



Migrating to the Avaya S8700 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.

555-245-110
Issue 2
June 2004

**Copyright 2004, Avaya Inc.
All Rights Reserved**

Notice

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

Warranty

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

Preventing Toll Fraud

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

Avaya Fraud Intervention

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

Disclaimer

Avaya is not responsible for any modifications, additions or deletions to the original published version of this documentation unless such modifications, additions or deletions were performed by Avaya. Customer and/or End User agree to indemnify and hold harmless Avaya, Avaya's agents, servants and employees against all claims, lawsuits, demands and judgments arising out of, or in connection with, subsequent modifications, additions or deletions to this documentation to the extent made by the Customer or End User.

How to Get Help

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

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

Providing Telecommunications Security

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

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

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

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

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

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

Responsibility for Your Company's Telecommunications Security

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

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

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

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

TCP/IP Facilities

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

Standards Compliance

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

Product Safety Standards

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

Safety of Information Technology Equipment, IEC 60950, 3rd Edition, 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

Luokan 1 Laserlaite

Klass 1 Laser Apparat

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。

To order copies of this and other documents:

Call: Avaya Publications Center
Voice 1.800.457.1235 or 1.207.866.6701
FAX 1.800.457.1764 or 1.207.626.7269

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

E-mail: totalware@gwsmail.com

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

Contents

About this documentation	15
• Overview	15
• Audience	15
• Using this documentation	15
• Conventions	16
General	16
Physical dimensions	16
Terminology	16
Typography	16
Commands	17
Keys	17
User input	17
System output and field names	18
• Downloading this documentation and updates from the Web	18
• Safety labels and security alert labels	19
• Related resources	19
• Technical assistance	19
Within the US	19
International	20
• Trademarks	20
• Sending us comments	20
1 Migrating to the Avaya S8700 or S8710 Media Server	21
• Migrating from existing DEFINITY and Linux platforms	21
• Migration paths	22
• Pre-migration setup	23
Before the day of migration	24
Day of migration	26
• Documentation needed	27
• Basic migration steps	28
• High-level overview	29
IPSI placement decisions	29
Installing and configuring the S8700 or S8710 Media Server complex	30
Transferring existing translations	30

Replacing expansion interface and maintenance circuit packs, if necessary	30
Replacing tone clocks with TN2312BP IPSI circuit packs in the expansion port networks and processor port network (optional)	31
Converting the processor port network to a port network	31
Cutting over to S8700 or S8710 Media Server control	32
Completing the migration	32
Testing the S8700 or S8710 Multi-Connect configuration	32
• Migrating translations	33
Before the day of migration	33
Day of migration	33
Accessing the media server	33
Checking system status	34
Verifying license file	35
Transferring translations (Multi-Connect only)	35
From a magneto optical disk	35
Ordering information	36
Terminal emulation settings	36
Disconnecting from the active media server	36
Connecting to the standby media server	36
Disconnecting from the standby media server	37
Connecting to the active media server	37
Copying translation files from MO disk to the active S8700 or S8710 Media Server	37
Disconnecting from the active media server	40
Connecting to the standby media server	40
Disconnecting from the standby media server	41
Connecting to the active media server	41
Installing the translations	41
From a PCMCIA flashcard	41
Connecting to the standby media server	41
Disconnecting from the standby media server	42
Connecting to the active media server	42
Restoring translation files	42
Disconnecting from the active media server	44
Restoring data for a migration (S8710 only)	44
Access the media server from your laptop	44
Verify license file	44
Copy translation files to media server	44

Restore translation files	45
Connecting to the standby media server	46
Connecting to the active media server	46
Installing the translations	46
Adding IPSI translations to Communication Manager	47
Adding IPSI information	48
Setting IPSI duplication (high/critical reliability only)	49
Setting alarm activation level	50
Backing up translations	51
• Migrating hardware	53
DEFINITY ECS R or SI in an MCC	53
DEFINITY ECS SI in an SCC	54
DEFINITY ECS CSI or DEFINITY ONE/S8100 in a CMC	55
Avaya IP600	55
• Upgrading and administering the existing hardware	56
Connecting media server and IPSI cables to Ethernet switch(es)	56
Upgrading hardware in each port network	57
Replacing tone clocks with IPSI circuit packs and replace maintenance circuit packs	57
Determining IPSI placement in port networks	57
Standard (simplex) reliability configuration	58
High or critical reliability configuration (MCC1)	61
Connecting the CAT5 cables to the IPSI circuit packs	63
High or critical reliability configuration (SCC1)	64
Ordering information	71
Connecting the CAT5 cables to the IPSI circuit packs	72
Installing Expansion Interface circuit packs	76
Completing circuit pack replacement	77
• Converting a processor port network to a port network	78
Preconversion administration (R, SI, CSI)	78
Connecting to the processor	79
Verifying system status	79
Recording all busyouts	79
Note node names and IP addresses	79
Saving translations	79
Preconversion administration (S8100)	80
Connecting to the processor	80
Note node names and IP addresses	80

Saving translations	80
Note IP settings	81
• Converting a processor port network to a port network (MCC)	82
Verifying hardware	82
Removing the processor port network control carrier(s)	83
Installing the expansion control carrier and port carrier	84
Installing IPSI and maintenance circuit packs	84
Connecting the CAT5 cables to the IPSI circuit packs	84
Installing Expansion Interface circuit packs	85
Powering up the media gateway(s)	85
• Converting a processor port network to a port network (SCC)	86
Verifying hardware	86
Removing the processor port network control cabinet	87
Installing the expansion control media gateway	88
Stacking the port media gateways	88
Installing IPSI and maintenance circuit packs	88
Connecting the CAT5 cables to the IPSI circuit packs	88
Installing Expansion Interface circuit packs	88
Powering up the media gateway(s)	89
• Migrating from a DEFINITY ECS R or SI	90
Verifying hardware	90
Migrating MCC or SCC to G650 Media Gateways	95
Powering down the cabinets	95
Removing the circuit packs	96
Placing circuit packs into G650 Media Gateway	97
Connecting trunks to PSTN	97
Connecting the G650 Media Gateways to the Main Distribution Frame	97
Connecting to the media server	97
• Converting a processor port network to a port network (CMC)	98
Verifying hardware	98
Converting the control cabinet to a port network	99
Powering down the control cabinet	100
Replacing the processor circuit pack	100
Replacing the TN799C C-LAN circuit pack (if necessary)	100
Adding TN2302AP IP Media Processor	101
Installing TN771 Maintenance/Test	101
Connecting to the media server	101

• Converting a processor port network to a port network (IP600)	102
Verifying hardware	102
Converting the IP600 control chassis to a port network	103
Powering down the control chassis	104
Replacing the WP cables	104
Replacing the processor circuit pack	106
Replacing the TN799C C-LAN circuit pack (if necessary)	106
Adding TN2302AP IP Media Processor	106
Installing TN771 Maintenance/Test	106
Connecting to the media server	106
• Postmigration administration	107
Assigning IP addresses to the IPSI circuit packs	107
Using DHCP addressing	107
Administering the location assignment	107
Setting the switch ID	108
Setting the cabinet number	108
Using static addressing	109
Verifying IPSI translations	112
Verifying IPSI connectivity	113
Enabling control of IPSI(s)	113
Verifying customer's data	115
Verifying circuit pack locations	115
Verifying circuit pack insertion	115
Verifying IP addresses	115
Check link status	115
Upgrading firmware (if necessary)	115
Testing the installation	116
Busying out trunks	116
Troubleshooting the migration	116
Returning replaced equipment	116
 2 Migrating from an S8500 Media Server to S8710 Media Server	 117
• Basic Migration Steps	117
• Verify hardware	118
• Upgrade G350 or G700 Media Gateways and LSPs (if being used)	119
Upgrade firmware on media gateways and media modules	119
Upgrade software on the LSPs	120

Task list	120
• On the S8500 Media Server	122
Clear the ARP cache on the laptop	122
Connect to the media server	122
Access the media server	123
Clear alarms	123
Start a SAT session	123
Check link status	123
Record all busyouts	123
Check clock synchronization	124
Disable scheduled maintenance	124
Check for translation corruption	124
Back up the translation files	124
• On first S8710 Media Server	124
Power up the media server	125
Access the media server	125
Set up Telnet (if necessary)	125
Install Communication Manager	126
Access the media server	127
Check software version	127
Copy files to the media server (if any)	128
Configure the media server using AIW	128
Restore the translations	129
• On second S8710 Media Server	129
Install Communication Manager	129
Connect duplication cables	129
Move Ethernet cables	129
Connect new cables to standby media server	130
Move the cables	130
• On the standby S8710 Media Server	130
Access the standby media server	130
Ping all the connections to the media server	130
Release the standby media server	130
Back up files on the media server	131
Release alarm suppression (optional)	132
Set the Product ID	132
Log off all administration applications	132
Disconnect from the media server	132

• On the active S8710 Media Server	132
Access the active media server	132
Resolve alarms	133
Back up files on the media server	133
Release alarm suppression (optional)	133
Set the Product ID	133
Log off all administration applications	133
Disconnect from the media server	133
Register the system	133
• On the S8500 Media Server	134
Access the media server	134
Shut down the media server	134
Disconnect the cables	134
3 Migrating from an S8700 Media Server to an S8710 Media Server	135
• Pre-Migration Setup	135
Before the day of migration	135
Day of migration	136
Basic Migration Steps	136
Verify hardware	137
Upgrade G350 or G700 Media Gateways and LSPs (if being used)	138
Upgrade firmware on media gateways and media modules	138
Upgrade software on the LSPs	138
Task list for R1.2/1.3.x to R2.1	139
Task list for R2.0 to R2.1	141
• On the S8700 Media Server	143
Clear the ARP cache on the laptop	143
Connect to the active media server	144
Access the media server	145
Clear alarms	145
Start a SAT session	145
Check link status	145
Record all busyouts	146
Check clock synchronization	146
Disable scheduled maintenance	146
Busyout MMI circuit packs (duplicated control only)	146

Check for translation corruption	147
Access active S8700 Media Server	147
Check software release (pre-R2.0 only)	147
Back up the system files	147
Back up the security files	148
Record the Product ID	149
Access the standby S8700 Media Server	149
Shut down the standby S8700 Media Server	149
• On first S8710 Media Server	149
Power up the media server	150
Access the media server	150
Set up Telnet (if necessary)	150
Install Communication Manager	151
Access the media server	152
Check software version	152
Verify date and time	153
Copy files to the media server (if any)	153
Configure the network parameters	154
Verify connectivity to the network server	155
Restore the security files	156
Restore the Linux migration backup files	156
Install software update (if any)	157
Verify software update installation	158
Verify media server configuration	158
• On second S8710 Media Server	158
Install Communication Manager and restore files	159
Connect duplication cables	159
Verify date and time	159
Install software update, if any	159
Move Ethernet cables	159
Move the cables	159
• On the standby S8710 Media Server	160
Access the standby media server	160
Ping all the connections to the media server	160
Release the standby media server	160
Back up files on the media server	160
Release alarm suppression (optional)	161
Set the Product ID	161

Log off all administration applications	161
Disconnect from the media server	161
• On the active S8710 Media Server	161
Access the active media server	161
Resolve alarms	162
Back up files on the media server	162
Release alarm suppression (optional)	162
Set the Product ID	162
Log off all administration applications	162
Disconnect from the media server	162
Register the system	162
• On the active S8700 Media Server	163
Access the media server	163
Shut down the media server	163
Disconnect the cables	163
4 Migrating a dedicated control network to a nondedicated control network	165
• Upgrading a TN2312AP to a TN2312BP IP Server Interface circuit pack	166
Setting alarm activation level	166
Replacing the circuit pack	166
Assigning IP addresses to the IPSI circuit pack	167
Upgrading the IPSI firmware (if necessary)	167
Index	169

About this documentation

Overview

This documentation, *Migrating to an Avaya S8700 or S8710 Media Server* provides procedures for the following:

- Migrating existing DEFINITY systems to the Avaya S8700 or S8710 Media Server
- Migrating a dedicated control network to a nondedicated control network
- Upgrading a TN2312AP IP Server Interface circuit pack with a TN2312BP

Included are procedures for migrating to either an S8700 or S8710 Multi-Connect configuration or an S8700 or S8710 IP-Connect configuration.

Audience

This documentation is for the following audiences:

- Trained field installation and maintenance personnel
- Technical support personnel
- Authorized BusinessPartners]

Using this documentation

Use this documentation as a guide to migrate other communication servers to the S8700 or S8710 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.

For an overview of the migration process, see [High-level overview](#) on page 29.

Read the [Pre-migration setup](#) on page 23 and [Documentation needed on page 27](#) 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 S8700 or S8710 Media Server, see one or more of the following sections:

- [Migrating translations](#) on page 33
- [Migrating hardware](#) on page 53
- [Upgrading and administering the existing hardware](#) on page 56
- [Converting a processor port network to a port network](#) on page 78

- [Migrating from a DEFINITY ECS R or SI](#) on page 90
- [Converting a processor port network to a port network \(CMC\)](#) on page 98
- [Converting a processor port network to a port network \(IP600\)](#) on page 102
- [Postmigration administration](#) on page 107
- [Migrating a dedicated control network to a nondedicated control network](#) on page 165
- [Upgrading a TN2312AP to a TN2312BP IP Server Interface circuit pack](#) on page 166

These sections contain step-by-step instructions to migrate the hardware and/or translations of a variety of systems and configurations to an S8700 or S8710 Media Server. Included are instructions to remove and install hardware, disconnect and reconnect equipment, turn the equipment off and on, and perform initial administration.

Conventions

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

General

We show commands and screens from the newest Communication Manager and see 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 documentation and updates from the Web

You can download the latest version of this documentation from the Avaya Support Web site (<http://support.avaya.com>). 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>.
- 2 Type the documentation number or documentation name in the Search Support box and click **Go**.
Or click on the link for product documentation.
- 3 Scroll down to find the product and latest release number.
- 4 Click the release number to view the list of titles.
- 5 Click on the title that you want.
- 6 Click one of the following options:
 - **PDF Format** to download the book in regular PDF format
 - **ZIP Format** to download the book in zipped PDF format

Safety labels and security alert labels

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

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

Technical assistance

Avaya provides the following resources for technical assistance.

Within the US

For help with:

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

International

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

Trademarks

All trademarks identified by the ® or ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners.

Sending us comments

Avaya welcomes your comments about this book. To reach us by:

- Mail, send your comments to:
Avaya Inc.
Product Documentation Group
Room B3-H13
1300 W. 120th Ave.
Westminster, CO 80234 USA
- E-mail, send your comments to:
document@avaya.com
- Fax, send your comments to:
1-303-538-1741

Be sure that you mention the name and number of this book, *Migrating to an Avaya S8700 or S8710 Media Server*, 555-245-110.

1 Migrating to the Avaya S8700 or S8710 Media Server

This section provides information on

- [Migrating from existing DEFINITY and Linux platforms](#) on page 21
- [Migrating a dedicated control network to a nondedicated control network](#) on page 165
- [Upgrading a TN2312AP to a TN2312BP IP Server Interface circuit pack](#) on page 166

Migrating from existing DEFINITY and Linux platforms

These procedures are for migrating from existing DEFINITY and Linux platforms to the Avaya S8700 or S8710 Media Server configuration. The S8700 or S8710 Media Server can be either a Multi-Connect configuration or an IP-Connect configuration. The migration procedures differ significantly because in the IP-Connect configuration, few of the old cabinets can be reused after the migration.

The existing DEFINITY systems that can migrate to an S8700 or S8710 are:

To a Multi-Connect configuration:

- DEFINITY ECS R in a Multicarrier Cabinet (MCC)
- DEFINITY ECS SI in a Single Carrier Cabinet (SCC) or Multicarrier Cabinet (MCC)

To an IP-Connect configuration:

- Avaya IP600 (S8100) in a G600
- DEFINITY ONE (S8100) in a Compact Modular Cabinet (CMC)
- DEFINITY ECS CSI in a CMC
- DEFINITY ECS R in an MCC (cabinet cannot be reused)
- DEFINITY ECS SI in an SCC or MCC (cabinet cannot be reused)

The existing Linux systems that can migrate to an S8700 or S8710 are:

- S8500
- S8700 IP-Connect

The following tasks are included in this migration procedure:

- [Migration paths](#) on page 22
- [Pre-migration setup](#) on page 23
- [Documentation needed on page 27](#)
- [Basic migration steps](#) on page 28
- [Migrating translations](#) on page 33

- [Migrating hardware](#) on page 53
 - [DEFINITY ECS R or SI in an MCC](#) on page 53
 - [DEFINITY ECS SI in an SCC](#) on page 54
 - [DEFINITY ECS CSI or DEFINITY ONE/S8100 in a CMC](#) on page 55
 - [Avaya IP600](#) on page 55
- [Postmigration administration](#) on page 107

Migration paths

For a list of DEFINITY systems that can be migrated to the S8700 or S8710 Multi-Connect configuration, see [Table 1, DEFINITY system releases migratable to the S8700 or S8710 Multi-Connect configuration](#), on page 22. For a list of DEFINITY systems that can be migrated to the S8700 or S8710 IP-Connect configuration, see [Table 2, Product releases migratable to the S8700 or S8710 IP-Connect configuration](#), on page 23.

When migrating to an S8700 or S8710 Multi-Connect configuration, you can use the existing translations. For a DEFINITY ECS R with a magneto optical drive, you can use the Magneto Optical Server Tool (MOST) to copy the translations to the S8700 or S8710 Media Server. For a DEFINITY ECS R without an optical drive or a DEFINITY ECS SI, you must freeze the translations and send them to Avaya's Software Technical Support (STS) group. STS then returns the translation files on a PCMCIA flashcard and translation reports. Contact the STS scheduling desk at 720-444-9418 for forms and additional information.

When migrating to an S8700 or S8710 IP Connect configuration, in most cases, all the translations must be re-entered. However, when migrating from an S8100, the only supported method of moving translations 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 system releases migratable to the S8700 or S8710 Multi-Connect configuration 1 of 2

DEFINITY ECS Release	Source Platform			
	R	SI	S8500 to S8710	S8700 to S8710
Release G3V4	x	x		
Release G3s/si (w/Intel 386)		x		
Release 5	x	x		
Release 6	x	x		
Release 6 with SREPN	x			
Release 7	x	x		
Release 8	x	x		
Release 9	x	x		

Table 1: DEFINITY system releases migratable to the S8700 or S8710 Multi-Connect configuration 2 of 2

DEFINITY ECS Release	R	SI	Source Platform	
			S8500 to S8710	S8700 to S8710
Release 10	x	x		
Release 11/1.1	x	x		
Release 1.2	x	x		x
Release 1.3	x	x		x
Release 2.0	x	x	x	x

Table 2: Product releases migratable to the S8700 or S8710 IP-Connect configuration

DEFINITY ECS Release	R	SI	CSI	Source Platform			S8700 to S8710
				S8100/ CMC1 (DEF1)	S8100/ G600 (IP600)	S8500	
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 11/1.1	x	x	x	x	x		
Release 1.2	x	x		x	x		x
Release 1.3	x	x		x	x		x
Release 2.0	x	x	x	x	x	x	x

Pre-migration 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

S8710

- If migrating from S8500 or S8700, verify that you have the
 - the external flash drive and formatted disk if backing up translations to the flash disk.
 - the appropriate login and password if backing up to and restoring files from the customer's network.
 - If migrating from an S8500 Media Server, verify that you have a new license file.
-

S8700 MC

- About 2 weeks before the migration, freeze the translations:

If the existing system does not have a magneto optical drive, send the translation media to Avaya's Software Technical Support (STS) group.

 - For R, collect the translations locally via a spare tape or removable media.
 - For SI, collect the translations locally via a spare flash card.

STS then updates the translations to the latest version; this process may take two weeks. STS returns the translation files on a PCMCIA card and translation reports before the migration can begin. For each processor, retain 2 cards (1 system and 1 backup) on site with the system.

Contact the STS scheduling desk at 720-444-9418 for forms and information on where and how to send the translations.
-

S8700 IP

- About 2 weeks before the migration, freeze 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.
 - Verify that a copy of the existing translations exists so they can be re-entered later (R, SI)
-
- 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 S8700 or S8710 Media Server* (03-300145) 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 new system. 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 TN766 or TN570 EI circuit packs with TN570B, vintage 7, or later 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 or saving translations to an MO disk that will be used to read translations directly into a media server.

- Verify that existing logins do not begin with a number. Linux does not support logins that begin with a number.
 - Use Avaya Terminal Emulation or Avaya Site Administration to perform a **list logins** command
- **S8700 MC:** 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 Emulation 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

- **S8710:** Verify that the open, customer-supplied, EIA 310D (or equivalent) standard 4-post, 19-inch (48-centimeter) equipment rack is properly installed and solidly secured. Make sure it is installed close to the existing S8700 Media Server to reuse the UPSs and Avaya Ethernet switch(es).
- If moving the UPSs and Avaya Ethernet switch(es) from the 2-post rack, make sure you have
 - a crosspoint (Phillips) screwdriver
 - rail kits for a 4-post rack for the UPSs
 - cage nuts to attach the screws to the rack, if necessary
 - and at least 2 people to lift the equipment
- Verify that the 19-inch EIA 310D (48-centimeter) open equipment rack was grounded. See the job aid titled *Approved Grounds* (555-245-772).
- Verify that cabling for the TN2312BP Internet Protocol Server Interface (IPSI) circuit packs is labeled and run from the control hardware rack to the port networks or that appropriate connectivity is provided.
- Verify that you have all the equipment on site. See *Installing and Configuring the Avaya S8700 or S8710 Media Server* (03-300145) for the list of required hardware.
- Verify that the services laptop has the right hardware and software. See *Installing and Configuring the Avaya S8700 or S8710 Media Server* (03-300145) for the list of computer and software specifications.
- **S8700 MC:** Verify that you have the required tools on site. For the Magneto Optical Server Tool, see [Transferring translations \(Multi-Connect only\)](#) on page 35. For the Cable Pass-Through Kit, see [High or critical reliability configuration \(SCC1\)](#) on page 64.
- 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.
- Verify that TN750, TN750B, and TN750C Announcement circuit packs have been removed and replaced by TN2501 Voice Announcement over LAN (VAL) circuit packs.

