fan units off until all the TDM cables are installed.

**Figure 10: Fan Assembly Removal**



**Figure 11: Proper Orientation for the Twisted Pair I/O Cables**



iodspair KLC 072602

**Figure notes**

- |   |                       |   |              |
|---|-----------------------|---|--------------|
| 1 | Top                   | 4 | Orange-black |
| 2 | No connects; no wires | 5 | Bottom       |
| 3 | Violet-brown          |   |              |

## Replacing the processor circuit pack

- 1 Remove the entire processor circuit pack and place it in an antistatic carrier or bag. You want it intact if you need to back out of the migration.
- 2 Remove the octopus cable from the connector associated with slot 2 on the backplane.
- 3 Install the IPSI adapter to the connector associated with slot 2 on the backplane.
- 4 Install the maintenance cable onto the 9-pin D-sub connector on the Adapter. This cable is for emergency transfer and "auxsig" signal.

### **NOTE:**

The TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack takes up only one slot.

- 5 Insert the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack into slot 2.
- 6 Attach the new label above the circuit pack slots.

## Replacing the TN799C C-LAN circuit pack (if necessary)

- 1 Remove the TN799C C-LAN circuit pack and place it in an antistatic carrier or bag.
- 2 Insert the new TN799DP C-LAN circuit pack into the same slot.
- 3 Replace the 259A adapter and CAT3 cable on the backplane with the Amphenol adapter used for the TN2302AP IP Media Processor circuit pack and a CAT5 cable.

## Adding TN2302AP IP Media Processor

### Installing TN771 Maintenance/Test

Install a TN771 Maintenance/Test circuit pack in slot 1. There must be one TN771 Maintenance/Test circuit pack per location. Maintenance functions were present on the TN798 or TN2402 Processor circuit pack and must be replaced by the TN771. This carrier does not have a TN775 Maintenance (EPN) dedicated slot.

### Connecting to the media server

Connect one end of the GREEN CAT5 straight-through cable to the Ethernet switch on the customer's network and the other to the IPSI adapter on the back of the media gateway.

# Postmigration administration

---

This section covers the following tasks:

- [Assigning IP addresses to the IPSI circuit packs](#) on page 57
- [Verifying IPSI translations](#) on page 62
- [Verifying IPSI connectivity](#) on page 63
- [Enabling control of IPSI\(s\)](#) on page 63
- [Verifying customer's data](#) on page 64
- [Upgrading firmware \(if necessary\)](#) on page 65
- [Testing the installation](#) on page 66
- [Busying out trunks](#) on page 66
- [Troubleshooting the migration](#) on page 66
- [Returning replaced equipment](#) on page 66

## Assigning IP addresses to the IPSI circuit packs

IP server interface circuit packs get IP addresses in one of two ways:

- Using dynamic host configuration protocol (DHCP)
- Using static IP addressing

The IPSI circuit packs associated with a dedicated control network use the DHCP method. In rare cases they might use the static addressing method.

The IPSI circuit packs associated with a nondedicated control network use the static addressing method. In rare cases they might use the DHCP addressing method.

### Using DHCP addressing

For the TN2312BP IPSI circuit packs to get IP addresses dynamically, you must first assign the switch ID (A through J) and the cabinet number (01 through 64) to each IPSI circuit pack. For G650 Media Gateways, a cabinet is defined as one or more media gateways connected by TDM cable, which is called a G650-rack-mount-stack.

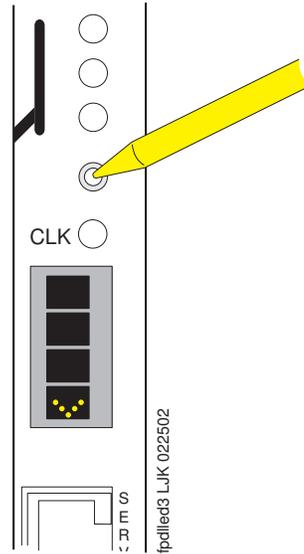
#### *Administering the location assignment*

- 1 Fully insert the TN2312BP IPSI circuit pack. If necessary, reseal the circuit pack to begin the programming sequence.

**NOTE:**

You must do the following steps within 5 seconds after inserting the circuit pack.

- 2 Insert a pen, golf tee, or similar object (no graphite pencil) into the recessed push button switch.



**NOTE:**

If you pass up the letter or number that you want, you must either cycle through all the letters or numbers to get to the one you want or reinsert (reseat) the circuit pack and begin again.