Documentation needed

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

- *Quick Start for Hardware Installation: Avaya S8700 or S8710 Media Server* (555-245-703)—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/avayaaiw/>).
- *Installing and Configuring the Avaya S8700 or S8710 Media Server* (03-300145)—part of the library providing information to install the S8700 or S8710 Media Server and configure 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 are also available on *Documentation for Avaya Communication Manager, Media Gateways and Servers* (03-300151):
 - *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.
 - *Server and CSS Separation—Avaya S8700 or S8710 Media Server* (555-245-766)—job aid providing information on and connectivity diagrams when the S8700 or S8710 Media Servers are in separate locations.
- *Upgrading Software and Firmware—Avaya S8700 Media Server* (555-245-115)—part of the library providing information on upgrading Avaya Communication Manager and the firmware on 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

When migrating from DEFINITY platforms:

- Install the Avaya S8700 or S8710 Media Servers and, if Avaya supplied, the Ethernet switch(es), and uninterruptible power supplies (UPSs) in the 4-post, 19-inch rack as described in the *Quick Start for Hardware Installation: Avaya S8700 or S8710 Media Server* (555-245-703).
- Replace Tone-Clock circuit packs with IPSI circuit packs in existing expansion port networks (when reusing SCCs or MCCs).
- Convert the existing processor control carrier/cabinet to an *expansion* control carrier/cabinet. (when reusing cabinets).
- Replace the Tone-Clock, Processor, or both circuit packs with the IPSI circuit pack in the existing port network.
- **S8700 MC**: If high or critical reliability, replace the second control carrier/cabinet with a port carrier/cabinet (when reusing SCCs or MCCs).
- **S8700 IP**: Move circuit packs to G650 Media Gateway (when not reusing cabinets).
- Connect the media servers to the media gateways.
- Enable control of the IPSIs, switching control to the S8700 or S8710 Media Servers.
- Complete the post-migration administration.

When migrating from S8500 or S8700 Media Servers:

- Install the Avaya S8710 Media Servers either
 - in a 19-inch, 4-post rack on a 2-post rack. as described in the *Quick Start for Hardware Installation: Avaya S8700 or S8710 Media Server* (555-245-703).
 - on a pullout shelf attached to a 2-post rack.
- Back up all the system files from both S8700 Media Servers to the customer's network using the **Linux Migration - Backup/Restore** link on the Maintenance Web Interface.
- Install the R2.1 software on the S8710 Media Servers.
- Restore the system files from the customer's network to both S8710 Media Servers using the **Linux Migration - Backup/Restore** link.
- Connect the duplication cables after restoring files to the second media server.

NOTE:

If moving Ethernet switch(es) and UPSs to the 4-post rack, do it here before the cutover.

- Connect the control network Ethernet cables to the new S8710 Media Servers, standby media server first.
- Complete the post-migration administration.

High-level overview

NOTE:

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

The migration from a DEFINITY ECS R or SI platform to the Avaya S8700 or S8710 Media Server with Avaya G650 Media Gateway (S8700 or S8710 Multi-Connect configuration) may be done in stages. The order in which these stages are completed, in most cases, depends on the resources available, the personnel available to perform them, and the customer's desire to minimize downtime. There needs to be careful coordination with the customer, as some of the operations required are service affecting.

The recommended process is based on several assumptions:

- The TN2312BP IP Server Interface (IPSI) circuit packs are installed ahead of time in the expansion port networks (EPNs) and processor port network (PPN—optional).
- Most PPNs may contain an IPSI, particularly for direct-connect systems.
- The general process is the same regardless of reliability.

The high level stages are:

- Install and configure the S8700 or S8710 Media Server complex.
- Transfer existing DEFINITY translations to Avaya Communication Manager residing on the S8700 or S8710 Media Servers. Add new translations for the IPSI circuit packs.
- Replace expansion interface and maintenance circuit packs in all the existing DEFINITY ECS port networks (PNs) with upgraded circuit packs (TN570B, vintage 7, or later; TN775D).
- Replace tone clocks with TN2312BP IPSI circuit packs in the designated EPNs and PPN (optional).
- Convert the PPN to a PN.
- Cut over to S8700 or S8710 Media Server control.
- Complete the migration steps, such as enabling alarm reporting and registering the system.
- Test the S8700 or S8710 Multi-Connect configuration.

The order that the high-level stages are listed above represents a recommended sequence to follow. Some of the stages can be done in a different sequence without causing any negative consequences. Local practice and resource management dictates the actual sequence.

IPSI placement decisions

In a direct connect system we install IPSIs in the PPN rather than an EPN because of the fiber connections and administration among the PNs. If the IPSIs are installed in an EPN in a 3-cabinet system, you would have to reconnect and readminister the optical fiber connecting the EI circuit packs. In a 2-cabinet system, this would not be a problem. Even in a center stage switch (CSS) system, installing IPSIs in the PPN is a good idea because it speeds up the system startup.

You want to put the rest of the IPSIs in as many different cabinets as you can. For example, putting IPSIs in both halves of a dual PN cabinet is not a good idea; if the cabinet dies, you lose 2 IPSI PNs. However, if in a 10-EPN system, 7 of the EPNs are DS1-C remoted and the other 3 PNs are 1 PPN cabinet and 1 dual PN cabinet, then putting IPSIs in both halves of the dual PN and the converted PPN eliminates running remote IPSI connections.

Installing the IPSIs in the PNs, including the PPN, ahead of time saves downtime because you can install, connect, and program the IPSIs and test their connectivity to the media server ahead of time. You also can upgrade the firmware on the IPSIs that need it before the actual cutover. Depending on how many IPSIs are installed, this could save a considerable amount of downtime. Installing IPSIs in the PPN and then re-installing them in the new carriers may seem a waste of time, but, again, it allows you to make sure they are working correctly before the cutover.

Installing and configuring the S8700 or S8710 Media Server complex

This stage consists of the physical rack installation of the S8700 or S8710 Media Servers, uninterruptible power supplies (UPSs), Avaya Ethernet switches, and connecting cables. After completing the physical installation, the components are configured, the license and Avaya authentication files are installed, and the software is upgraded and patched.

For information on installing the media server complex and configuring the media servers, see *Installing and Configuring the Avaya S8700 or S8710 Media Server* (03-300145).

This stage can be done any time before transferring the existing translations. This stage is not service affecting to the existing DEFINITY ECS system.

Transferring existing translations

For existing systems equipped with a magneto optical (MO) disk drive, translations can be transferred using an external Magneto Optical disk drive connected to the S8700 or S8710 Media Server. For systems that do not have a MO disk drives, you must freeze the translations and get updated translation files.

Perform this stage after the server complex is installed and configured and before the PPN is converted to a PN. Once the translations are copied and saved, you can add the new IPSI translations, making sure that the IPSIs are set to disabled.

This stage is not, in itself, service affecting. However, we recommend that you do this stage just before converting the PPN. If this stage is performed early in the installation process, the likelihood of new translations being added to the existing DEFINITY system greatly increases, meaning translations would be out of sync. Unless these translations are concurrently entered into Avaya Communication Manager, they will be lost at cutover.

Replacing expansion interface and maintenance circuit packs, if necessary

In PNs that have IPSIs, the maintenance circuit pack needs to be replaced by a TN775D Maintenance (EPN) circuit pack. You may also need to replace the expansion interface (EI) circuit packs; only TN570B, vintage 7, or later work in an S8700 or S8710 Multi-Connect configuration.

You can do this stage at any time before the actual cutover. The maintenance and EI circuit packs are all hot-swappable and can be changed out in the existing DEFINITY system without powering down the carrier or cabinet.

This stage is service affecting for standard reliability configurations. As each PN is worked on, it is out of service while the circuit packs are being changed. Service impact can be minimized for high or critical reliability configurations by only working on the circuit packs in the standby carriers (MCC) or cabinets (SCC).

Replacing tone clocks with TN2312BP IPSI circuit packs in the expansion port networks and processor port network (optional)

Some PNs receive IPSI circuit packs. The TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack takes the place of the existing TN2182 Tone Clock circuit pack and terminates control communication with the S8700 or S8710 Media Servers. In existing PNs that receive IPSIs, flat ribbon cables run between the IPSIs and the maintenance circuit pack to provide connectivity that is not available via the backplane of older carriers. Once the IPSI circuit packs are installed, you must either program the faceplate so a DHCP server can assign IP addresses to them or program static IP addresses into the IPSI itself, depending on whether the control network is dedicated (private) or nondedicated (through the customer's network).

You can accomplish this stage at any time before the actual cutover. The tone clock and IPSI circuit packs are hot-swappable and can be changed out in the existing DEFINITY system. The IPSI circuit pack provides the same functionality as the tone clock circuit pack. The IPSIs can be connected via CAT5 cable to the media server complex (via Ethernet switch) before the cutover. You can do this while the IPSIs are working as tone clocks in the existing system. This allows you to test connectivity between the media servers and the IPSIs before the cutover. Even though you are converting the PPN to a PN, it's a good idea to install the IPSIs in the PPN and test connectivity ahead of time. You then re-install the IPSIs in the new carrier(s) after they are installed.

This stage is service affecting for standard reliability configurations. As each IPSI-equipped PN is worked on, it is out of service while the circuit packs are being changed. Service impact can be minimized for high or critical reliability configurations by only working on the circuit packs in the standby carriers (MCC) or cabinets (SCC).

Converting the processor port network to a port network

This stage consists of replacing the processor carrier A in the PPN with a new expansion control carrier (J58890AF-2 L13). If the PPN has duplicated control carriers (cabinets if SCC), then you also must replace carrier B with a new port carrier (cabinet if SCC).

If you replaced the EIs and maintenance circuit packs and replaced the tone clock with an IPSI in the old control carrier, you must reinsert them into the new control carrier. You do not need to reprogram the IPSI. If you have a center stage switch or ATM, you must move the EIs to positions A01 and B02 (if critical reliability).

You must install and configure the media servers, transfer the translations, and upgrade the existing EPNs before performing this stage.

If you want to cutover and have the S8700 or S8710 Media Server control the existing EPNs while you convert the PPN, you first must power down the PPN and then enable the IPSIs from the S8700 or S8710 Media Server. Do this only if the customer wants to minimize downtime. If the PPN also contains the switch node carrier(s), then powering down the PPN also takes down the center stage switch (CSS).

This stage is service affecting for the PPN and, thus, the existing DEFINITY ECS system. It is out of service while the carriers are changed out, which should take no more than 30 minutes.

Cutting over to S8700 or S8710 Media Server control

Once the PPN is converted and you power it up, you want to cut over to the S8700 or S8710 Media Server. To do this, you must enable the IPSIs on the IP Server Interface (IPSI) System Parameters screen.

This stage is momentarily service affecting as the CSS comes back up and the calls are load-balanced across the IPSIs throughout the port networks.

Completing the migration

This stage includes verifying the customer's data and upgrading IPSI firmware (if necessary). Alarms are generated if the IPSIs do not have the most current firmware or do not all have the same firmware.

For information on other post-migration tasks, such as clearing alarms, backing up the media servers, enabling alarm reporting, and registering the system, see *Installing and Configuring the Avaya S8700 or S8710 Media Server* (03-300145) and go to the "Completing the installation administration" section.

This stage includes clearing alarms, upgrading IPSI firmware (if necessary), backing up the media servers, enabling alarm reporting, and registering the system. Alarms are generated if the IPSIs do not have the most current firmware or do not all have the same firmware.

This stage must be performed after the actual cutover. However, some parts of this stage (upgrade firmware, register system) could be done before the cutover.

None of the operations performed in this stage is service affecting. However, if during alarm resolution hardware needs to be replaced, it could result in a service interruption.

Testing the S8700 or S8710 Multi-Connect configuration

This stage involves testing the complete system and verifying proper operation. Functional call processing is tested, such as station-to-station calls, outgoing calls, incoming calls, and so forth. Various hardware-related testing procedures are provided. These may or may not be performed, depending on whether a given piece of hardware is configured.

Perform the testing procedures after the actual cutover is completed and while completing the migration.

These procedures are not service affecting. However, replacing hardware to resolve problems encountered may be service affecting.

Migrating translations

This section provides information for migrating translation files from the existing system to the new S8700 or S8710 Media Server.

Before the day of migration

- 1 The customer freezes translation changes.
- 2 If the existing DEFINITY ECS R system does not have a Magneto Optical drive, the project manager or software specialist sends the translations on a tape to Avaya's Software Technical Support (STS).
- 3 If an existing DEFINITY ECS SI system, The project manager sends the translations via flash disk to the Avaya Software Technical Support group.
- 4 **S8700 MC**: STS mails a PCMCIA flashcard with the updated translation file to the project manager, who sends them to the software specialist or field technician.

S8700 IP: STS updates the translations to the latest version and returns the translation reports and translations file. The new translations are added to the S8700 or S8710 Media Server as part of the media server installation process. The STS group uses the GES configuration report, available from the project manager, that shows the slot locations for all the circuit packs.

There is no supported method of moving translations directly to the Avaya S8700 or S8710 Media Server except for an S8100 with a Compact Modular Cabinet (CMC1) or G600 Media Gateway.

S8710: When migrating from S8500 or S8700 Media Servers:

- No need to freeze translations early as you back up all the system files including the current translations the day of the migration.

Day of migration

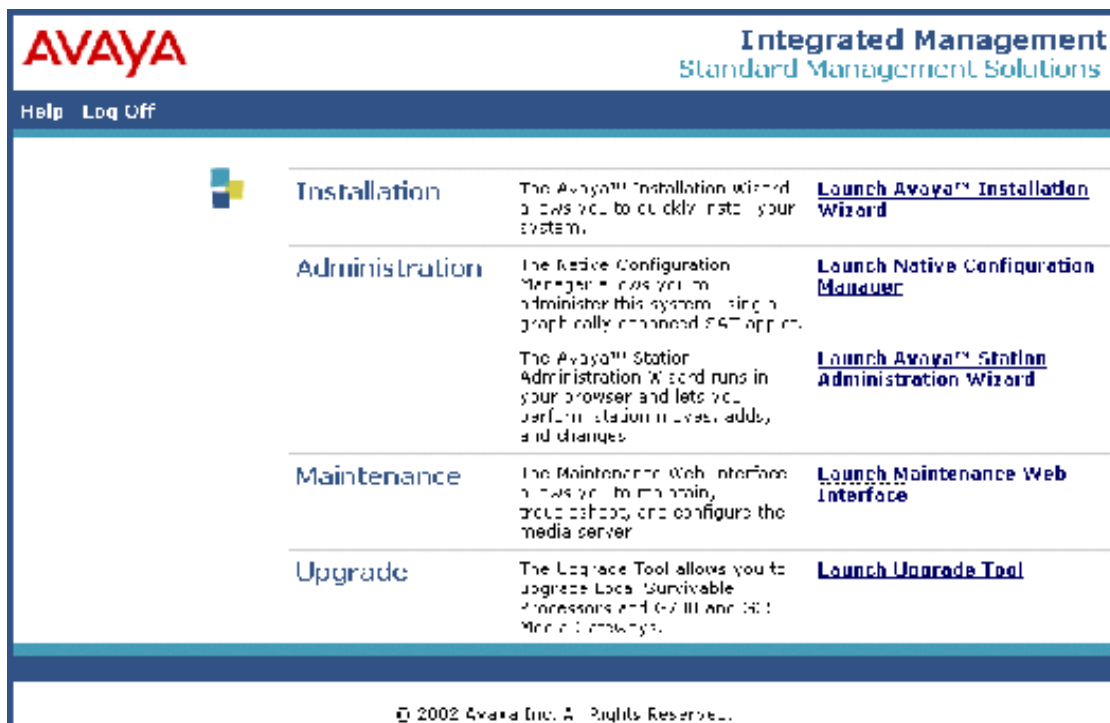
Before proceeding with this procedure, verify the following:

- You have access to the customer's network to back up the system files, including translations.
- The S8700 or S8710 Media Servers are installed and configured.
- The duplication link between the S8700 or S8710 Media Servers is Up, standby shadowing is On, and Standby Refreshed is Yes. Use the **Status Server** from the Maintenance Web Pages of the *active* media server to verify.
- The license file is installed and operational. Use the **License File** from the Maintenance Web Interface of the *active* media server to verify.

Accessing the media server

- 1 Connect to the services port (2) on the back of the *active* media server.
- 2 Launch the Web browser.
- 3 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.

Checking system status

- 1 Under Server, click **Status Summary**.
- 2 Verify the following information
 - Duplication link between the S8700 or S8710 Media Servers is Up
 - Standby shadowing is On
 - Standby Refreshed is Yes

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**.

Transferring translations (Multi-Connect only)

There are two ways to transfer translations to the media server:

- [From a magneto optical disk](#) on page 35—if the existing system has an optical drive.
- [From a PCMCIA flashcard](#) on page 41—if the existing system has a tape (R) or flash (SI) drive. This is a blowback provided by Avaya's Software Translations Support (STS) group.

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

From a magneto optical disk

The Magneto Optical Server Tool (MOST) is used to transfer translation files from a Magneto Optical disk to an Avaya S8700 or S8710 Media Server. This tool is used only when migrating call processing translations on a DEFINITY ECS R to an Avaya S8700 or S8710 Media Server in a Multi-Connect configuration only.

The MOST tool is not shipped with every system but should be available locally.

The MOST tool consists of:

- External Magneto Optical drive
- SCSI PC card
- External SCSI cable

Ordering information

Table 3: Magneto Optical Server Tool

Comcode	Description
700226269	Magneto Optical Server Tool



CAUTION:

When creating the optical disk that will be used to move translations from the source system to the S8700 or S8710 Media Server, there are specific steps that must be followed. See *Upgrades and Additions for Avaya DEFINITY® Server R (555-233-115)* for the specific procedures.

Terminal emulation settings

NOTE:

Avaya Terminal Emulation and HyperTerminal are supported terminal emulation applications.

Terminal emulation may be used when connection to a media server command line interface (CLI) or a SAT session is needed. Terminal emulation port settings:

- 9600 baud
- No parity
- 8 data bits
- 1 stop bit
- No flow control

S8700 or S8710

Disconnecting from the active media server

- 1 Unplug the laptop from the services port on the back of the active media server.
-

Connecting to the standby media server

S8700 only

- 1 Connect to the services port on the back of the standby media server.
-

- 2 Launch a Web browser.
- 3 Log in as **craft** or **dadmin**.
- 4 Click **Launch Maintenance Web Pages**.
- 5 Under Server, click **Busy-out Server**.
- 6 Click **Busy Out**.

S8700 or S8710

Disconnecting from the standby media server

- 1 Unplug the laptop from the services port on the back of the standby media server.
-

Connecting to the active media server

NOTE:

If the PCMCIA memory card is currently plugged into the bottom slot on the *active* media server, remove it. The MOST tool will be plugged into the bottom slot.

- 1 Open a DOS Command window (**Start > Run > Command**)

If connected to the services port (2):

- 2 Type **telnet 192.11.13.6** and press **Enter**.
- 3 At the login prompt log in as **craft** or **dadmin**.

If connected through the customer network:

- 4 Type **telnet ipaddress** and press **Enter**, where *ipaddress* is the active media server IP address
- 5 At the login prompt log in as **craft** or **dadmin**.

Copying translation files from MO disk to the active S8700 or S8710 Media Server

- 1 Type **stop -acf** and press **Enter** to stop Communication Manager call processing.
- 2 Type **sudo readmo -e** and press **Enter** to enable MO read.

NOTE:

Be sure that the Magneto Optical drive is powered up. There is a power switch located on the rear of the drive. For the S8700, see [Figure 1, Magneto optical drive connection to S8700 Media Server](#), on page 39. For the S8710, see [Figure 2, Magneto optical drive connection to S8710 Media Server](#), on page 40.

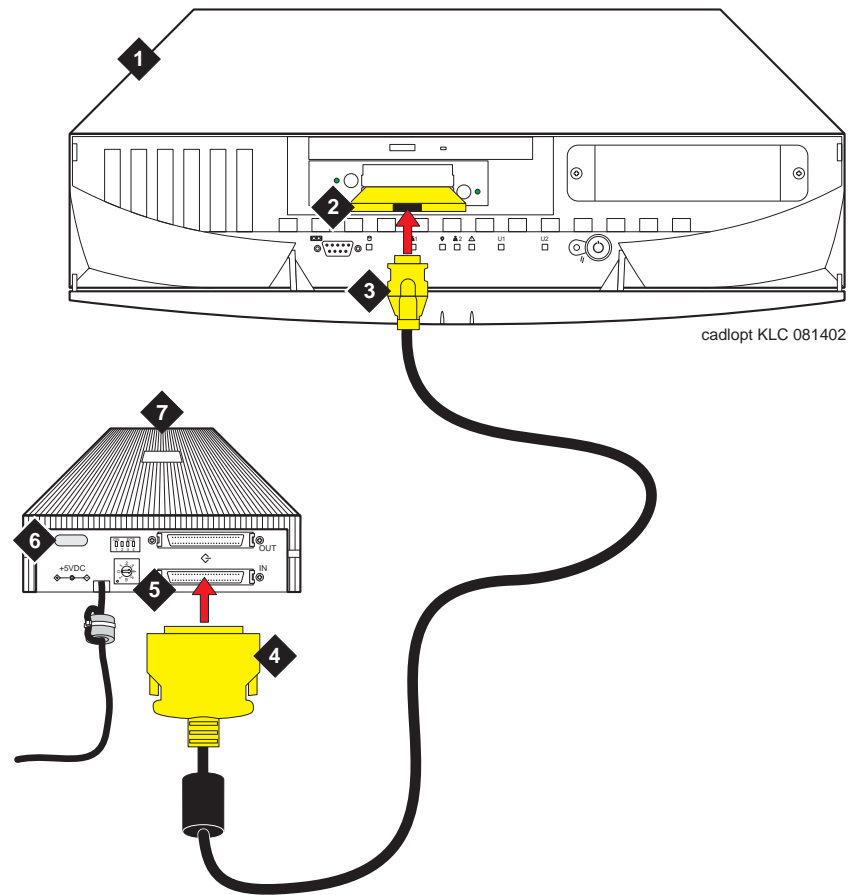
- 3 **S8700 MC:** Insert the MOST tool flash adapter into the bottom PCMCIA port of the *active* media server.
S8710: Insert the MOST tool USB cable into a USB port of the *active* media server.
- 4 Insert the removable media (optical disk) into the external MO drive.

- 5 Type **mo -l** and press **Enter** to list the contents of the MO disk. Note the file sizes of Translation and TranslationA.

NOTE:

The next step copies the translation files from the MO disk to /etc/opt/defty on the media server hard drive.

- 6 Type **sudo readmo** and press **Enter** to copy the translations from the MO disk to the media server. The light on the front of the MO drive will flash rapidly. Reading the translation files takes from 40 seconds to one minute.
- 7 Type **cd /etc/opt/defty** and press **Enter** to change to the translations directory.
- 8 Type **ls -l** and press **Enter** to verify that files **xln1** and **xln2** are the same size as files Translation and TranslationA from [Step 5](#).
- 9 If the file sizes are different repeat [Step 5](#) through [Step 8](#). If the file sizes are still different, escalate the problem through the appropriate channels.
- 10 **S8700 MC**: Eject the flash adapter from the media server.
S8710 MC: Unplug MOST tool from the USB port.
- 11 Type **sudo readmo -d** and press **Enter** to disable MO read.
- 12 Type **start -ac** and press **Enter** to restart Communication Manager call processing.

Figure 1: Magneto optical drive connection to S8700 Media Server**Figure notes**

- | | | | |
|---|--------------------|---|---|
| 1 | S8700 Media Server | 4 | SCSI Cable and connector |
| 2 | SCSI PCard | 5 | Bottom connector on Magneto Optical drive |
| 3 | PCMCIA Connector | 6 | Power Switch |
| | | 7 | Magneto Optical Drive |
-

Figure 2: Magneto optical drive connection to S8710 Media Server

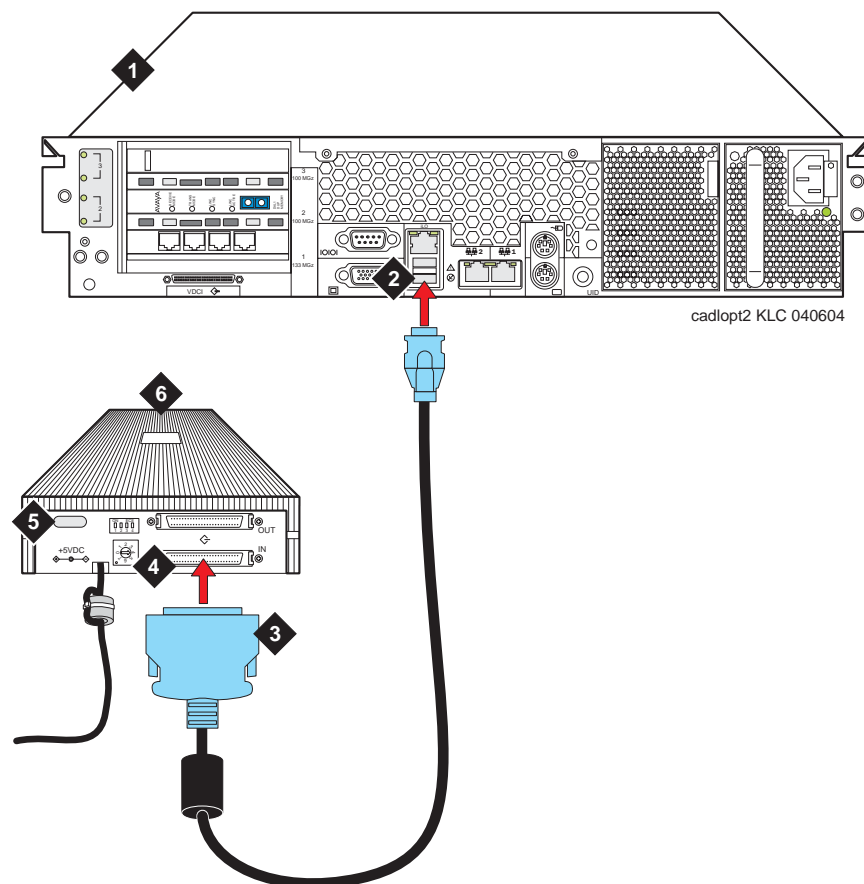


Figure notes

- | | | | |
|---|----------------------------|---|---|
| 1 | Back of S8700 Media Server | 4 | Bottom connector on Magneto Optical drive |
| 2 | Cable with USB connector | 5 | Power Switch |
| 3 | SCSI cable and connector | 6 | Magneto Optical Drive |

S8700 or S8710

Disconnecting from the active media server

- 1 Unplug the laptop from the services port on the back of the active media server.

Connecting to the standby media server

S8700 only

- 1 Connect to the services port on the back of the standby media server.

- 2 Launch a Web browser.
- 3 Log in as **craft** or **dadmin**.
- 4 Click **Launch Maintenance Web Pages**.
- 5 Under Server, click **Release Server**.
- 6 Click **Release**.

S8700 or S8710

Disconnecting from the standby media server

- 1 Unplug the laptop from the services port on the back of the standby media server.
-

Connecting to the active media server

S8700 or S8710

- 1 Connect to the services port on the back of the active media server.
-
- 2 Open a SAT session using Native Configuration Manager or Avaya Site Administration.
 - 3 Login as **craft** or **dadmin**.

Installing the translations

- 1 Type **reset system 4** and press **Enter**.

To add the IPSI translations before saving translations, go to [Adding IPSI translations to Communication Manager](#) on page 47.

From a PCMCIA flashcard

NOTE:

The PCMCIA flashcard is used only with the S8700 Media Server.

Make sure you have the PCMCIA with the translations from Avaya's Software Technical Support (STS) group.

Connecting to the standby media server

S8700 only

- 1 Connect to the services port on the back of the standby media server.
-
- 2 Launch a Web browser.
 - 3 Log in as **craft** or **dadmin**.
 - 4 Click **Launch Maintenance Web Pages**.

- 5 Under Server, click **Busy-out Server**.
- 6 Click **Busy Out**.

S8700 or S8710

Disconnecting from the standby media server

- 1 Unplug the laptop from the services port on the back of the standby media server.

Connecting to the active media server

- 1 Connect to the services port on the back of the active media server.
-

S8700 only

Restoring translation files

- 1 Place the PCMCIA flashcard (STS provided) into the *bottom* slot of the PCMCIA drive in the *active* media server. See [Figure 3, Flashcard placement](#), on page 42

Figure 3: Flashcard placement

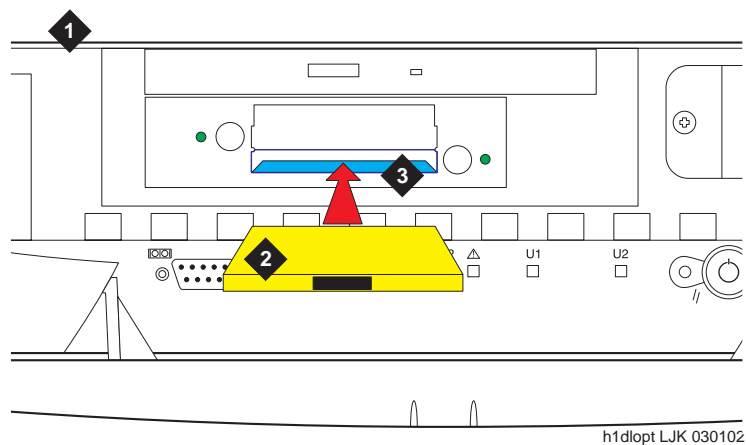
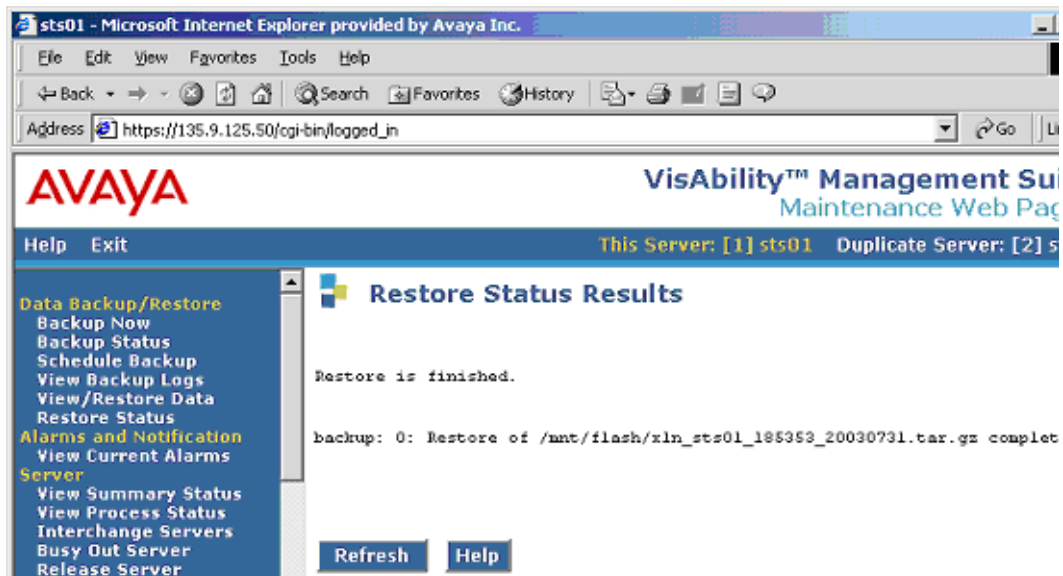


Figure notes

- | | |
|-----------------------------|-------------------------------|
| 1 Media Server | 3 Bottom slot of PCMCIA drive |
| 2 PCMCIA flashcard from STS | |
-

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

- 3 Select **Local Directory** and click **View**. The field automatically displays the default directory.
- 4 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."
- 5 Click **Restore** to restore the translation files.
- 6 Click **Restore Status**.
- 7 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.



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

S8700 or S8710

Disconnecting from the active media server

- 1 Unplug the laptop from the services port on the back of the active media server.
-

Restoring data for a migration (S8710 only)

The following procedure assumes the technician has already saved the customer's conversion files (sent from the Avaya STS team) on the technician's laptop.

Access the media server from your laptop

- 1 Connect a crossover cable to the services port on the back of the media server.
- 2 Launch the Web browser.
- 3 Type **192.11.13.6** in the Address bar and press **Enter** to bring up the logon 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.

Verify license file

- 1 Under Security, click **License File**.
- 2 Verify that the **MultiVantage License Mode:** field shows Normal.

Copy translation files to media server

- 1 Under Miscellaneous, click **Download Files**.
- 2 Click **Browse** and select the file saved on the services laptop.

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)

- 3 Click **Download** to place the file on the media server.

Restore 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

- 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`.

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

Connecting to the standby media server

S8700 only

- 1 Connect to the services port on the back of the standby media server.
-
- 2 Launch a Web browser.
 - 3 Log in as **craft** or **dadmin**.
 - 4 Click **Launch Maintenance Web Pages**.
 - 1 Under Server, click **Release Server**.
 - 2 Click **Release**.

Connecting to the active media server

S8700 only

- 1 Connect to the services port on the back of the active media server.
-
- 2 Launch a Web browser.
 - 3 Log in as **craft** or **dadmin**.
 - 4 Click **Launch Maintenance Web Interface**.
 - 5 Under Server, click **Status Summary** to verify that the standby media server has been refreshed. Do not continue until the standby media server has been refreshed.
 - 6 Open a SAT session using Native Configuration Manager or Avaya Site Administration.
 - 7 Login as **craft** or **dadmin**.

Installing the translations

- 1 Type **reset system 4** and press **Enter**.
- 2 Return the STS-supplied PCMCIA flashcard to Avaya.

Go to [Adding IPSI translations to Communication Manager](#) on page 47 to add the IPSI translations before saving translations.

Adding IPSI translations to Communication Manager

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

S8700 MC:

```

change system-parameters ipserver-interface                               Page 1 of 1

      IP SERVER INTERFACE (IPSI) SYSTEM PARAMETERS

SERVER INFORMATION

      IPSI Host Name Prefix: vodka
      Primary Control Subnet Address: 198.152.254. 0 *
      Secondary Control Subnet Address: 198.152.255. 0 *

OPTIONS

      Switch Identifier: A
      IPSI Control of Port Networks: disabled

```

S8700 IP:

```

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** and **Secondary Control Subnet Address** (if equipped) fields are correct.

The subnet addresses 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; the Communication Manager call processing software 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** and/or **Secondary Control Subnet Address** fields is not correct, it must be changed on the media servers. 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 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.

NOTE:

The information you provide differs, depending on whether the IPSIs get static addresses or they are assigned automatically through DHCP.

Adding IPSI information

- 1 Type **add ipserver-interface *PNnumber*** where ***PNnumber*** is the port network number and press **Enter** to add the IPSI circuit pack information.
- 2 When using a DHCP server, verify that the fields associated with the Primary IPSI and Secondary IPSI (if equipped) are populated with default data. The **Host:** and **DHCP ID:** fields are set by the DHCP server.

add ipserver-interface 4
Page 1 of 1

IP SERVER INTERFACE (IPSI) ADMINISTRATION - PORT NETWORK 4

IP Control? y
Socket Encryption? n

Enable QoS? n

Primary IPSI

Location: 9A01

Host: ipsi-A09a

DHCP ID: ipsi-A09a

Secondary IPSI

Location: 9B01

Host: ipsi-A09b

DHCP ID: ipsi-A09b

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.

```
add ipserver-interface 8
      IP SERVER INTERFACE (IPSI) ADMINISTRATION - PORT NETWORK 8
IP Control? y                                Socket Encryption? y

                                              Enable QoS? y

Primary IPSI                                QoS Parameters
-----
Location: 1A01                                Call Control 802.1p: 6
      Host: 172.22.22.174                    Call Control DiffServ: 46
      DHCP ID: ipsi-A01a