**Setting the switch ID**

If you have only one system, the default switch ID is A. The second system would be B and so on. The switch ID is *not* the media gateway or carrier letter.

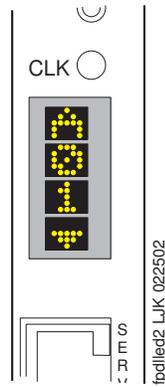
- 1 While the display is flashing, press the button until the switch ID (A through J) shows on the top character of the LED display. When the correct letter shows, stop. It will flash a few times (5 seconds) then stop. The next character down begins to flash.

**Setting the cabinet number**

The number to program is the cabinet number *not* the port network number. If you have more than one IPSI in a cabinet, they all have the same cabinet number.

- 1 While the first digit of the number is flashing, press the button until the correct tens digit (0 through 6) shows on the display. When the correct digit shows, stop. It flashes a few times then stops (five seconds). The second digit begins flashing.
- 2 While the second digit is flashing, press the button until the correct units digit (0 through 9) shows on the display. When the correct digit shows, stop. The digit flashes a few times then stops (five seconds).

- 3 All segments of the display goes dark for one second, and then the Switch ID and media gateway stack number is displayed in the top three characters of the LED display. A "V" is shown in the fourth character (bottom) of the display. When the DHCP server assigns an address to the IPSI, the center of the "V" is filled in to form the bottom half of a diamond in the display.

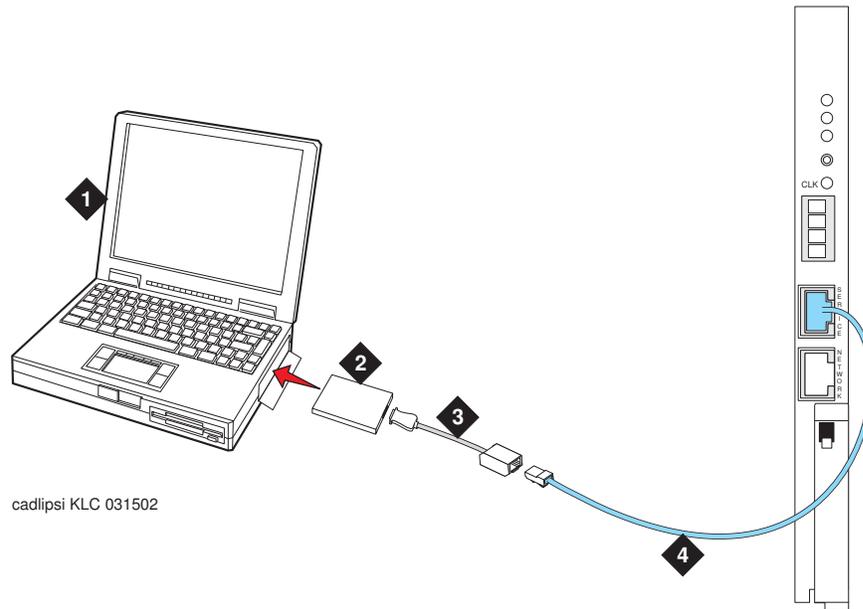


For duplicated control network, repeat these steps for the second IPSI in the cabinet.

### Using static addressing

For the IPSI circuit packs to get static IP addresses, you must administer them directly through the Ethernet port connection on the IPSI faceplate (top port). See [Figure 12, Connecting directly to the IPSI](#), on page 60.

**Figure 12: Connecting directly to the IPSI**



**Figure notes**

- |   |   |
|---|---|
| <p><b>1</b> Services laptop</p> <p><b>2</b> PCMCIA Network Interface Card (NIC)</p> | <p><b>3</b> NIC adapter cable (if necessary)</p> <p><b>4</b> CAT5 crossover cable to IPSI</p> |
|---|---|

**NOTE:**

Make sure you have the password before proceeding.

- 1** Connect the services laptop computer to the top port on the IPSI circuit pack faceplate.
- 2** From the services laptop Start Menu, click **Start > Run** to open the Run dialog box.
- 3** Type **command** and press **Enter** to open a MS-DOS Command Line window.
- 4** Type **arp -d 192.11.13.6** and press **Enter** to clear the ARP cache in the laptop. This command responds with one of the following:
  - The command line prompt when the cache has been cleared.
  - The phrase: The specified entry was not found. This is returned when the specified IP address does not currently contain an entry in the ARP cache.
- 5** Type **telnet 192.11.13.6** and press **Enter** to open the Telnet window and connect to the IPSI  
 Prompt = [IPSI]:

**NOTE:**

While connected to the IPSI, type **help** or **?** to obtain online help. Most commands have two or three letter abbreviations.