Secondary IPSI
-----
Location: 1B01
      Host: 172.22.22.175
      DHCP ID: ipsi-A01b
```

S8500 only

S8700 only

- 3 Verify the correct setting for the **IP Control?** field
 - If IPSIs are in IP-connected PNs, then set the **IP Control?** field to **y**.
 - If IPSIs are in fiber-connected PNs (CSS or ATM), then set the **IP Control?** field to **y**.
 - If IPSIs are in fiber-connected PNs (direct-connect), then set the **IP Control?** field to **y** unless there is more than 1 IPSI. Then set the **IP Control?** field for the second IPSI to **n**.
 - If an IPSI is in a DS1-C-remoted PN, then set the **IP Control?** field to **n** to maintain the 5:1 ratio of IPSIs to PNs. If the field is set to **y**, then the system decreases the ratio to 2:1.
-
- 4 Verify that all the other fields are populated.
 - 5 Press **Enter** to effect the changes.
 - 6 Repeat steps 1 through 5 for each port network.

Setting IPSI duplication (high/critical reliability only)

- 1 Type **change system-parameters duplication** and press **Enter**

S8700 MC:

<pre> change system-parameters duplication DUPLICATION RELATED SYSTEM PARAMETERS Enable Operation of PNC Duplication? y Enable Operation of IPSI Duplication? y </pre>	<pre> Page 1 of 1 </pre>
---	--------------------------

S8700 IP:

<pre> change system-parameters duplication DUPLICATION RELATED SYSTEM PARAMETERS Enable Operation of IPSI Duplication? y </pre>	<pre> Page 1 of 1 </pre>
--	--------------------------

- 2 Set the **Enable Operation of IPSI Duplication?** field to **y**.
- 3 Press **Enter** to effect the changes.

Setting alarm activation level


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

<pre> change system-parameters maintenance 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 </pre>	<pre> Page 1 of 3 </pre>
--	--------------------------

- 2 In the **CPE Alarm Activation Level** field, select **none** (default), **warning**, **minor**, or **major**, depending on the level the customer wants.

Backing up translations

- 1 **S8700 MC:** Replace the PCMCIA memory card (Local PC card) in the bottom PCMCIA slot of the *active* media server.
S8710: Place a formatted flash card in the compact flash drive attached to a USB port.
- 2 Launch a Web browser.
- 3 Log in as **craft** or **dadmin**.
- 4 Click **Launch Maintenance Web Pages**.
- 5 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

- 6** 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.

- 7** Click **Start Backup** to begin the back up process.

Migrating hardware

These procedures are for migrating the hardware from existing platforms to the Avaya S8700 or S8710 Media Server with an Avaya G650 Media Gateway. The media server can be either a Multi-Connect configuration or an IP-Connect configuration. The migration procedures differ significantly because in the IP-Connect configuration, few of the old cabinets can be reused after the migration.

The existing DEFINITY platforms that can migrate to an S8700 or S8710 Multi-Connect configuration are:

- DEFINITY ECS R in a Multicarrier Cabinet (MCC)
- DEFINITY ECS SI in a Single Carrier Cabinet (SCC) or MCC

The existing Linux-based platforms that can migrate to an S8710 Multi-Connect configuration are:

- Avaya S8500 Media Server with G650 Media Gateways
- Avaya S8700 Media Server with G650 Media Gateways (Multi-connect configuration)

The existing DEFINITY platforms that can migrate to an S8700 or S8710 IP-Connect configuration are:

- Avaya IP600
- DEFINITY ONE in a Compact Modular Cabinet (CMC)
- DEFINITY ECS CSI in a CMC
- DEFINITY ECS R in an MCC (cabinet cannot be reused)
- DEFINITY ECS SI in an SCC or MCC (cabinet cannot be reused)

The existing Linux-based platforms that can migrate to an S8710 IP-Connect configuration are:

- Avaya S8500 Media Server with G650 Media Gateways
- Avaya S8700 Media Server with G650 Media Gateways (IP-connect configuration)

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

DEFINITY ECS R or SI in an MCC

The migration process differs, depending on whether the migration is to an S8700 or S8710 Multi-Connect or IP Connect configuration.

S8700 MC

If all the port networks are connected through a Center Stage Switch (CSS) or Asynchronous Transfer Mode (ATM), we recommend replacing the tone clocks with TN2312BP IPSI circuit packs in the processor port network (PPN) and expansion port networks (EPNs) first. The IPSIs are hot swappable. For specific information on how to do this, see [Upgrading and administering the existing hardware](#) on page 56.

If all the port networks are direct connect, we recommend that you install one IPSI in the existing PPN rather than in one of the EPNs. But before installing the IPSI, you must convert the PPN to an EPN 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 82.

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 78 for the specific steps.

S8700 IP:

Migrating an existing DEFINITY ECS R or SI to the S8700 or S8710 IP Connect configuration requires moving allowable circuit packs to an Avaya G650 Media Gateway. The MCC cannot be reused. For specific information on how to do this, see [Migrating from a DEFINITY ECS R or SI](#) on page 90.

This is a service-affecting event. The port networks must be powered down to move the circuit packs.

DEFINITY ECS SI in an SCC

The migration process differs, depending on whether the migration is to an S8700 or S8710 Multi-Connect or IP Connect configuration.

S8700 MC

If all the port networks are connected through a Center Stage Switch (CSS) or Asynchronous Transfer Mode (ATM), we recommend replacing the tone clocks with IPSI circuit packs in the processor port network (PPN) and expansion port networks (EPNs) first. The IPSIs are hot swappable. For specific information on how to do this, see [Upgrading and administering the existing hardware](#) on page 56.

If all the port networks are direct connect, we recommend that you install one IPSI in the existing PPN rather than in one of the EPNs. But before installing the IPSI, you must convert the PPN to an EPN 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 86.

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 78 for the specific steps.

S8700 IP

Migrating an existing DEFINITY ECS SI to the S8700 or S8710 IP Connect configuration requires moving allowable circuit packs to an Avaya G650 Media Gateway. The SCC cannot be reused. For specific information on how to do this, see [Migrating from a DEFINITY ECS R or SI](#) on page 90.

This is a service-affecting event. The port networks must be powered down to move the circuit packs.

DEFINITY ECS CSI or DEFINITY ONE/S8100 in a CMC

You can only migrate a DEFINITY ECS CSI or DEFINITY ONE/S8100 in a Compact Modular Cabinet (CMC) to an Avaya S8700 or S8710 IP Connect configuration.

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 TN2182 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 98.

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 78 or [Preconversion administration \(S8100\)](#) on page 80 for the specific steps.

Avaya IP600

You can only migrate an Avaya IP600 to an Avaya S8700 or S8710 IP Connect configuration.

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 102.

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 80 for the specific steps.

Upgrading and administering the existing hardware

NOTE:

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

This section covers upgrading and administering existing port networks (PNs) in preparation for migrating to the S8700 or S8710 Multi-Connect configuration for both multicarrier cabinets (MCCs) and single carrier cabinets (SCCs). This consists of:

- Placing the CAT5 cables between the Ethernet switches and PNs
- Changing out expansion interface circuit packs (if necessary)
- Changing out tone clocks and maintenance boards for IP Server Interfaces (IPSI) and new maintenance boards
- Connecting the IPSI boards to the Ethernet Switches.
- Assigning IDs or static IP addresses to the IPSI boards

This can all be done while the existing system is in service. However, with standard reliability configurations, short service interruptions are encountered as the tone clock is changed out in IPSI-controlled PNs.

NOTE:

If you are installing IPSIs in the existing PPN, you must move all the new circuit packs to the new carrier (cabinet) during the PPN conversion.

This section assumes that the S8700 or S8710 Media Servers have the latest software release, the media server complex is installed, configured, and operational.

This section covers the following tasks:

- [Connecting media server and IPSI cables to Ethernet switch\(es\)](#) on page 56
- [Upgrading hardware in each port network](#) on page 57
- [Installing Expansion Interface circuit packs](#) on page 76
- [Postmigration administration](#) on page 107

Connecting media server and IPSI cables to Ethernet switch(es)

See *Quick Start for Hardware Installation: Avaya S8700 or S8710 Media Server* (555-245-703) and the job aid titled *Cabling Guide — MCC1 and SCC1 Media Gateway* (555-245-771) for a connectivity guide.

Each TN2312BP IP Server Interface (IPSI) circuit pack must have a CAT5 Ethernet cable back to the Ethernet switch. Cables for IPSIs located in port network carrier A are GREEN. Cables for IPSIs located in PN carrier B (high or critical reliability) are RED.

Each media server is connected to the Ethernet switch(es) that comprise Control Network A (CNA) in duplex configurations (GREEN cable).

Each media server is connected to each Ethernet switch(es) that comprise Control Network B (CNB) in high and critical reliability configurations (RED cable).

Upgrading hardware in each port network

In IPSI-controlled PNs you must replace the existing tone-clock and maintenance circuit packs with a TN2312BP IPSI circuit pack and TN775D or later maintenance circuit pack. You must also replace TN776 (SI) and TN570 (R) Expansion Interface circuit packs with TN570B, vintage 7, or later circuit packs.

- [Replacing tone clocks with IPSI circuit packs and replace maintenance circuit packs](#) on page 57
- [Assigning IP addresses to the IPSI circuit packs](#) on page 107
- [Completing circuit pack replacement](#) on page 77

Replacing tone clocks with IPSI circuit packs and replace maintenance circuit packs

NOTE:

Before beginning, read this procedure and [Assigning IP addresses to the IPSI circuit packs](#) on page 107 to familiarize yourself with them. If using DHCP server, setting the Switch ID and Cabinet number on the IPSI circuit pack can be done at initial installation.

However, there are certain sequences that need to be completed prior to a predetermined time-out interval. If the Switch ID and Cabinet number are not set when the circuit pack is first plugged in it can be done later but it will require that the circuit pack be reseated. This could result in an additional service interruption in a duplex reliability configurations.

Determining IPSI placement in port networks

Determine which PNs get the IPSI circuit packs. Not all PNs require them. Port networks that do not house an IPSI have an Expansion Interface (EI) circuit pack that controls the PN. These EI-controlled PNs are assigned automatically to an IPSI at system initialization. The balancing of EI-controlled PNs amongst available IPSIs is also done automatically.

Also, with Release 2.0 or later of Communication Manager, you are allowed to put an IPSI in a DS1-C-remoted port network.

The following are the rules and guidelines for placement of IPSI circuit packs.

Rules:

- When placing an IPSI in a DS1-C-remoted port network, make sure that the non-remoted IPSI is administered first and that the **IP Control** field is set to **y**. The IPSI in the DS1-C-remoted PN does not have to be set to no. However, if it is set to **y**, customers need to run Ethernet from the IPSI and there is limited control (1:2 versus 1:5).
- The reference IPSI (the one whose serial number is used in the license file) is placed in the PN with the shortest Ethernet connection to the media servers. This minimizes the amount of data network that could fail between the IPSI and the media servers causing the system to switch to No License mode.

- The minimum number of port networks that require an IPSI is determined by the following formulas:
 - Duplex (Direct Connect): 1 IPSI controls up to 3 PNs. If 1 or 2 PNs and if a G650 media gateway PN is added, it may have an IPSI too. If 2 IPSIs are used, the IP control for 1 is yes and the other is no.
 - Duplex (Center Stage or ATM): Total Number of PNs divided by 5 (if not an integer, round up), plus one.
 - High/Critical: Total Number of PNs divided by 5 (if not an integer, round up). For each IPSI-connected PN, you need 2 IPSIs.

Guidelines:

- On large configurations that contain multiple switch node carriers, IPSIs should be placed as evenly as possible among the switch nodes. Use the **list fiber all** command to determine which port networks are connected to which switch node.

Standard (simplex) reliability configuration



WARNING:

The following procedure affects service when the circuit packs are being switched out. Coordinate this activity with the customer to minimize disruption of customer activities.

NOTE:

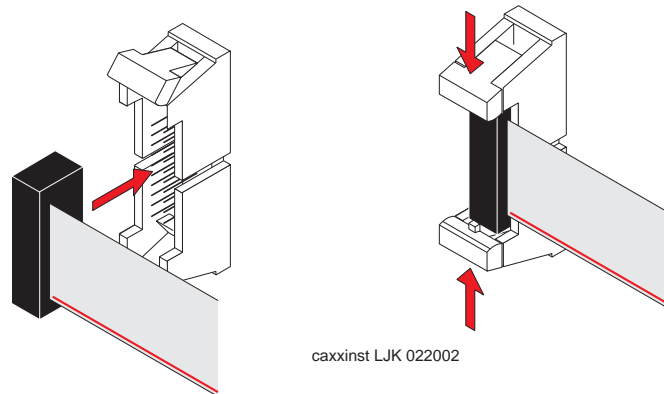
You can replace the maintenance circuit pack with the TN775D Maintenance (EPN) (if necessary) and the TN2182 Tone Clock circuit packs with the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit packs and program them ahead of time. All the circuit packs being replaced are hot-swappable, so you do not need to power down the PNs or the carrier.

- 1 Type **list cabinet** and press **Enter** to determine which PNs have TN2182 Tone Clock circuit packs and in which cabinets they are in.
- 2 In cabinets receiving an IPSI circuit pack, remove the TN2182 Tone Clock circuit pack from the expansion control carrier and place it in an antistatic carrier.

NOTE:

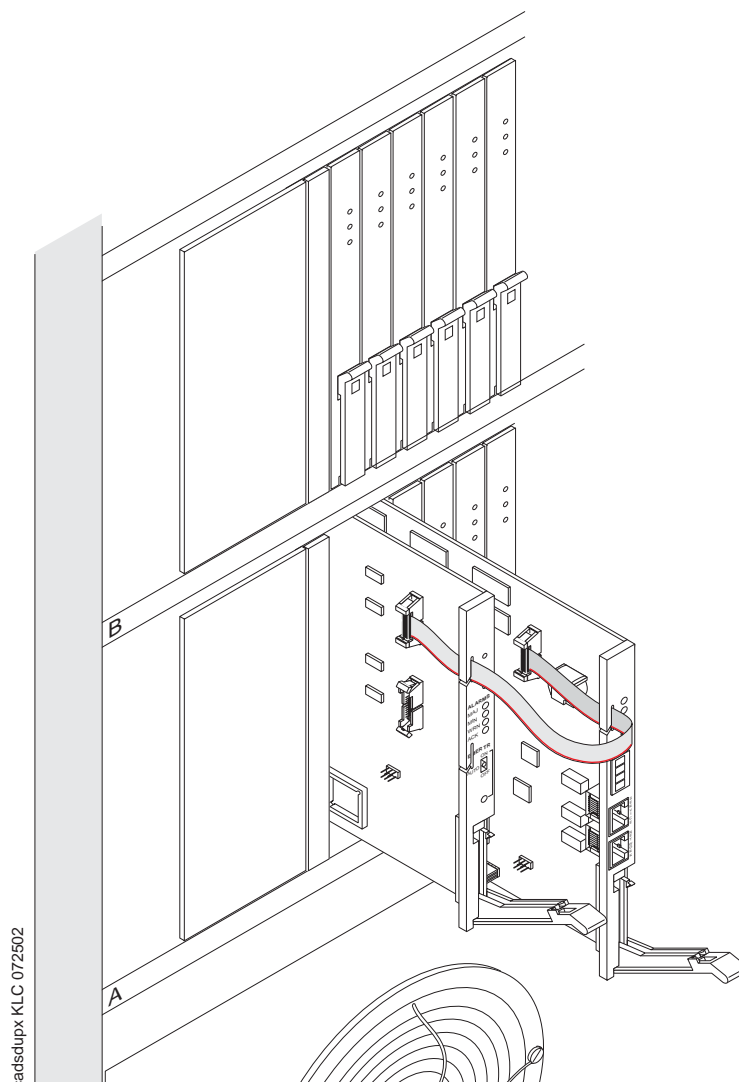
If present, do not remove the TN771 Maintenance/Test circuit pack.

- 3 Remove the TN775B/C Maintenance (EPN) circuit pack from the expansion control carrier and place it in an antistatic carrier.
- 4 Insert the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack part way into the TONE-CLOCK slot.
- 5 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 TN 2312AP circuit pack. See [Figure 4, Ribbon Cable Connector](#), on page 59.

Figure 4: Ribbon Cable Connector

-
- 6** Push the tabs on the ends of the connector inward to lock the connector in place.
 - 7** Thread the ribbon through the slot on the front panel. See [Figure 5, Duplex Reliability Ribbon Cable Connection](#), on page 60. (Standard reliability is referred to as duplex reliability in the S8700 or S8710 Multi-Connect configuration because of the two media servers.)
 - 8** Insert the TN775D maintenance circuit pack part way into the MAINTENANCE slot.
 - 9** Attach the other end of the short ribbon cable to the *top* connector on the component side of the TN775D circuit pack (red line on the bottom). See [Figure 5, Duplex Reliability Ribbon Cable Connection](#), on page 60.

Figure 5: Duplex Reliability Ribbon Cable Connection



-
- 10** Push the tabs on the ends of the connector inward to lock the connector in place.
 - 11** Thread the ribbon through the slot on the front panel.
 - 12** Fully insert the circuit packs.
 - 13** Program the TN2312BP just inserted. See [Assigning IP addresses to the IPSI circuit packs](#) on page 107.

High or critical reliability configuration (MCC1)

NOTE:

You can replace the maintenance circuit pack with the TN775D Maintenance (EPN) (if necessary) and the TN2182 Tone Clock circuit packs with the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit packs and program them ahead of time. All the circuit packs being replaced are hot-swappable, so you do not need to power down the PNs or the carrier.

These procedures assume that the tone-clock and maintenance circuit packs are in the A and B carriers. If one of them is in the E or D rather than B carrier, then the ribbon cable is not necessary.

- 1 Determine which PNs get the IPSI circuit packs. See [Determining IPSI placement in port networks](#) on page 57.

NOTE:

Not every port network requires an IPSI circuit pack.

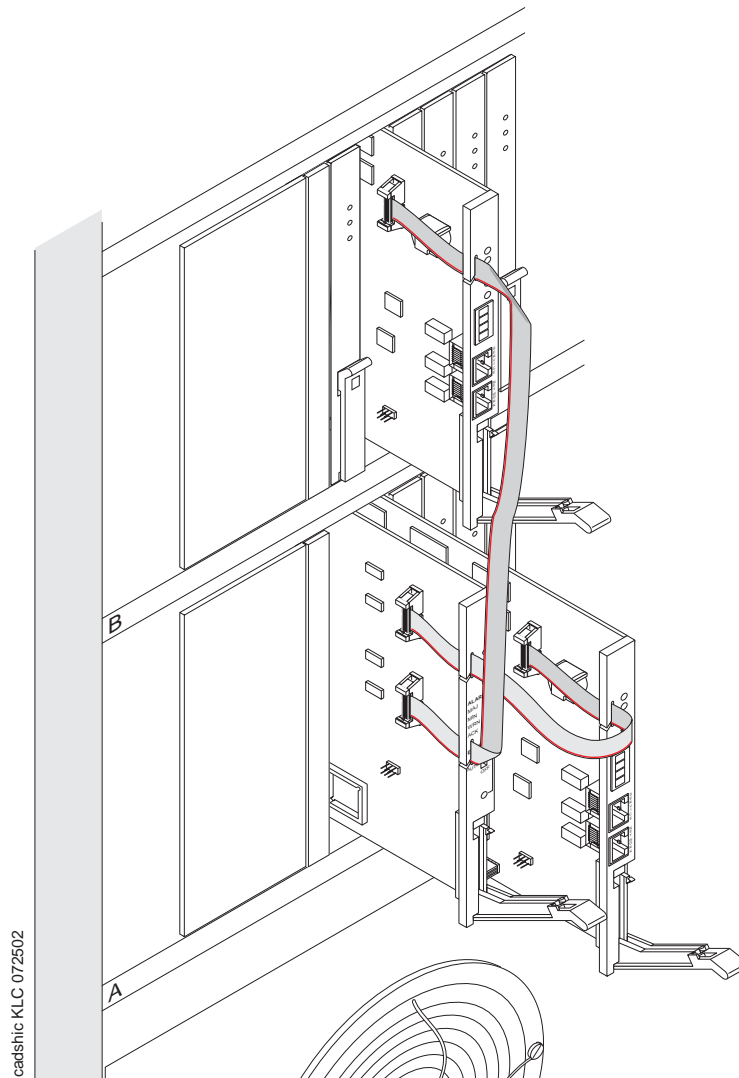
- 2 Type **list cabinet** and press **Enter** to determine which port networks have TN2182 Tone Clock circuit packs and in which media gateway they are in.
- 3 Type **status port-network number** where **number** is the number of the port network and press **Enter** to determine the active tone clock.
- 4 If needed, type **set tone cabinet carrier** where **cabinet** is **1-64** and **carrier** is **A-E** and press **Enter** to make the tone clock in the B carrier active.
- 5 Remove the TN2182 Tone Clock circuit pack from the standby carrier (A) and place it in an antistatic carrier.

NOTE:

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

- 6 Remove the TN775B/C Maintenance/Test circuit pack from standby carrier (A) and place it in an antistatic carrier.
- 7 Insert the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack part way into the TONE-CLOCK slot on the standby carrier (A).
- 8 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 circuit pack.
- 9 Push the tabs on the ends of the connector inward to lock the connector in place. See [Figure 4, Ribbon Cable Connector](#), on page 59.
- 10 Thread the ribbon through the slot on the front panel.
- 11 Insert the TN775D Maintenance (EPN) circuit pack part way into the MAINTENANCE slot in carrier A.
- 12 Attach the other end of the short ribbon cable to the *top* connector on the component side of the circuit pack (red line on the bottom). See [Figure 5, Duplex Reliability Ribbon Cable Connection](#), on page 60.
- 13 Push the tabs on the ends of the connector inward to lock the connector in place.
- 14 Thread the ribbon through the slot on the front panel.
- 15 Fully insert the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack only.

- 16 Assign the Switch and Cabinet ID to the TN2312BP Internet Protocol Server Interface (IPSI-2) just inserted. See [Assigning IP addresses to the IPSI circuit packs](#) on page 107.
- 17 Type **set tone cabinet carrier** and press **Enter** to force a tone-clock interchange.
- 18 Type **status port-network number** where **number** is the number of the port network and press **Enter** to verify that the tone-clock moved to the other carrier. Verify that the YELLOW LED on the IPSI circuit pack is flashing.
- 19 Remove the TN2182 Tone Clock circuit pack from the new standby carrier (B) and place in an antistatic carrier.
- 20 Insert the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack part way into the TONE-CLOCK slot on the standby carrier (B).
- 21 With the red line on the bottom (pin 1), attach one end of the long ribbon cable to the connector on the component side of the circuit pack.
- 22 Push the tabs on the ends of the connector inward to lock the connector in place. See [Figure 4, Ribbon Cable Connector](#), on page 59.
- 23 Thread the ribbon through the slot on the front panel.
- 24 Attach the other end of the long ribbon cable to the *bottom* connector on the component side of the TN775D Maintenance (EPN) circuit pack (red line on the bottom). See [Figure 6, High/Critical Reliability Ribbon Cable Connection](#), on page 63.
- 25 Fully insert the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack.
- 26 Program the TN2312BP Internet Protocol Server Interface (IPSI-2) just inserted. See [Assigning IP addresses to the IPSI circuit packs](#) on page 107.
- 27 Fully insert the TN775D Maintenance (EPN) circuit pack *after* both IPSIs have been programmed.

Figure 6: High/Critical Reliability Ribbon Cable Connection

Connecting the CAT5 cables to the IPSI circuit packs

See *Quick Start for Hardware Installation: Avaya S8700 or S8710 Media Server* (555-245-703) and the job aid titled *Cabling Guide — MCC1 and SCC1 Media Gateway* (555-245-771) for a connectivity guide.

- 1 Connect the GREEN CAT5 cables to the IPSIs in the A carrier or cabinet in the A position.
- 2 If high or critical reliability, connect the RED CAT5 cables to the IPSIs in the B carrier or cabinet in B position.

High or critical reliability configuration (SCC1)

NOTE:

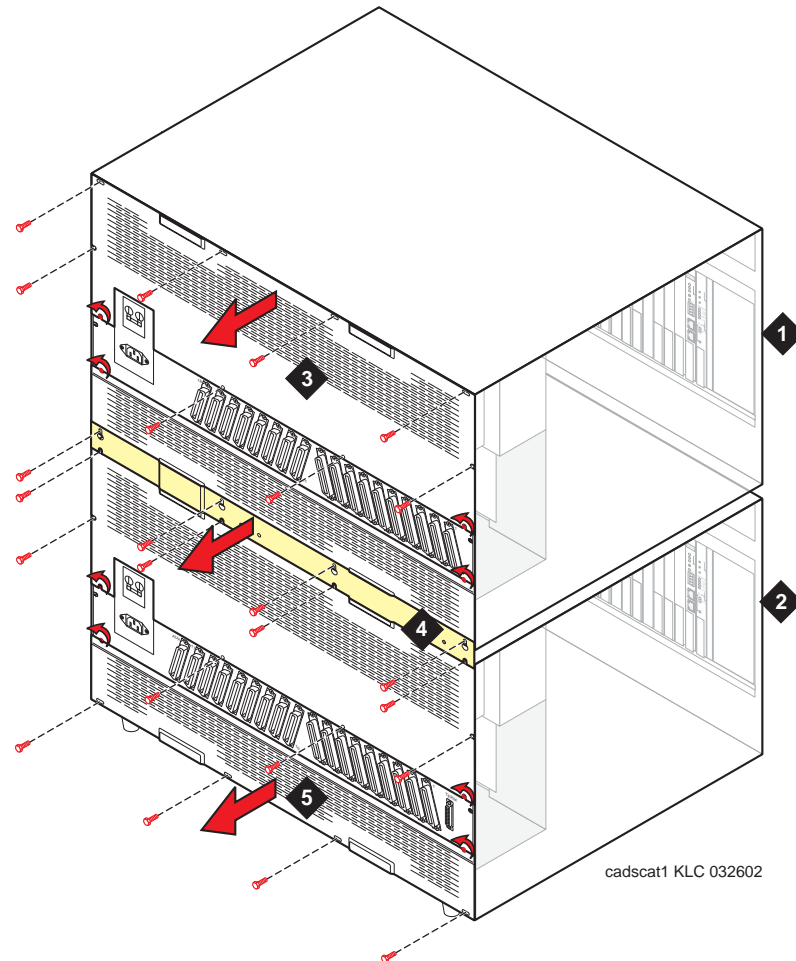
You can replace the tone-clocks with the IPSI circuit packs and administer them ahead of time. The circuit packs are hot-swappable, so you do not need to power down the PNs or the carriers.

- 1 Determine which PNs get the IPSI circuit packs. See [Determining IPSI placement in port networks](#) on page 57.

NOTE:

Not every port network requires an IPSI circuit pack.

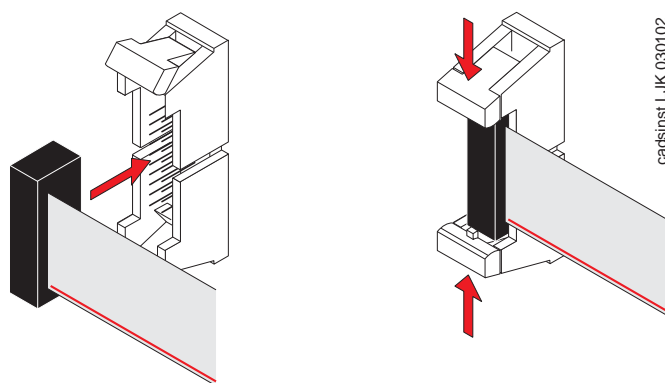
- 2 Type **list cabinet** and press **Enter** to determine which port networks have TN2182 Tone Clock circuit packs and in which media gateway they are in.
- 3 Type **status port-network *number*** where **number** is the number of the port network and press **Enter** to determine the active tone clock.
- 4 If needed, type **set tone cabinet carrier** and press **Enter** to make the tone clock in the B carrier active.
- 5 Remove the ground plate, upper and lower rear covers from the media gateway(s). See [Figure 7, Removing ground plate and upper and lower rear covers](#), on page 65.

Figure 7: Removing ground plate and upper and lower rear covers**Figure notes**

- | | | | |
|----------|------------------|----------|------------------|
| 1 | Media Gateway B | 4 | Ground plate |
| 2 | Media Gateway A | 5 | Lower rear cover |
| 3 | Upper rear cover | | |

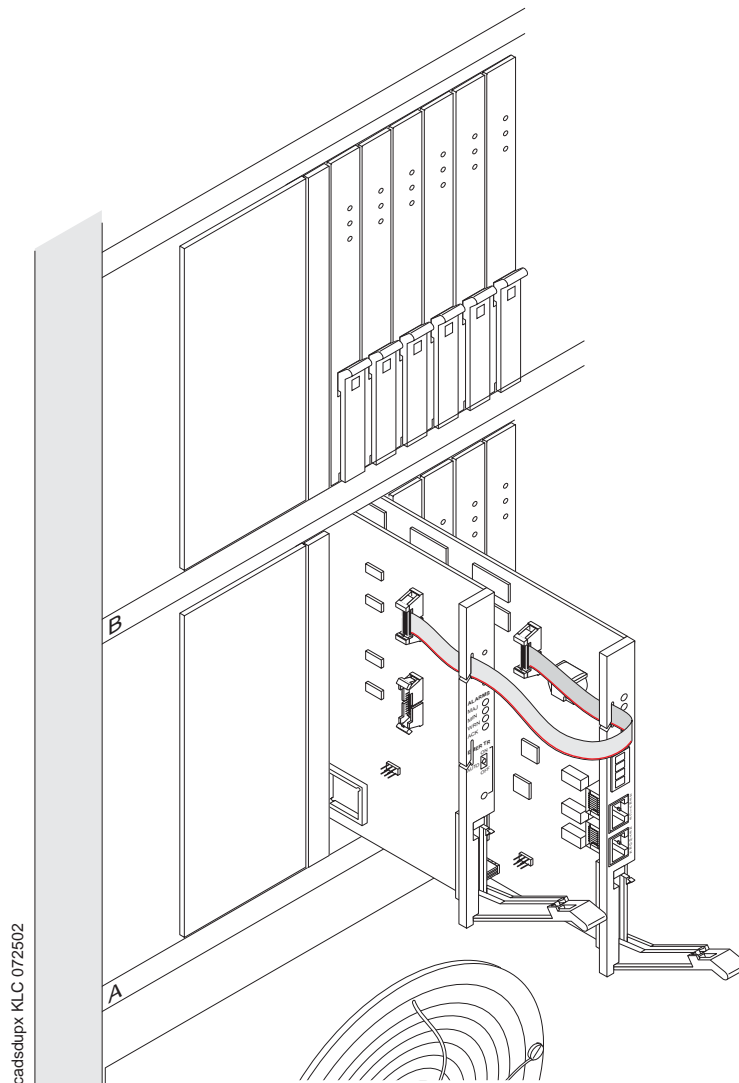
- 6** If they are not already present, insert the TN2312BP Internet Protocol Server Interface (IPSI-2) and TN775D Maintenance (EPN) circuit packs part way into their respective slots (Tone/Clock and Maintenance). If they are already present, unseat and pull them partway out.
- 7** With the red line on the bottom (pin 1), attach one end of the short ribbon cable to the connector on the component side of the TN2312AP/BP Internet Protocol Server Interface (IPSI/IPSI-2) circuit pack.
- 8** Push the tabs on the ends of the connector inward to lock the connector in place. See [Figure 8, Ribbon Cable Connector](#), on page 66.

Figure 8: Ribbon Cable Connector



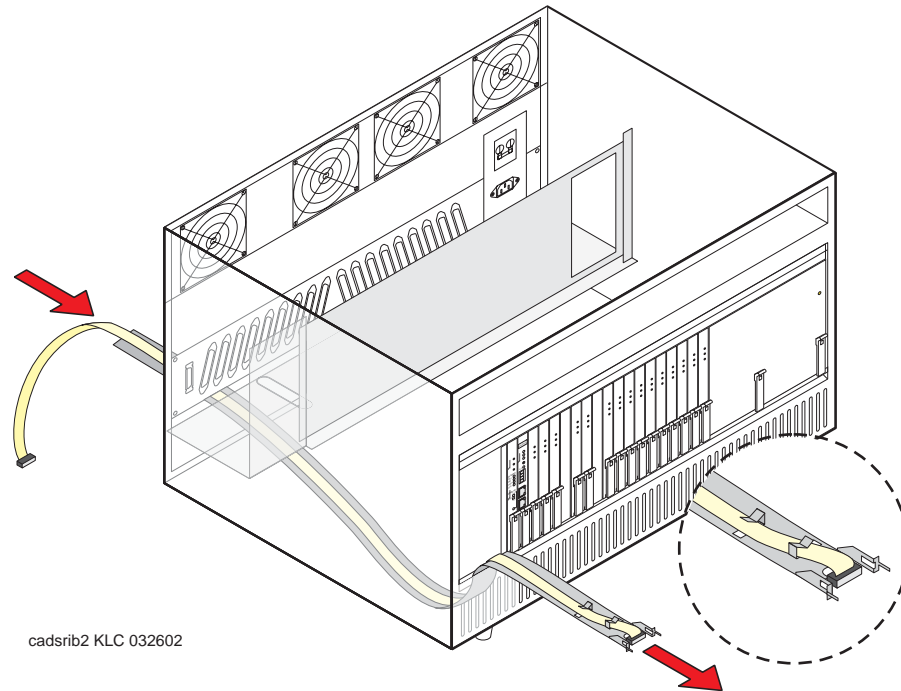
-
- 9** Thread the ribbon through the slot on the front panel.
 - 10** Attach the other end of the short ribbon cable to the *top* connector on the component side of the TN775D Maintenance (EPN) circuit pack (red line on the bottom). See [Figure 9, Duplex Ribbon Cable Connection](#), on page 67.

Figure 9: Duplex Ribbon Cable Connection



- 11** Push the tabs on the ends of the connector inward to lock the connector in place.
- 12** Thread the ribbon through the lower slot on the faceplate of the TN775D Maintenance (EPN) circuit pack.
- 13** For high or critical reliability configuration use the pass through tool to feed the long ribbon cable through media gateway A. See [Figure 10, Ribbon cable placement using the pass through tool](#), on page 68.

Figure 10: Ribbon cable placement using the pass through tool



- 14** Plug the long ribbon cable into the *bottom* connector on the component side of the TN775D Maintenance (EPN) circuit pack. (red line on bottom). See [Figure 11, High/Critical Ribbon Cable Connection](#), on page 69.
- 15** Push the tabs on the ends of the connector inward to lock the connector in place.
- 16** Thread the ribbon cable through the remaining slot on the faceplate of the TN775D Maintenance (EPN) circuit pack.
- 17** Route the cable through the TDM slot in the back of the SCC1 media gateway A and up to SCC1 media gateway B. See [Figure 12, Cable routing through the TDM slot](#), on page 70.

Figure 11: High/Critical Ribbon Cable Connection

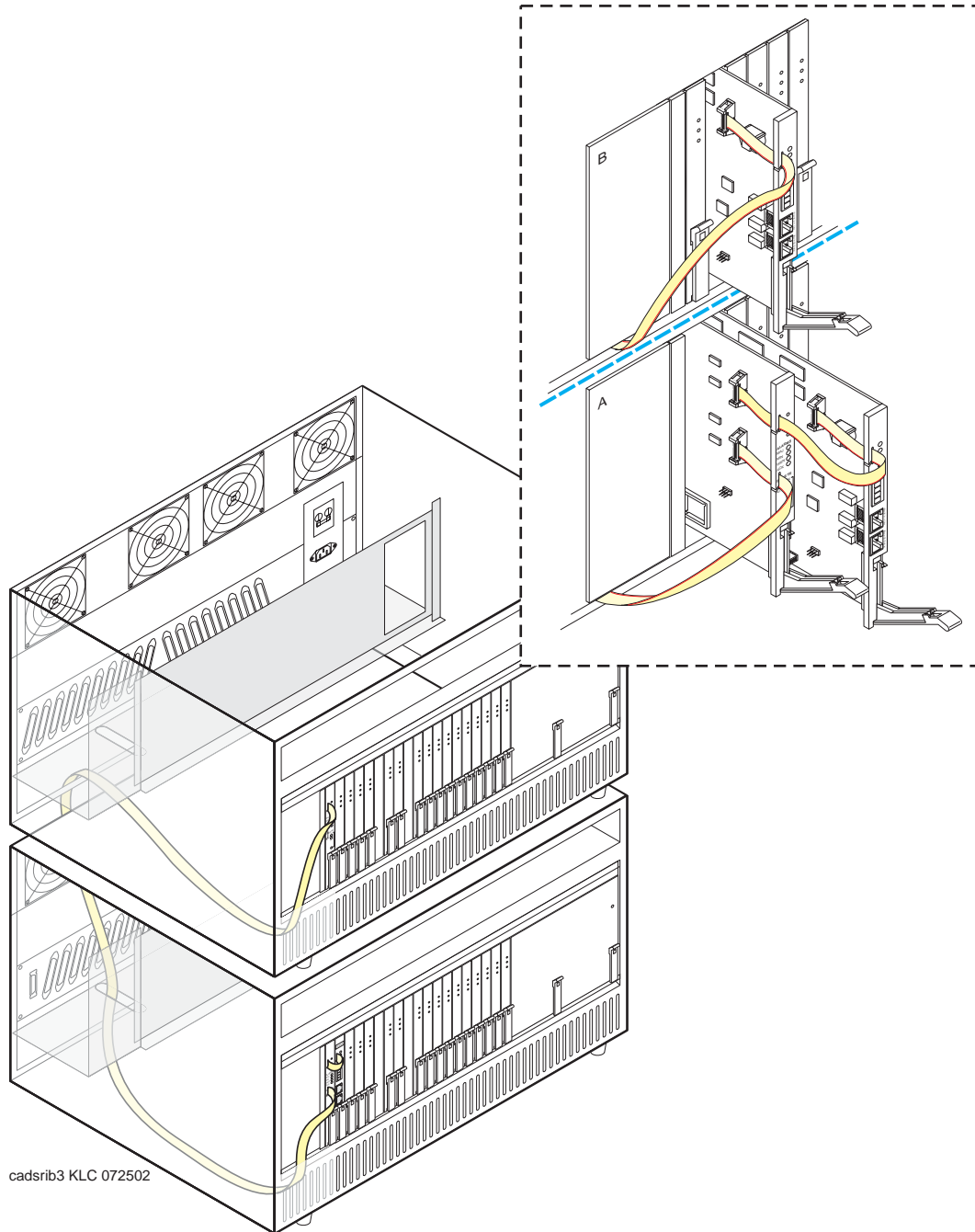


Figure 12: Cable routing through the TDM slot

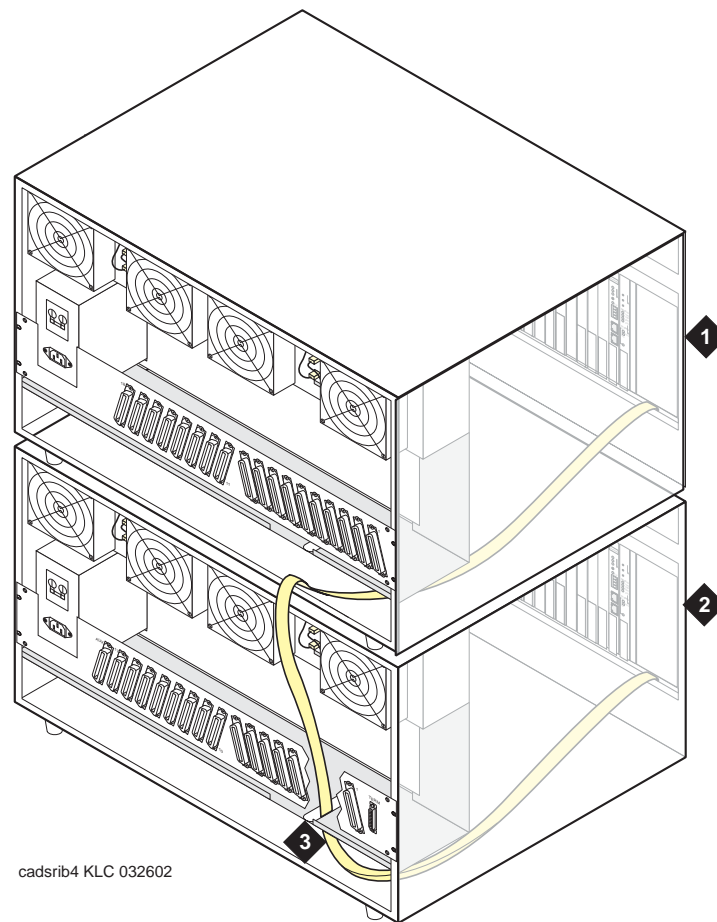


Figure notes

- | | | | |
|----------|-----------------|----------|----------------|
| 1 | Media Gateway B | 3 | TDM cable slot |
| 2 | Media Gateway A | | |

- 18** Use the pass through tool to feed the long ribbon cable through media gateway B.
- 19** If not already present, insert a TN2312BP Internet Protocol Server Interface (IPSI-2) part way into the tone clock slot of media gateway B.
- 20** Connect the long ribbon cable to the connector on the component side of the TN2312BP Internet Protocol Server Interface (IPSI-2) in media gateway A (red line on bottom). See [Figure 11, High/Critical Ribbon Cable Connection](#), on page 69.
- 21** Fully insert the TN775D Maintenance (EPN) and TN2312BP Internet Protocol Server Interface (IPSI-2) circuit packs.
- 22** If both ribbon and CAT5 cables have been installed, replace rear covers and ground plates (see [Figure 13, Replace rear covers and ground plates](#), on page 71).

If CAT5 cables need to be installed, leave the rear covers and ground plates off and go to [Connecting the CAT5 cables to the IPSI circuit packs](#) on page 72.

Figure 13: Replace rear covers and ground plates

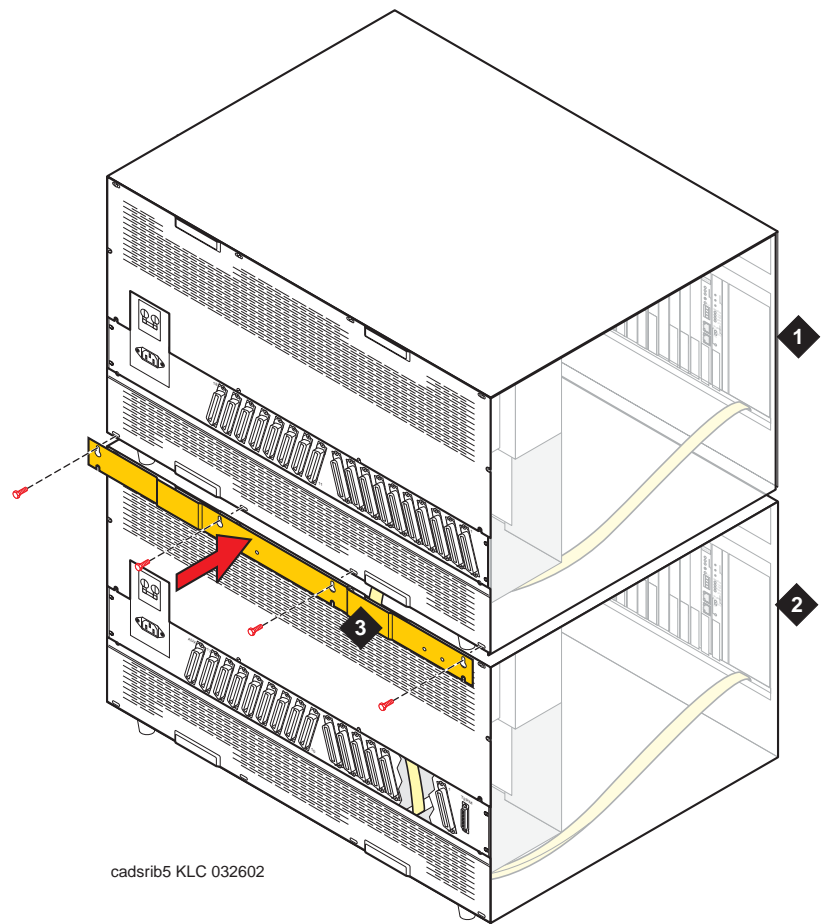


Figure notes

- | | | | |
|---|-----------------|---|--|
| 1 | Media Gateway B | 3 | Ground plate covering TDM cable opening. Note: All cables running between or exiting media gateways use the opening provided for TDM cables. |
| 2 | Media Gateway A | | |

Ordering information

Table 4: Cable Pass Through Kit ordering information

Comcode	Description
700219413	Cable Pass Through Kit

Connecting the CAT5 cables to the IPSI circuit packs

See *Quick Start for Hardware Installation: Avaya S8700 or S8710 Media Server* (555-245-703) and the job aid titled *Cabling Guide — MCC1 and SCC1 Media Gateway* (555-245-771) for a connectivity guide.

- 1 If not already removed, remove the ground plate. Remove the upper and lower rear covers from the media gateway(s). See [Figure 14, Removal of ground plate](#), on page 72.

Figure 14: Removal of ground plate

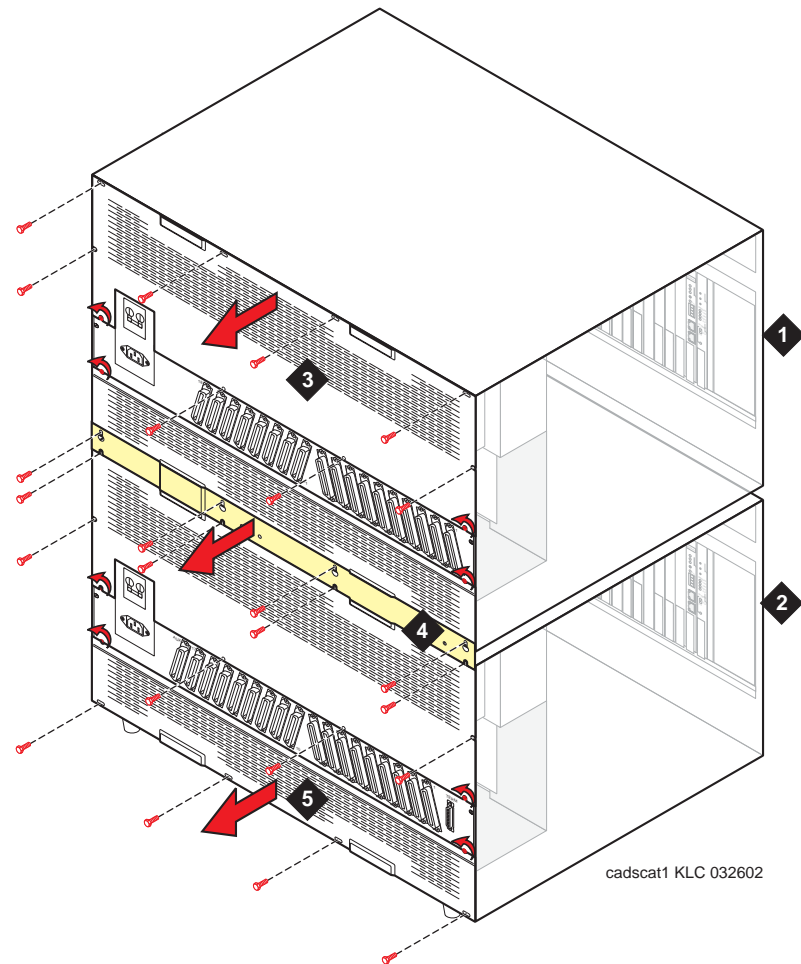
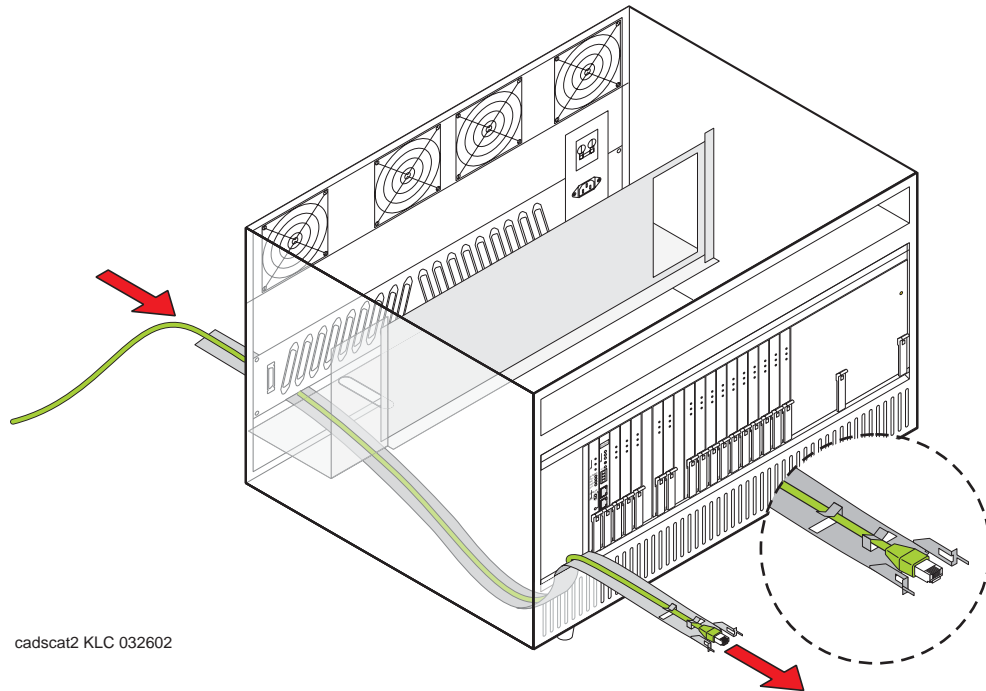


Figure notes

- | | | | |
|---|------------------|---|------------------|
| 1 | Media Gateway B | 4 | Ground plate |
| 2 | Media Gateway A | 5 | Lower rear cover |
| 3 | Upper rear cover | | |

- 2 Run the 25- or 50-m GREEN CAT5 cable from the Ethernet switch through the media gateway, using a cable pass-thru kit. See [Figure 15, CAT5 cable in pass-thru kit](#), on page 73.

Figure 15: CAT5 cable in pass-thru kit



- 3 Install the clamp on ferrite on the CAT5 Ethernet cable. See [Figure 16, CAT5 cable run through the clamp-on ferrite](#), on page 74.



WARNING:

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

Figure 16: CAT5 cable run through the clamp-on ferrite

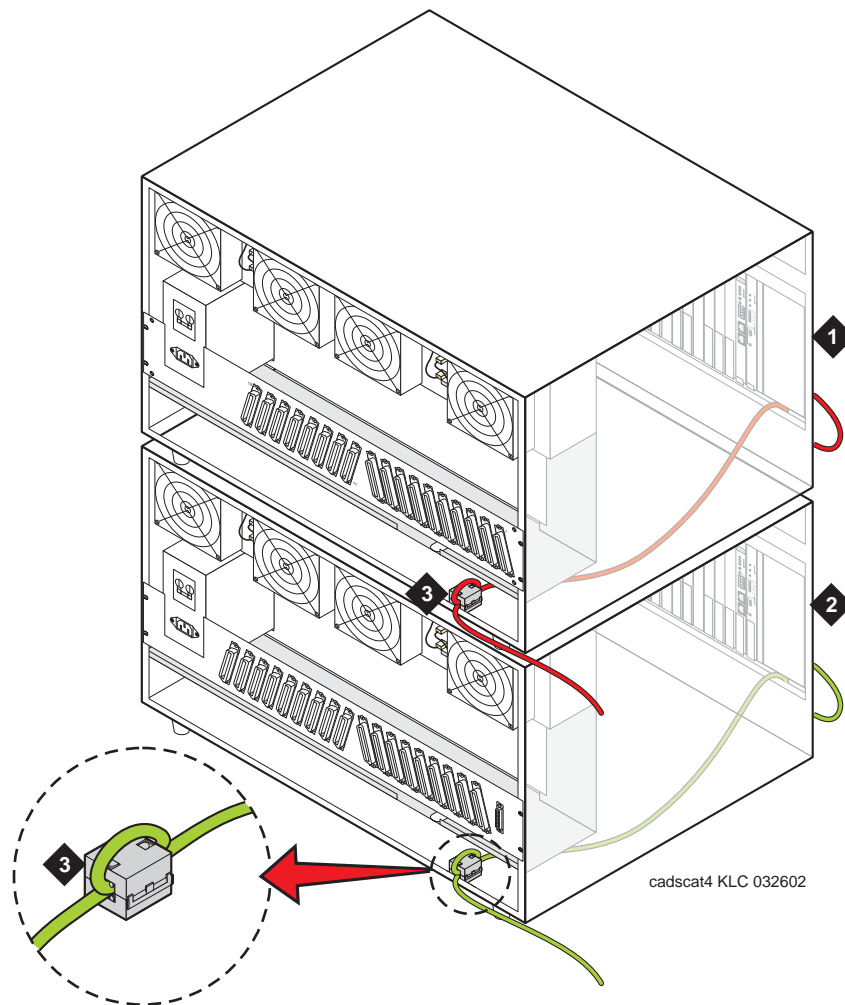


Figure notes

- | | | | |
|---|-----------------|---|-------------------|
| 1 | Media Gateway B | 3 | Clamp on Ferrite. |
| 2 | Media Gateway A | | |



WARNING:

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

- 4 Connect the GREEN CAT5 cable to the bottom connector on the front of the TN2312 IPSI circuit pack in media gateway A. See [Figure 17, CAT5 cable connected to the IPSI](#), on page 75.
- 5 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 18, Replacement of the rear covers and the ground plate](#), on page 76.
- 6 For high or critical reliability, repeat steps 1 through 5 for the IPSI circuit pack in media gateway B using a red CAT5 Ethernet cable.

Figure 17: CAT5 cable connected to the IPSI

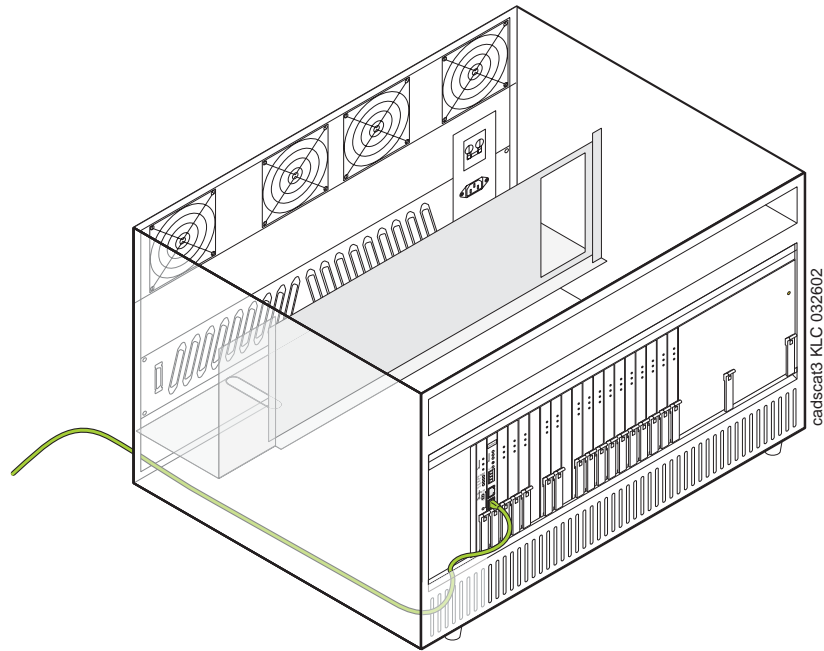


Figure 18: Replacement of the rear covers and the ground plate

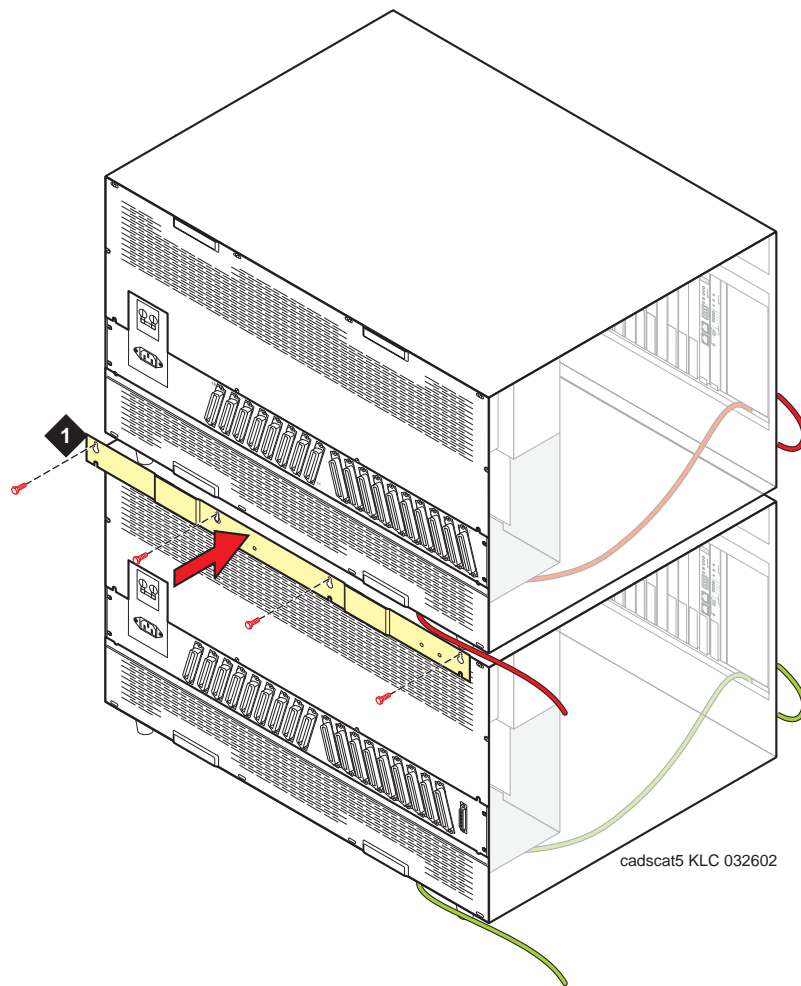


Figure notes

- 1** Ground Plate

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 Expansion Interface, vintage 7, or later circuit pack.

- 1** Remove the existing circuit pack and place in an antistatic container.
- 2** Insert the TN570B Expansion Interface, vintage 7, or later EI circuit pack into the EXPN INTFC slots (01, 02).
- 3** Repeat steps 1 and 2 for each PN that does not have TN570B Expansion Interface, vintage 7, or later EI circuit packs.

Completing circuit pack replacement

For standard (duplex) reliability configurations repeat [Standard \(simplex\) reliability configuration](#) on page 58 for each port network that will receive a TN2312BP. For high and critical reliability configurations repeat [High or critical reliability configuration \(MCC1\)](#) on page 61 or [Connecting the CAT5 cables to the IPSI circuit packs](#) on page 63 for each port network that receives a TN2312BP.

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 78
- [Preconversion administration \(S8100\)](#) on page 80
- [Converting a processor port network to a port network \(MCC\)](#) on page 82 (R or SI)
- [Converting a processor port network to a port network \(SCC\)](#) on page 86 (SI)
- [Converting a processor port network to a port network \(CMC\)](#) on page 98 (CSI or S8100)
- [Converting a processor port network to a port network \(IP600\)](#) on page 102 (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 79
- [Verifying system status](#) on page 79
- [Recording all busyouts](#) on page 79
- [Note node names and IP addresses](#) on page 79
- [Saving translations](#) on page 79

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 S8700 or S8710 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 80
- [Note node names and IP addresses](#) on page 80
- [Saving translations](#) on page 80
- [Note IP settings](#) on page 81

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 S8700 or S8710 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)

NOTE:

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

This section covers the following tasks:

- [Removing the processor port network control carrier\(s\)](#) on page 83
- [Installing the expansion control carrier and port carrier](#) on page 84
- [Installing IPSI and maintenance circuit packs](#) on page 84
- [Connecting the CAT5 cables to the IPSI circuit packs](#) on page 84
- [Installing Expansion Interface circuit packs](#) on page 85
- [Postmigration administration](#) on page 107

Verifying hardware

Make sure you have the conversion specific hardware on hand. See [Table 5, Required Migration Hardware](#), on page 82 for a list of hardware.

Table 5: 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) – 25-meter (82 feet) – 50-meter (164 feet)	1
700178056		1
700178064		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 mm²) 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.

NOTE:

You can cut over to having the media server control the other PNs at this time. Only cutover at this time if you are *not* installing IPSI(s) in the PPN or the customer wants to minimize down time. To cutover, go to [Enabling control of IPSI\(s\)](#) on page 113.

- 4 Power down the cabinet.
- 5 Disconnect the cables on the front of carrier A.
 - Power
 - ATM Fiber (optional)
- 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.
- 13 Repeat for carrier B (H/C only).

Installing the expansion control carrier and port carrier

- 1 Install the J58890-AF-2 L13 PN expansion control carrier in position A.
- 2 Install a J58890BB - 4 L14 Port carrier in position B.
- 3 Connect the carrier grounds.
- 4 Install the CFY1B Current Limiter (CURL) unit on the back of control carrier A. (Reuse the CURL if R; replace the CURL if SI.)
- 5 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).
 - Duplex reliability: No ICC cables required.
 - High reliability: ICCB and ICCD
 - Critical Reliability: ICCA, ICCB, ICCB, and ICCD
 - AUX cable to carrier A.
 - 9 pin D subminiature plug to P1 connector on each carrier.
- 6 Install faceplates on carrier A.
- 7 Install faceplates on carrier B.
- 8 Install power supplies in carrier A.
- 9 Install power supplies in carrier B.

Installing IPSI and maintenance circuit packs

If this PN does *not* contain an IPSI, install the tone clock and maintenance circuit packs, as required, then continue with [Installing Expansion Interface circuit packs](#) on page 85.

If this PN contains one or two IPSIs, reinstall the IPSIs and the ribbon cables as you did before. See [Standard \(simplex\) reliability configuration](#) on page 58 and [High or critical reliability configuration \(MCC1\)](#) on page 61.

Although you can use ICCs for connectivity (ICCB and ICCD) for consistency, just use the ribbons on the front.

Connecting the CAT5 cables to the IPSI circuit packs

See *Quick Start for Hardware Installation: Avaya S8700 or S8710 Media Server* (555-245-703) and the job aid titled *Cabling Guide — MCC1 and SCC1 Media Gateway* (555-245-771) 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 TN570C or higher EI circuit packs into the EXPN INTFC slots (A01, B02).

If reusing the EI circuit pack in a CSS:

- 1** Move the EI/ATM Interface circuit pack from location C02 to location A01.
- 2** If critical reliability, move the EI/ATM Interface circuit pack from location D02 to location B02.

If using ATM EIs:

- 3** Run the fiber optic cables for the expansion interface circuit packs through the media gateway, using a cable pass-thru kit.
- 4** Connect the fiber optic cables to the connector on the front of the expansion interface circuit packs. LED lights up when properly connected.

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)

NOTE:

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

This section covers the following tasks:

- [Verifying hardware](#) on page 86
- [Removing the processor port network control cabinet](#) on page 87
- [Installing the expansion control media gateway](#) on page 88
- [Stacking the port media gateways](#) on page 88
- [Installing IPSI and maintenance circuit packs](#) on page 88
- [Connecting the CAT5 cables to the IPSI circuit packs](#) on page 88
- [Installing Expansion Interface circuit packs](#) on page 88
- [Postmigration administration](#) on page 107

Verifying hardware

Make sure you have the conversion specific hardware on hand. See [Table 6, Required Migration Hardware](#), on page 86 for a list of hardware.

Table 6: 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
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

Table 6: 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 mm²) 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.

NOTE:

You can cut over to having the media server control the other PNs at this time. Only cutover at this time if you are *not* installing IPSI(s) in the PPN or the customer wants to minimize down time. To cutover, go to [Enabling control of IPSI\(s\)](#) on page 113.

- 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 and control cabinet B (if high or critical reliability).

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

If this PN does *not* contain an IPSI, install the tone clock and maintenance circuit packs, as required, then continue with [Installing Expansion Interface circuit packs](#) on page 88.

If this PN contains one or two IPSIs, reinstall the IPSIs and the ribbon cables as you did before. See [Standard \(simplex\) reliability configuration](#) on page 58 and [High or critical reliability configuration \(SCC1\)](#) on page 64.

Connecting the CAT5 cables to the IPSI circuit packs

See *Quick Start for the Hardware Installation: Avaya S8700 or S8710 Media Server* (555-245-703) and the job aid titled *Cabling Guide — MCC1 and SCC1 Media Gateway* (555-245-771) for a connectivity guide.

If this PN contains two IPSIs, see [Connecting the CAT5 cables to the IPSI circuit packs](#) on page 72.

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 TN570C or higher EI circuit packs into the EXPN INTFC slots (A01, B02).

If reusing the EI circuit pack in a CSS:

- 1** Move the EI/ATM Interface circuit pack from location C02 to location A01.
- 2** If critical reliability, move the EI/ATM Interface circuit pack from location D02 to location B02.

If using ATM EIs:

- 3** Run the fiber optic cables for the expansion interface circuit packs through the media gateway, using a cable pass-thru kit.
- 4** Connect the fiber optic cables to the connector on the front of the expansion interface circuit packs. LED lights up when properly connected.

Powering up the media gateway(s)

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

Migrating from a DEFINITY ECS R or SI

NOTE:

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

These procedures explain how to migrate an existing DEFINITY ECS R or SI to the Avaya S8700 or S8710 IP Connect configuration. In this migration, you cannot reuse the existing cabinets; you must move the reusable circuit packs to Avaya G650 Media Gateways.

At this point

- The S8700 or S8710 Media Server complex is installed, configured, and operational
- The G650 Media Gateways are installed
- Any new port circuit packs that were ordered are installed in the media gateways.

This section covers the following tasks:

- [Verifying hardware](#) on page 90
- [Powering down the cabinets](#) on page 95
- [Removing the circuit packs](#) on page 96
- [Placing circuit packs into G650 Media Gateway](#) on page 97
- [Connecting trunks to PSTN](#) on page 97
- [Connecting the G650 Media Gateways to the Main Distribution Frame](#) on page 97
- [Connecting to the media server](#) on page 97
- [Postmigration administration](#) on page 107

Verifying hardware

Make sure you have the migration specific hardware on hand. See [Table 7, Required Migration Hardware](#), on page 90 for a list of required hardware. Not all circuit packs can be reused in the G650 Media Gateway. [Table 8, Allowable Circuit Packs and Circuit Modules](#), on page 91 lists the circuit packs that can be used with the Avaya G650 Media Gateway. [Table 9, Non-Allowable Circuit packs and Circuit Modules](#), on page 93 lists the circuit packs that cannot be used with the Avaya G650 Media Gateway.

In addition, at a presale site inspection, the remediation process must check the vintages of every circuit pack that will be reused and replace those circuit packs that have unusable vintages. See the Hardware and Software Compatibility Matrix <ftp://ftp.avaya.com/incoming/Up1cku9/tsoweb/media/minhardwarevintages.pdf>.

Table 7: Required Migration Hardware 1 of 2

Comcode	Description	Number
700260359	TN2312BP IP Server Interface circuit pack	1
700263502	IPSI adapter	1
700276389	Maintenance cable (attaches to IPSI adapter—optional)	1

Table 7: Required Migration Hardware 2 of 2

Comcode	Description	Number
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

NOTE:

If you have a TN799C or earlier C-LAN circuit pack, you must replace it with a TN799DP. And if you want to use 100 Mbps speed, you must use the IP Media Processor Amphenol Adapter and a CAT5 cable. The 259A Adapter only works with a CAT3 cable and offers only 10 Mbps speed.

Table 8: Allowable Circuit Packs and Circuit Modules 1 of 3

Apparatus code	Name
655A	AC Power Unit—used in G650 Media Gateway
J58890MA-1 (TN801B)	CallVisor ASAI/CallVisor PC/LAN over the DEFINITY LAN Gateway R2 (MAP-D)
TN429D	Analog Direct Inward/Outward Dialing (DIOD) Central Office Trunk
TN433	Speech Synthesizer—Italian
TN457	Speech Synthesizer—British English
TN459B	Direct Inward Dialing (DID) Trunk—United Kingdom, 8 ports
TN464GP/ TN2464BP	DS1 Interface Trunk—T1, 24 Channel; E1, 32 Channel; Firmware Download Enabled
TN465C	Analog Central Office Trunk—multicountry, 8 ports
TN479	Analog Line, 16 ports
TN497	Tie Trunk—Italy, 4 ports
TN556D	ISDN-BRI, S/T-NT Interface, 4-wire, 12 ports
TN725B	Speech Synthesizer—U.S. English
TN744E	Call Classifier/Detector
TN746B	Analog Line, 16 ports
TN747B	Central Office Trunk, 8 ports
TN753B	Direct Inward Dialing (DID) Trunk, 8 ports

Table 8: Allowable Circuit Packs and Circuit Modules 2 of 3

Apparatus code	Name
TN754C	DCP Digital Line, 4-wire, 8 ports
TN760E	Tie Trunk, 4-wire, 4 ports
TN762B	Hybrid Line, 8 ports
TN763D	Auxiliary Trunk, 4 ports
TN767E	DS1 Interface Trunk—T1, 24 Channel
TN769	Analog Line, 8 ports
TN789B	Radio Controller
TN791	Analog Guest Line, 16 ports
TN793B	Analog Line with Caller ID, 2-wire, 24 ports
TN797	Analog CO Trunk or Line Combo—US, Canada, 8 ports
TN799DP	Control LAN (C-LAN)
TN2135	Analog Line
TN2139	Direct Inward Dialing (DID) Trunk—Italy, 8 ports
TN2140B	Tie Trunk—Hungary, Italy, 4-wire, 4 ports
TN2146	Direct Inward Dialing Trunk—Belgium, the Netherlands, 8 ports
TN2147C	Central Office Trunk—multiple countries, 8 ports
TN2181	DCP Digital Line, 2-Wire, 16 ports
TN2183	Analog Line—multiple countries, 16 ports
TN2184	Direct Inward/Outward Dialing (DIOD) Trunk—Germany, 4 ports
TN2185B	ISDN-BRI 4-Wire S/T-TE Interface (Trunk Side)
TN2198B	ISDN-BRI 2-Wire U Interface, 2-wire, 12 ports
TN2199	Central Office Trunk—Russia, 3-wire, 4 ports
TN2207	DS1 Interface - (T1) 24 Channel and (E1) 32 Channel
TN2209	Tie Trunk—Russia, 4-wire, 4 ports
TN2214B	DCP Digital Line, 2-wire 24-port (Category B only)
TN2215	Analog Line
TN2224CP	DCP Digital Line, 2-wire, 24 ports; Firmware Download Enabled
TN2242	TTC Digital 2-Mbit Trunk—Japan
TN2302AP	IP Media Processor; Firmware Download Enabled
TN2305B	ATM-CES Trunk/PN Interface—multimode fiber
TN2306B	ATM-CES Trunk/PN Interface—single mode fiber
TN2312BP	IP Server Interface
TN2313AP	DS1 Interface Trunk, 24 channels; Firmware Download Enabled
TN2501AP	VAL Announcement

Table 8: Allowable Circuit Packs and Circuit Modules 3 of 3

Apparatus code	Name
TN2793B	Analog Line with Caller ID, 24 ports
TN-CCSC-1	ISDN-PRI to DASS Converter
TN-CCSC-2	ISDN-PRI to DPNSS Converter, 75 ohm
TN-CCSC-3	ISDN-PRI to DPNSS Converter, 120 ohm
TN-C7	ISDN-PRI to SS7 Converter
TN-CIN	Voice/FAX/Data Multiplexer

Table 9: Non-Allowable Circuit packs and Circuit Modules 1 of 2

Apparatus code	Name
631DA1/DB1	AC Power Unit—MCC1 Media Gateway
649A	DC Power Unit—MCC1 Media Gateway
676C	DC Power Supply—SCC1 Media Gateway
982LS	Current Limiter—SCC1 Media Gateway
CFY1B	Current Limiter—MCC1 Media Gateway
CPP1	Memory Expansion
ED-1E546 (TN566) (TN567)	INTUITY AUDIX R3 System
ED-1E546 (TN2208) (TN2170)	CallVisor Adjunct-Switch Application Interface (ASAI) over the DEFINITY (LAN) Gateway R1
TN420C	Tone Detector
TN553	Packet Data
TN566/567	Multifunction circuit pack
TN568	Intuity AUDIX Slim
TN570B/C/D	Expansion Interface
TN572	Switch Node Clock
TN573B	Switch Node Interface
TN577	Packet Gateway
TN735	MET Line
TN748E	Tone Detector
TN750/B/C	Announcement
TN755B	Neon Power Unit
TN756	Tone Detector/Generator

Table 9: Non-Allowable Circuit packs and Circuit Modules 2 of 2

Apparatus code	Name
TN758	Modem Pool
TN765	Processor Interface
TN768	Tone-Clock
TN772	Duplication Interface
TN775C	Maintenance
TN776	Expansion Interface
TN777B	Network Control
TN778	Packet Control
TN780	Tone-Clock
TN787K	Multimedia Interface
TN788B	Multimedia Voice Conditioner
TN790B	Processor
TN792	Duplication Interface
TN794	Network Control/Packet Interface (NetPkt)
TN798B	Processor
TN799/B/C	Control Lan (C-LAN)
TN1648B	System Access/Maintenance
TN1650B	Memory
TN1654	DS1 Converter - T1, 24 Channel/E1, 32 Channel
TN1655	Packet Interface
TN1656	Tape Drive
TN1657	Disk Drive
TN2182B	Tone-Clock—Tone Detector, Call Classifier, 8 ports
TN2202	50-Hz French Ring Generator
TN2208	AUDIX
TN2301	Survivable Remote Logic Switch
TN2308	Direct Inward Dialing Trunk
TN2401	Network Control/Packet Interface
TN2404	Processor

Migrating MCC or SCC to G650 Media Gateways



CAUTION:

This process requires a service interruption from when the DEFINITY ECS is powered down to when the circuit packs are relocated and the telephones and other stations and trunks are connected to the new Avaya G650 Media Gateways.

All reusable circuit packs and their associated cables must be moved from the SCCs and the MCC carriers to the G650 Media Gateways. To do this, follow this general procedure:

- Gracefully shut down the MCC1 or SCC1 cabinets starting with the EPNs.
- Pull the reusable circuit packs from the cabinets or carriers.
- Disconnect any adapters and associated cable(s) from the rear connector panels that can be reused.
- Install the adapters and associated cable(s) to the correct slots on the rear connector panels of the G650 Media Gateways.
- Install the circuit packs in the correct slots in the G650 Media Gateway.
- Connect the port I/O cables to the Main Distribution Frame (MDF) and the Public Switched Telephone Network (PSTN).
- Connect the IPSIs to the media server.

Powering down the cabinets



CAUTION:

Make sure you have done the premigration administration. See [Preconversion administration \(R, SI, CSI\)](#) on page 78.

You must gracefully shut down the MCCs or SCCs before pulling the circuit packs. Start with the EPNs; shut down the PPN last.

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.

- 1 Connect a 10 AWG (#25) (2.6 mm²) wire to pin 49 of the connecting block associated with the power-failure transfer panel.
- 2 Route the opposite end of the wire to an approved ground and connect.
- 3 At the port network's power distribution unit, set the main circuit breaker to OFF.

Removing the circuit packs



CAUTION:

Always wear an antistatic wrist strap when removing circuit packs and associated cables.

- 1 Remove all circuit packs. Store the circuit packs in static-proof packaging.
- 2 Remove all reusable equipment and cables. See [Table 10, List of reusable equipment and cables](#), on page 96.
- 3 Repeat for carriers/cabinets B, C, D, and E.

Table 10: List of reusable equipment and cables

Reusable Circuit Pack	Associated Equipment/Cables	Notes
TN799DP C-LAN	TN2302AP Amphenol Adapter CAT5 cable with DW8 connectors	Provides 100 Mbps connectivity Can use adapter and cable from TN799B/C, but they only provide 10 Mbps connection.
TN2302AP IP Media Processor	TN2302AP Amphenol Adapter CAT5 cable with DW8 connectors	Provides 100 Mbps connectivity
TN2501AP VAL Announcement	Backplane Adapter CAT5 cable with DW8 connectors	
Station adapter	258A adapter	
Station adapter	356A adapter	
DS1Interface Trunk TN464GP/TN2464BP TN767E TN2207 TN2313AP	120A CSU module 700A DS1 loop-back jack H600-383 cable DW8A-DE cord	
Trunks and lines	I/O cables	
Other	10 AWG (#25) wire to coupled bonding conductor	

Repeat [Powering down the cabinets](#) on page 95 through [Removing the circuit packs](#) on page 96 for each MCC or SCC.

Placing circuit packs into G650 Media Gateway



CAUTION:

Always wear an antistatic wrist strap when installing circuit packs and associated cables.

NOTE:

All the circuit packs are hot swappable. You do not need to power down the media gateways to install them.

NOTE:

Use the GES configuration report available from the project manager.

- 1 Place the circuit packs in the proper slots.
- 2 Install the associated equipment and cables as needed.

Connecting trunks to PSTN

Either reuse the I/O cables from the existing equipment or use new ones to connect all the trunks to the Public Switched Telephone Network (PSTN). For information on connecting the media gateways to the PSTN, see *Installing and Configuring the Avaya S8700 or S8710 Media Server* (03-300145) and go to the section titled "Connect the main distribution frame to stations and the public switched telephone network."

Connecting the G650 Media Gateways to the Main Distribution Frame

Either reuse the I/O cables from the existing equipment or use new ones to connect the G650 Media Gateways to the Main Distribution Frame. For information on connecting the media gateways to the PSTN, see *Installing and Configuring the Avaya S8700 or S8710 Media Server* (03-300145) and go to the section titled "Connecting the media gateway to the main distribution frame."

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 (CMC)

NOTE:

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

NOTE:

If you want to make the system high reliability, then you cannot reuse the Compact Modular Cabinets (CMCs). You must install Avaya G650 Media Gateways and move all the circuit packs to the G650.

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.

There is no supported method for moving translations from the existing systems to the S8700 IP Connect configuration. Everything must be retranslated.

This section covers the following tasks:

- [Verifying hardware](#) on page 98
- [Converting the control cabinet to a port network](#) on page 99
- [Powering down the control cabinet](#) on page 100
- [Replacing the processor circuit pack](#) on page 100
- [Replacing the TN799C C-LAN circuit pack \(if necessary\)](#) on page 100
- [Connecting to the media server](#) on page 101
- [Postmigration administration](#) on page 107

Verifying hardware

Make sure you have the conversion specific hardware on hand. See [Table 11, Required Migration Hardware](#), on page 98 for a list of required hardware.

Table 11: 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

Table 11: Required Migration Hardware 2 of 2

Comcode	Description	Quantity
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
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 78 if csi or [Preconversion administration \(S8100\)](#) on page 80 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)

NOTE:

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

NOTE:

If you want to make the system high reliability, then you cannot reuse the IP600 cabinets. You must install Avaya G650 Media Gateways and move all the circuit packs to the G650.

NOTE:

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

There is no supported method for moving translations from the existing systems to the S8700 IP Connect configuration. Everything must be retranslated.

This section covers the following tasks:

- [Verifying hardware](#) on page 102
- [Converting the IP600 control chassis to a port network](#) on page 103
- [Powering down the control chassis](#) on page 104
- [Replacing the WP cables](#) on page 104
- [Replacing the processor circuit pack](#) on page 106
- [Replacing the TN799C C-LAN circuit pack \(if necessary\)](#) on page 106
- [Connecting to the media server](#) on page 106
- [Postmigration administration](#) on page 107

Verifying hardware

Make sure you have the conversion specific hardware on hand. See [Table 12, Required Migration Hardware](#), on page 102 for a list of required hardware.

Table 12: 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

Table 12: Required Migration Hardware 2 of 2

Comcode	Description	Quantity
848525887	IP Media Processor adapter	1/MedPro 1/C-LAN
NA	CAT5 cables	1/MedPro 1/C-LAN
700234032	Migration kit (PEC code 63275):	
700207111	– Upper circuit pack slot label	1
700181118	– Twisted pair I/O cables	10
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 78 if CSI or [Preconversion administration \(S8100\)](#) on page 80 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 19, Fan Assembly Removal](#), on page 105. 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 20, Proper Orientation for the Twisted Pair I/O Cables](#), on page 105. 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 20, Proper Orientation for the Twisted Pair I/O Cables](#), on page 105.

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 19: Fan Assembly Removal

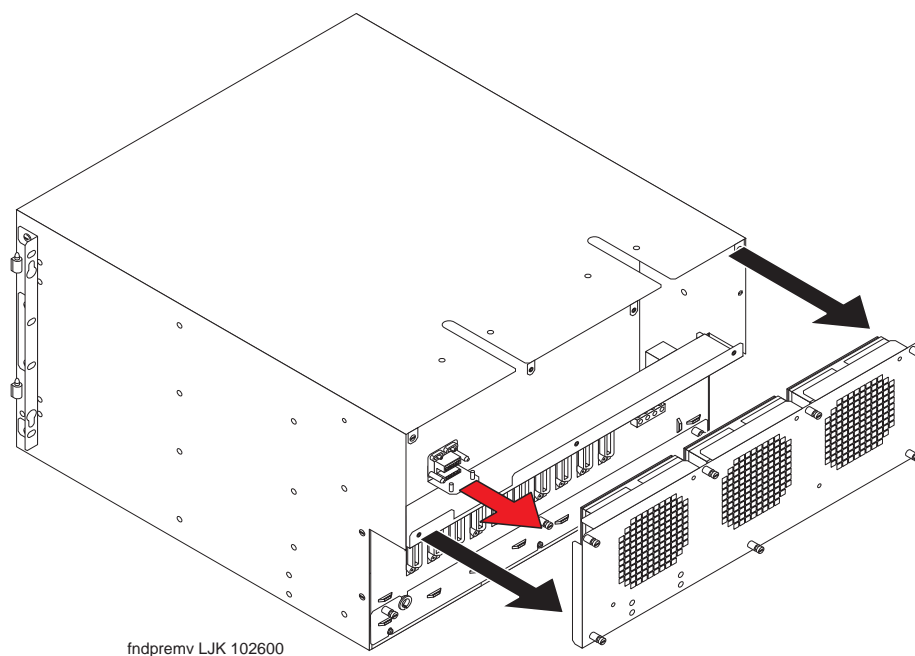
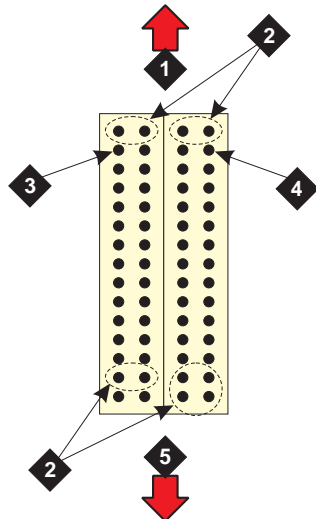


Figure 20: Proper Orientation for the Twisted Pair I/O Cables



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 107
- [Verifying IPSI translations](#) on page 112
- [Verifying IPSI connectivity](#) on page 113
- [Enabling control of IPSI\(s\)](#) on page 113
- [Verifying customer's data](#) on page 115
- [Upgrading firmware \(if necessary\)](#) on page 115
- [Testing the installation](#) on page 116
- [Busying out trunks](#) on page 116
- [Troubleshooting the migration](#) on page 116
- [Returning replaced equipment](#) on page 116

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.

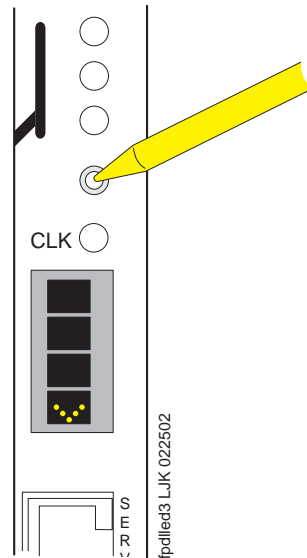
Administering the location assignment

- 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.

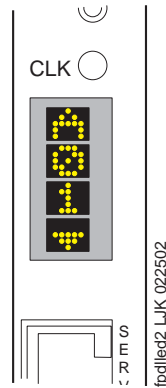
- 1 While the display is flashing, press the button until the switch ID (A through J) shows on the top character of the LED display. When the correct letter shows, stop. It will flash a few times (5 seconds) then stop. The next character down begins to flash.

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 21, Connecting directly to the IPSI](#), on page 110.

Figure 21: Connecting directly to the IPSI

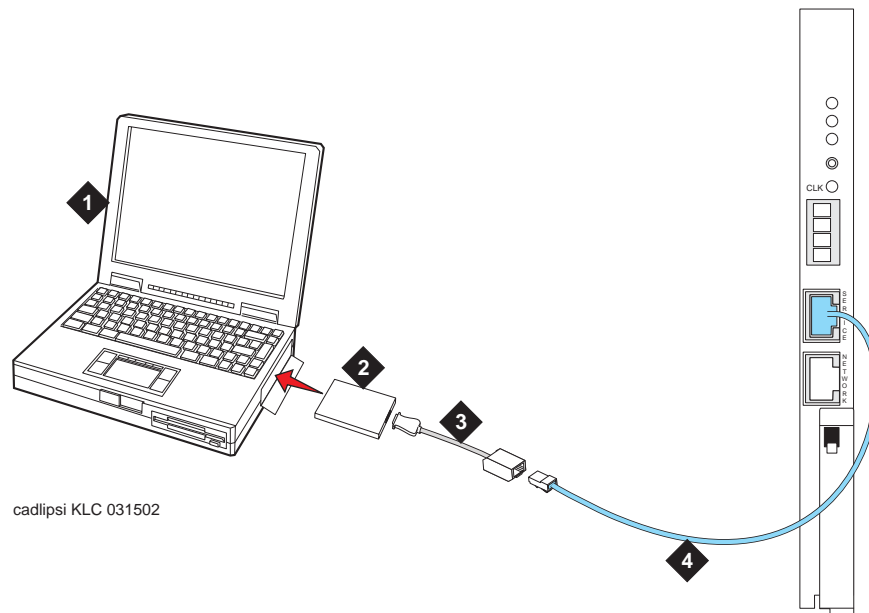


Figure notes

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

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 **ipsillogin** 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]: ipsillogin
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.

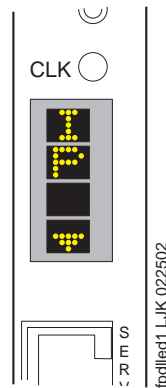
- 16 Type **quit** to logoff the IPSI.

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 I P with a filled-in V showing at the bottom. (See [Figure 22, LED display showing that the IPSI has a static IP address](#), on page 112)

Figure 22: 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.

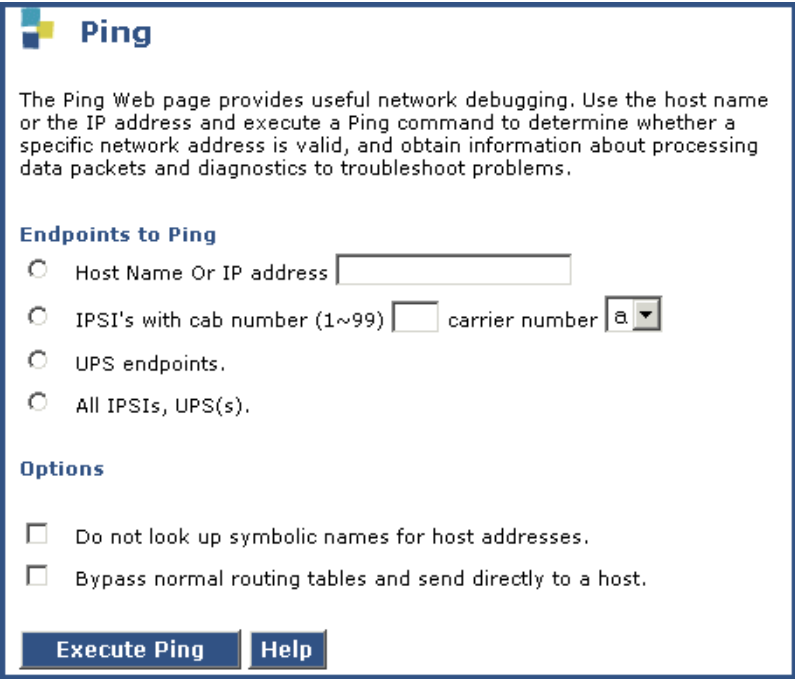
- 19 Repeat for each IPSI circuit pack.

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 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.

Endpoints to Ping

- ☐ Host Name Or IP address
- ☐ IPSI's with cab number (1~99) carrier number
- ☐ UPS endpoints.
- ☐ All IPSIs, UPS(s).

Options

- ☐ Do not look up symbolic names for host addresses.
- ☐ Bypass normal routing tables and send directly to a host.

Execute Ping **Help**

- 2 Select “IPSI's 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(s) have the same, 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**.

S8700 MC:

```
change system-parameters ipserver-interface                               Page 1 of 1
                                IP SERVER INTERFACE (IPSI) SYSTEM PARAMETERS

SERVER INFORMATION

                                IPSI Host Name Prefix: vodka
                                Primary Control Subnet Address: 198.152.254. 0 *
                                Secondary Control Subnet Address: 198.152.255. 0 *

OPTIONS

                                Switch Identifier: A
                                IPSI Control of Port Networks: enabled
```

S8700 IP:

```
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.

2 Migrating from an S8500 Media Server to S8710 Media Server

These procedures explain how to migrate an existing S8500 Media Server on release 2.0 of Avaya Communication Manager to S8710 Media Servers on release 2.1. In this migration, you configure the S8710 Media Servers but reuse the translations from the S8500 Media Server. This migration requires a new license file.

Because with this migration you are upgrading to Release 2.1 of Communication Manager, you must upgrade local survivable processors (LSPs), if they are being used, *before* the S8710 Media Server takes control.

Basic Migration Steps

- Upgrade G350 or G700 Media Gateways and local survivable processors (LSPs) if being used.
- Install the Avaya S8710 Media Servers in a 19-inch, 4-post rack as described in the *Quick Start for Hardware Installation: Avaya S8700 or S8710 Media Server* (555-245-703). You need a second UPS.
- Back up the translation files from the S8500 Media Server to the compact flashcard using the **Backup Now** link on the Maintenance Web Interface.
- Install the R2.1 software on the S8710 Media Servers. See *Installing and Configuring the Avaya S8700 or S8710 Media Server* (03-300145).
- Restore the translation files from the flashcard to the active S8710 Media Server using the **View/Restore Data** link.

NOTE:

If moving the UPS to a different 4-post rack, do it here before the cutover.

- Connect the control network Ethernet cables to the new S8710 Media Servers, standby media server first. You need a second GREEN CAT5 cable for media server 2.
- Complete the post-migration administration.

Verify hardware

You can reuse some of the equipment and cables when migrating an S8500 Media Server to S8710 Media Servers; see [Table 13, Reusable hardware](#), on page 118. But you need new equipment to complete the migration; see [Table 14, Required new hardware](#), on page 118.

Table 13: Reusable hardware

Comcode	Description	Quantity
408357002 408427409 700181928	Powerware 9125 uninterruptible power supply (UPS) with SNMP adapter installed (if Avaya-provided) – US & Canada – International – Japan	1
108873233 108563123 108644451	10/100BaseT Ethernet switch (if Avaya-provided) – Avaya Ethernet P133 switch – Avaya Ethernet P333 switch – Avaya Ethernet P334 switch	1
700235526	External V.90 56K USB modem with cable (if used)	1
700290448	Compact flash drive	1
700290430	Compact flash media	1
700170012 700178056 700178064	Green CAT5 Ethernet cables – 5-meter (16 feet) – 25-meter (82 feet) – 50-meter (164 feet)	1 1-34 1-34
700170053	Black CAT5 Ethernet crossover cable for laptop computer	1
407063478	Electrostatic discharge (ESD) wrist strap	1

Table 14: Required new hardware 1 of 2

Comcode	Description	Quantity
700326416	Avaya S8710 Media Servers	2
408357002 408427409 700181928	Powerware 9125 uninterruptible power supply (UPS) (if Avaya-provided) – US & Canada – International – Japan	1
408427656	SNMP Network Interface Adapter for UPS (if Avaya-provided)	1
700230741	4-post rail kits for mounting UPSs in rack (Powerware code: 05146726-5501)	1
700235526	External V.90 56K USB modem with cable	1
700290448	Compact 4-slot flash drive	1

Table 14: Required new hardware 2 of 2

Comcode	Description	Quantity
700290430	Compact flash media	1
700287964	Avaya Communication Manager CD for Linux Servers	1
700252828	Avaya S8300, S8500, S8700 Media Server Library CD (555-233-824)	1
	Green CAT5 Ethernet cables	
700170012	– 5 meters (16 feet)	1
700178056	– 25 meters (82 feet)	1
700178064	– 50 meters (164 feet)	1
700169998	Blue CAT5 Ethernet crossover cable for duplication	1
	Yellow single-mode fiber optic cable with LC connectors	1
700290422	– 4.6 meters (15 feet)	
700326382	– 100 meters (328 feet)	

Upgrade G350 or G700 Media Gateways and LSPs (if being used)

NOTE:

If the customer has no G350 or G700 Media Gateways or no local survivable processors (LSPs), skip these tasks and go to [On the S8500 Media Server](#) on page 122.