- 6 Type **ipsilogin** and press **Enter** (abbreviated command = **il**).

**NOTE:**

The *craft* login used on the IPSI has a different password than the *craft* login used on the media servers.

- 7 Log in as **craft**.  
Prompt = [IPADMIN]:

Type **show control interface** and press **Enter**. 8 Type **show port 1** and press **Enter** to see the current settings.

- 9 Type **set control interface *ipaddr netmask*** and press **Enter**, where *ipaddr* is the customer-provided IP address and *netmask* is the customer provided subnet mask.

```
TN2312 IPSI IP Admin Utility
Copyright Avaya Inc, 2000, 2001, All Rights Reserved

[IPSI]: ipsilogin

Login: craft
Password:

[IPADMIN]: set control interface 135.9.70.77 255.255.255.0

WARNING!! The control network interface will change upon exiting IPADMIN

[IPADMIN]: show control interface

Control Network IP Address = 135.9.70.77
Control Network Subnetmask = 255.255.255.0
Control Network Default Gateway = None
IPSI is not configured for DHCP IP address administration

[IPADMIN]: █
```

- 10 Press **Enter** to effect the changes.
- 11 Type **show control interface** and press **Enter**.  
The IP address, subnet mask, and default gateway information will be displayed.  
Verify that the proper information was entered.
- 12 If required, type **set control gateway *gateway*** and press **Enter**, where *gateway* is the customer-provided IP address for their gateway.
- 13 Press **Enter** to effect the changes.
- 14 If required, use the **set vlan priority**, **set vlan tag**, **set vlan id**, **set port negotiation** (1=disable), **set port duplex** (1 full), **set port speed** (1 100 MB), and **set diffserv** commands to enter VLAN and diffserv parameters for the IPSI. Use **Help** to obtain syntax guidelines for these commands.
- 15 Type **reset** and press **Enter**  
Answer **Y** to the warning.

**NOTE:**

Resetting the IPSI terminates the administration session. If further administration is required, start a new telnet session to the IPSI.

- 16 Type **quit** to logoff the IPSI.

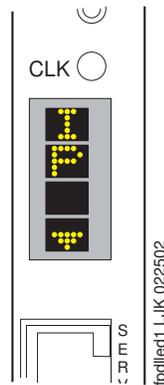
**NOTE:**

Control network settings (IP address, subnet mask, and gateway) become effective when you exit the IPADMIN session.

- 17 Check the LCD. Verify that it has an IP with a filled-in V showing at the bottom. (See [Figure 13, LED display showing that the IPSI has a static IP address](#), on page 62)

---

**Figure 13: LED display showing that the IPSI has a static IP address**



- 
- 18 Disconnect the laptop from the faceplate.

**NOTE:**

Always use the **arp -d 192.11.13.6** command (step 4) to clear the ARP cache on the laptop before connecting to another IPSI. If the cache is not cleared the laptop appears to hang and does not connect to the next IPSI.

- 19 Repeat for each IPSI circuit pack.

## Verifying IPSI translations

- 1 Type **list ipserver-interface** and press **Enter**.
- 2 Verify that the ISPI circuit pack(s) is translated.

## Verifying IPSI connectivity

- 1 Under Diagnostics, click **Ping**.

The screenshot shows a web page titled "Ping" with a blue header and a yellow and blue logo. Below the title is a paragraph explaining the page's purpose: "The Ping Web page provides useful network debugging. Use the host name or the IP address and execute a Ping command to determine whether a specific network address is valid, and obtain information about processing data packets and diagnostics to troubleshoot problems." Below this is a section titled "Endpoints to Ping" with four radio button options: "Host Name Or IP address" (with a text input field), "IPSI's with cab number (1~99) [ ] carrier number [a] [v]" (with two input fields and a dropdown), "UPS endpoints.", and "All IPSIs, UPS(s)". Below this is an "Options" section with two checkboxes: "Do not look up symbolic names for host addresses." and "Bypass normal routing tables and send directly to a host." At the bottom are two buttons: "Execute Ping" and "Help".

- 2 Select "IPSIs with cab number (1–99) \_\_\_ carrier number \_\_\_." Fill in the blanks with the correct cabinet and carrier numbers.
- 3 Click **Execute Ping**.
- 4 Verify that the endpoints respond correctly.

## Enabling control of IPSI(s)

### NOTE:

Make sure the IPSI has the current firmware.



### CAUTION:

This is the step that allows the media server to take control of the IPSI-controlled port network(s).

- 1 Type **change system-parameters ipserver-interface** and press **Enter**.

```
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: 172. 22. 0. 0*
      Secondary Control Subnet Address: . . .

OPTIONS

      Switch Identifier: A
      IPSI Control of Port Networks: enabled

NOTE: * indicates data changed on the server
```

- 2 Set the **IPSI Control of Port Networks:** field to **enabled**
- 3 Press **Enter** to effect the change.

All the port networks are now controlled by the media server.

## Verifying customer's data

The new translations should include all the media gateway (chassis) and circuit pack administration, including the media gateway (chassis) and the circuit pack administration of the converted cabinets (chassis). Verify that the information is correct.

### Verifying circuit pack locations

- 1 Type **list cabinet** and press **Enter** to view all the "cabinets." Verify that the cabinet number assigned to the converted cabinets shows.
- 2 Type **display cabinet number**, where *number* is the cabinet number of the converted cabinet, and press **Enter**. Under Carrier Description, Carrier Type verify that the number of "carriers" in use matches the number of media gateways in the stack (SCC) or media gateways in the rack (G600 or G650).

### Verifying circuit pack insertion

- 1 Type **list configuration all** and press **Enter** to see the list of all the slot locations.
- 2 Verify that the circuit pack code and vintage number appears in the **Code** and **Vintage** fields rather than "no board", indicating that a circuit pack was not installed in that slot.

## Verifying IP addresses

Make sure that the node names and IP addresses assigned to the TN2302AP IP Media Processor and TN799DP C-LAN circuit packs match the node names and IP addresses from before the migration.

- 1 Type **display ip-interfaces** and press **Enter** to get the node names for the TN2302AP IP Media Processor and TN799DP C-LAN circuit packs in the slots of interest.
- 2 Type **list node-names** and press **Enter** to verify that the node names exist and the IP addresses match up with the node names.

## Check link status

Compare the list made before the migration to make sure that the in- or out-of-service links match.

- 1 Type **display communication-interface links** and press **Enter**. Write down all enabled links.
- 2 Type **status link number** where *number* is **1-99** and press **Enter**.
- 3 Compare which links are in service with the premigration list.
- 4 Repeat steps 2 and 3 for all link numbers.

## Upgrading firmware (if necessary)

You may need to upgrade the firmware on the IPSI(s). Each IPSI must be on the most current and same firmware load. The most current firmware load is on the installation CD. If not, go to Avaya Support Web page (<http://avaya.com/support>) and click on Software and Firmware Downloads.

First verify the version of firmware currently on the IPSI circuit pack.

- 1 Under Installation and Upgrades, click **View IPSI Version**. Select **Query All** and click **View IPSI Version**.
- 2 Verify the firmware release for the TN2312BP IPSI.

Upgrade the firmware on the just installed TN2313BP IP Server Interface circuit pack if necessary. For information on how to do this, refer to "Upgrade the IPSI Firmware" in the section titled "Upgrading Software and Firmware," which is part of the *Avaya S8300, S8500, and S8700 Media Server Library CD*.

Take this opportunity to upgrade the firmware on the following circuit packs if necessary.

- UDS1 (TN464GP, TN2464BP, and TN2313AP)
- Maintenance/Test (TN771DP)
- Control LAN (C-LAN) (TN799DP)
- IP Media Processor (TN2302AP)

For information on how to do this, refer to "Upgrade firmware on programmable circuit packs" in the Upgrading section, which is part of the *Avaya S8300, S8500, and S8700 Media Server Library CD*.

## Testing the installation

Test the complete installation. Refer to “Testing the Complete Configuration” in the Installation section, which is part of the *Avaya S8300, S8500, and S8700 Media Server Library* CD.

## Busying out trunks

If you recorded any busyouts earlier, you need to make sure they are busied out after the conversion.

## Troubleshooting the migration

Refer to "Troubleshooting an Installation" in the Installing section, which is part of the *Avaya S8300, S8500, and S8700 Media Server Library* CD.

## Returning replaced equipment

Once you've determined that the port network is functioning, return the old processors and any other replaced equipment to Avaya following established procedures.

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