If the configuration is using G350 or G700 Media Gateways and media modules and newer firmware exists for them, you must upgrade the firmware on them first. If the media server is the primary controller for a G700 Media Gateway equipped with a local survivable processor (LSP), you must upgrade the software on the LSPs (S8300) *before* you transfer control to the S8710 Media Servers. The correct order is:

- 1 Upgrade media gateway firmware to latest version
- 2 Upgrade media modules firmware to latest version
- 3 Upgrade S8300 Media Server software to latest version if using LSPs
- 4 Transfer control to the S8710 Media Server.

Upgrade firmware on media gateways and media modules

For more detailed information on the firmware upgrade process, see *Installation and Upgrades for the Avaya G700 Media Gateway and Avaya S8300 Media Server* (555-234-100) or for more complete information.

Upgrade software on the LSPs

For more detailed information on the software upgrade process, see *Installation and Upgrades for the Avaya G700 Media Gateway and Avaya S8300 Media Server* (555-234-100).

NOTE:

Although the LSPs remain registered with the primary controller, the LSPs will not accept translations if they are running an older version of the software than the primary controller.

You may use the Upgrade Tool to upgrade the firmware on the G700 Media Gateway. For more detailed information on using the Upgrade Tool, see the job aid for Release 2.0 titled *Job Aid: Upgrade Tool and Worksheets* (555-245-757, Issue 1).

You may be able to use the Upgrade Tool to upgrade the software on the S8300 Media Server, depending on the media server version. For more information see *Installation and Upgrades for the Avaya G700 Media Gateway and Avaya S8300 Media Server* (555-234-100).



CAUTION:

You must stop call processing on the LSPs during the migration process. You can do this procedure on either the active or standby media server.

Task list

On the S8500 Media Server:

- 1 [Clear the ARP cache on the laptop](#) on page 122
- 2 [Connect to the media server](#) on page 122
- 3 [Access the media server](#) on page 123
- 4 [Clear alarms](#) on page 123
- 5 [Start a SAT session](#) on page 123
- 6 [Check link status](#) on page 123
- 7 [Record all busyouts](#) on page 123
- 8 [Check clock synchronization](#) on page 124
- 9 [Disable scheduled maintenance](#) on page 124
- 10 [Check for translation corruption](#) on page 124
- 11 [Back up the translation files](#) on page 124

On first S8710 Media Server:

NOTE:

This media server becomes media server 1.



CAUTION:

The duplication cables must not be connected. If connected, disconnect.

- 1 [Power up the media server](#) on page 125
- 2 [Access the media server](#) on page 125
- 3 [Set up Telnet \(if necessary\)](#) on page 125
- 4 [Install Communication Manager](#) on page 126
- 5 [Access the media server](#) on page 127
- 6 [Check software version](#) on page 127
- 7 [Copy files to the media server \(if any\)](#) on page 128
- 8 [Configure the media server using AIW](#) on page 128
- 9 [Restore the translations](#) on page 129

On second S8710 Media Server:

NOTE:

This media server becomes media server 2.



CAUTION:

The duplication cables must not be connected. If connected, disconnect.

- 1 [Install Communication Manager](#) on page 126
- 2 [Connect duplication cables](#) on page 129

Move the cables from the S8500 Media Server to the S8710 Media Servers:

- 1 [Connect new cables to standby media server](#) on page 130



CAUTION:

The following task causes an interruption of service; 2-5 minutes if moving only the cables, up to 30 minutes if moving the Ethernet switch(es) and UPSs.

- 2 [Move the cables](#) on page 130

NOTE:

At this time, the active *S8710* Media Server is controlling call processing.

On the standby S8710 Media Server:

- 1 [Access the standby media server](#) on page 130
- 2 [Ping all the connections to the media server](#) on page 130
- 3 [Release the standby media server](#) on page 130
- 4 [Back up files on the media server](#) on page 131
- 5 [Release alarm suppression \(optional\)](#) on page 132
- 6 [Set the Product ID](#) on page 132
- 7 [Log off all administration applications](#) on page 132
- 8 [Disconnect from the media server](#) on page 132

On the active S8710 Media Server:

- 1 [Access the active media server](#) on page 132
- 2 [Resolve alarms](#) on page 133
- 3 [Back up files on the media server](#) on page 131
- 4 [Release alarm suppression \(optional\)](#) on page 132
- 5 [Set the Product ID](#) on page 132
- 6 [Log off all administration applications](#) on page 132
- 7 [Disconnect from the media server](#) on page 132
- 8 [Register the system](#) on page 133

On the S8500 Media Server:

- 1 [Access the media server](#) on page 134
- 2 [Shut down the media server](#) on page 134
- 3 [Disconnect the cables](#) on page 134

On the S8500 Media Server

Clear the ARP cache on the laptop

NOTE:

Depending on your laptop computer's operating system (generally Windows 2000), you may need to clear the Address Resolution Protocol (ARP) cache before entering a new IP address. If you enter an IP address, and your computer cannot connect, then you may need to clear the cache.

- 1 On your laptop computer, click **Start** > **Run** to open the **Run** dialog box.
- 2 Type **command** and press **Enter** to open a MS-DOS Command Line window.
- 3 Type **arp -d 192.11.13.6** and press **Enter** to clear the Address Resolution Protocol (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 appear in the ARP cache.

Connect to the media server

- 1 Connect the laptop to the services port (2) on the back of the media server using a crossconnect CAT5 cable.

Access the media server

- 1 Launch the Web browser.
- 2 Type **192.11.13.6** in the **Address** field and press **Enter** to open the logon page.
- 3 Log on as **craft** or **dadmin** and suppress alarm origination.
- 4 Click **Launch Maintenance Web Interface** to get to the Main Menu.

Clear alarms

- 1 Under Alarms, click **Current Alarms**.
- 2 Select the server alarms to be cleared and click **Clear**.
- 3 Resolve any major alarms using SAT commands and a terminal emulation application, such as Native Configuration Manager or MS HyperTerminal.

Start a SAT session

- 1 Open a terminal emulation application, such as Native Configuration Manager or MS HyperTerminal.
- 2 Type **192.11.13.6 5023** and press **Enter**.
- 3 Log on as **craft** or **dadmin** and suppress alarm origination.

Check link status

NOTE:

Because some links may be down by choice, make note of them before the upgrade.

- 1 Type **display communication-interface links** and press **Enter**.
- 2 Note all administered links.
- 3 Type **status link *number*** and press **Enter** for each administered link.
Check the following fields for the values listed:
 - **Link Status** = connected
 - **Service State** = in service
- 4 Type **list signaling group** and press **Enter**.
- 5 Note the signaling groups listed by number.
- 6 For each of the signaling groups listed, type **status signaling group *number*** and press **Enter**.
- 7 Under the **Group State** field, make note of any links that are out of service.

Record 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 busied-out state after the migration.

Check clock synchronization

- 1 Type **status sync** and press **Enter** to verify that the clock synchronization is good.
- 2 Make sure the **Switching Capabilities** field shows **enabled**.

Disable scheduled maintenance

To prevent scheduled daily maintenance from interfering with the upgrade:

- 1 Type **change system-parameters maintenance** and press **Enter**.
- 2 If scheduled maintenance is in progress, set the **Stop Time** field to 1 minute after the current time.

or

If scheduled maintenance is not in progress, set the **Start Time** field to a time after the upgrade will be completed.

For example, if you start the upgrade at 8:00 P.M. and the upgrade takes 90 minutes, set the **Start Time** field to 21:30.

Check for translation corruption

- 1 Type **newterm** and press **Enter**.
- 2 If you do not get a login prompt, but instead see the following message
Warning: Translation corruption detected . . .
then follow the normal escalation procedure for translation corruption before continuing the upgrade.

Back up the translation files

- 1 Connect the compact flash drive cord into one of the USB ports on the front of the media server.
- 2 Insert a formatted 128-megabit compact flash disk into the bottom slot of the drive.
- 3 Select **Avaya Call Processing (ACP) Translations** and **Local PC** as the backup method.
- 4 Click **Start Backup** to begin the backup process.
- 5 Click **Backup History** to view the progress of the backup process.
- 6 When done, disconnect from media server.

On first S8710 Media Server

NOTE:

This media server becomes media server 1.



CAUTION:

The duplication cables must not be connected. If connected, disconnect.

Power up the media server

- 1 Connect the AC power cord to media server 1 and to UPS 1 to power it up.
- 2 Push the power button.

Access the media server

NOTE:

You must place the CD in the drive immediately.

To access the media server:

- 1 Clear the ARP cache from the laptop if necessary. (See [Clear the ARP cache on the laptop](#) on page 122 and return here.)
- 2 Connect the laptop to the services port (2) on the back of the media server using a crossconnect cable.
- 3 Place the CD with Communication Manager in the CD-ROM drive on the media server.
- 4 Wait at least 3 minutes after powering up before starting a Telnet session to access the information on the CD.

Set up Telnet (if necessary)

NOTE:

Use a telnet session to access the information on the CD.

The Microsoft Telnet application may be set to send a carriage return (CR) and line feed (LF) each time you press Enter. The installation program sees this as 2 key presses. If running Windows 2000/XP, you need to correct this before you copy the Remaster Program to the hard drive.

- 1 Click **Start > Run** to open the **Run** dialog box.
- 2 Type **telnet** and press **Enter** to open a Microsoft Telnet session.
- 3 Type **display** and press **Enter** to see the current settings. If message says

Sending only CR

then close the dialog box.

If message says

Sending both CR & LF

then continue with step 4.

- 4 Type **unset crlf** and press **Enter**.
- 5 Type **display** and press **Enter** to verify that the settings changed. The message says

Sending only CR

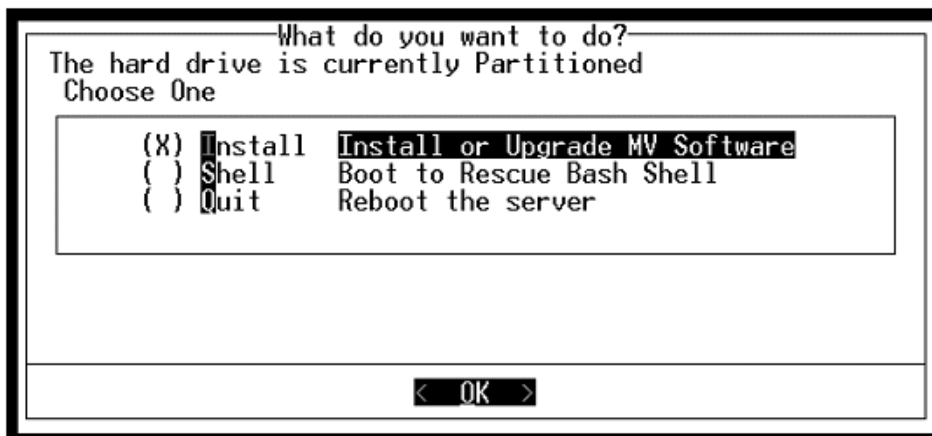
- 6 Close the dialog box.

Install Communication Manager

NOTE:

Use a telnet session to access the information on the CD.

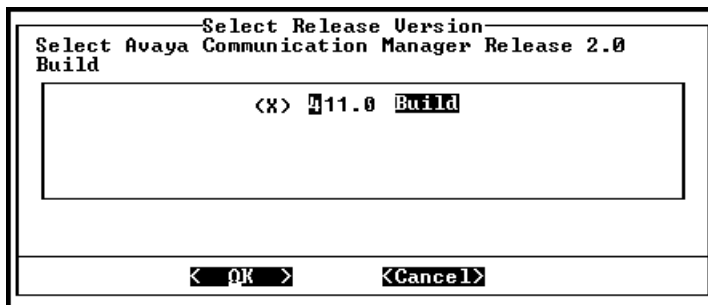
- 1 Type **telnet 192.11.13.6** and press **Enter** to view the first screen.



NOTE:

To navigate on these screens, use the arrow keys to move to an option, then press the space bar to select the option. Press **Enter** to submit the screen.

- 2 Select **Install**, make sure OK is highlighted, and press **Enter**.
- 3 Select <Yes> and press **Enter**.



- 4 Select <OK> and press **Enter** to partition the hard drive and reformat the partitions

Once the drive is properly configured, the program begins the installation process and reports the progress.

```
21:26:38 | copying iputils-20020124-8.i386.rpm
21:26:38 | copying libattr-2.0.8-3.i386.rpm
21:26:38 | copying libcap-1.10-12.i386.rpm
21:26:39 | copying libelf-0.8.2-2.i386.rpm
21:26:39 | copying libgcc-3.2-7.i386.rpm
21:26:39 | copying libjpeg-6b-21.i386.rpm
21:26:39 | copying libtermcap-2.0.8-31.i386.rpm
21:26:39 | copying libtool-libs-1.4.2-12.i386.rpm
21:26:39 | copying losetup-2.11r-10.i386.rpm
21:26:39 | copying lrzsz-0.12.20-14.i386.rpm
21:26:39 | copying lsof-4.63-2.i386.rpm
21:26:39 | copying ltrace-0.3.10-12.i386.rpm
21:26:39 | copying mailx-8.1.1-26.i386.rpm
21:26:39 | copying mingetty-1.00-3.i386.rpm
21:26:39 | copying mktemp-1.5-16.i386.rpm
21:26:39 | copying ncompress-4.2.4-31.i386.rpm
21:26:39 | copying net-tools-1.60-7.i386.rpm
21:26:40 | copying patch-2.5.4-14.i386.rpm
21:26:40 | copying pcre-3.9-5.i386.rpm
21:26:40 | copying poprt-1.8-0.69AV1.i386.rpm
21:26:40 | copying rdate-1.2-5.i386.rpm
21:26:40 | copying rusers-0.17-21.i386.rpm
21:26:40 | copying setserial-2.17-9.i386.rpm
```

These processes can take up to 20 minutes. When the media server is ready to reboot, the CD-ROM drive drawer opens. You must remove the CD from the drive at this time.

The reboot may take up to 3 minutes. The telnet session drops automatically.

Access the media server

- 1 Click **Start > Run** to open the **Run** dialog box.
- 2 Type **telnet 192.11.13.6** and press **Enter** to see if you get a login prompt. Repeat until you get the login prompt.
- 3 Exit the Telnet session.
- 4 Log onto the Maintenance Web Interface. See [Access the media server](#) on page 123 and return here.

Check software version

- 1 Under **Server**, click **Software Version**.
- 2 Verify the software version.

Copy files to the media server (if any)

You must copy the required files from the laptop to the media server. This includes the software update file and firmware for programmable circuit packs. Do not copy the backup file using this method.

NOTE:

The latest firmware for the programmable circuit packs and media modules may be on the CD.

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



- 2 Select **File(s) to download from the machine I'm using to connect to the server**.
- 3 Click **Browse** next to the top field to open the File Upload window on your computer. Find the files that you need to copy to the media server.
- 4 Click **Download** to copy the file to the media server.

Configure the media server using AIW

Configure the media server and install the new license file and software updates automatically using the Avaya Installation Wizard (AIW). You can do it two ways:

- Import the data from the filled-out *Electronic Preinstallation Worksheet* (EPW).
- Type in the information manually using the filled-out EPW as a guide.

NOTE:

You can install the license file without being physically connected to the reference IPSI. However, you have only 30 minutes before it tries to check the serial number on the IPSI. To get another 30 minutes, you can restart the clock by restarting the media server. In a SAT session, type **reset system 1**.

To access the Installation Wizard:

- 1 Activate the browser with the Home page.
- 2 .Click **Launch Avaya Installation Wizard**.
- 3 Follow the prompts, using Help on each page for more information.

Restore the translations

- 1 Connect the compact flash drive cord to one of the USB ports on the back of the media server.
- 2 Insert the compact flash disk with the translations into the bottom slot of the drive.
- 3 Under Data Backup/Restore, click **View/Restore Data**.
- 4 Select **Local PC Card**.
- 5 Click **View**.
- 6 Select the correct translation (xlr_) file (the most recent one is at the top) and both force options.
- 7 Click **Restore**.
- 8 Click **Restore History** and select desired file.
- 9 Click **Status** to view the Restore status. When the restoration is complete, the following message displays:

Backup: 0: Restore of <filepath/filename> is completed successfully.

On second S8710 Media Server

NOTE:

This media server becomes media server 2.



CAUTION:

The duplication cables must not be connected. If connected, disconnect.

Install Communication Manager

- 1 Repeat tasks [Power up the media server](#) on page 125 through [Configure the media server using AIW](#) on page 128 for media server 2 and return here.

Connect duplication cables

- 1 Connect the fiber optic and CAT5 duplication cables to both media servers.

Move Ethernet cables

Moving the CAT5 cables from the S8500 Media Server to the S8710 Media Servers transfers control to the S8710 Media Servers.

Connect new cables to standby media server

- 1 Connect the new GREEN CAT5 Ethernet cable for control network A (CNA) to port 1 (Eth0) on the *standby* S8710 Media Server.
- 2 If a dedicated control network, connect the new CAT5 Ethernet cable for the customer's network to the *standby* S8710 Media Server (Eth4) and verify connectivity.
- 3 Connect the new USB modem to the USB connector on the *standby* S8710 Media Server.

Move the cables



CAUTION:

The following steps cause an interruption of service; 2-5 minutes if moving only the cables, up to 30 minutes if moving the Ethernet switch and UPS.

- 1 Disconnect the control network A (CNA) CAT5 cable from the S8500 Media Server and connect it to the *active* S8710 Media Server (Eth0).

NOTE:

At this time, the active *S8710* Media Server is controlling call processing.

- 2 If a dedicated control network, connect the CAT5 cable connected to the customer's network to the *active* S8710 Media Server (Eth4) and verify connectivity.
- 3 Move the modem connection from the S8500 Media Server to the *active* S8710 Media Server. Do not use the serial modem connected to the RSA.

On the standby S8710 Media Server

Access the standby media server

- 1 Clear the ARP cache on the laptop if necessary. (See [Clear the ARP cache on the laptop](#) on page 122 and return here.)
- 2 If not already connected to the standby media server, connect to it.
- 3 Log in. (See [Access the media server](#) on page 123 and return here.)

Ping all the connections to the media server


- 1 Under Diagnostics, click **Ping**.
- 2 Select **Other server(s)**, **All IPSIs**, **UPS(s)**, **Ethernet switches** and click **Execute Ping**.

Release the standby media server

- 1 Under Server, click, **Release Server** to release the standby server from busyout mode.
- 2 Click **Status Summary** to verify that the standby server is no longer busied out.

Back up files on the media server

- 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
 ☐ Format PC Card

Encryption

☐ Encrypt backup using pass phrase

Start Backup **Help**

- 2 Select the data sets and the backup method.

Do not select **Save ACP translations prior to backup**.

- 3 Click **Start Backup** to begin the back up process.

Release alarm suppression (optional)

If you complete the migration well before the time set when you suppressed alarming, you may want to release alarm suppression manually rather than wait.

- 1 Click **Start > Run** to open the *Run* dialog box
- 2 Type **telnet 192.11.13.6** and press **Enter**.
- 3 Log in as **craft** or **dadmin**.
- 4 Type **almsuppress -n** and press **Enter** to release alarm suppression.
- 5 Log off.

Set the Product ID

NOTE:

It is different from the one on the S8500 Media Server.

- 1 Click **Start > Run** to open the *Run* dialog box.
- 2 Type **telnet 192.11.13.6** and press **Enter**.
- 3 Log in as **craft** or **dadmin**.
- 4 At the prompt, type **productid -p number** and press **Enter**. The variable *product_id* is the product ID you received from the customer or the ART tool.

Log off all administration applications

When you have completed all the administration, log off all the applications used.

Disconnect from the media server

Disconnect the laptop from the media server.

On the active S8710 Media Server

Access the active media server

- 1 Clear the ARP cache on the laptop if necessary. (See [Clear the ARP cache on the laptop](#) on page 122 and return here.)
- 2 Connect to the active media server.
- 3 Log in. (See [Access the media server](#) on page 134 and return here.)

Resolve alarms

- 1 Under Alarms and Notification, click **Current Alarms**.
- 2 Select the server alarms to be cleared and click **Clear**.
- 3 Resolve new alarms since the migration using SAT commands and the *Maintenance Commands for Avaya Communication Manager 2.1, Media Gateways and Servers* and *Maintenance Alarms for Avaya Communication Manager 2.1, Media Gateways and Servers* books.

Back up files on the media server

- 1 Under Data Backup/Restore, click **Backup Now**.
- 2 Select the data sets and the backup method.

Select **Save ACP translations prior to backup** to save the translations to the hard drive before saving it to the backup media or customer's network.
- 3 Click **Start Backup** to begin the back up process.

Release alarm suppression (optional)

- 1 Repeat task [Release alarm suppression \(optional\)](#) on page 132 on the active media server and return here.

Set the Product ID

- 1 Repeat task [Set the Product ID](#) on page 132 on the active media server. and return here

Log off all administration applications

When you have completed all the administration, log off all the applications used.

Disconnect from the media server

Disconnect the laptop from the media server.

Register the system

Follow the existing process and procedures to register the Avaya S8710 Media Server.

On the S8500 Media Server

Access the media server

- 1 Clear the ARP cache on the laptop if necessary. (See [Clear the ARP cache on the laptop](#) on page 122 and return here.)
- 2 Connect to the services port on the standby media server.
- 3 Log in and launch the Web browser. (See [Access the media server](#) on page 123 and return here.)

Shut down the media server



CAUTION:

Do not unplug a functioning server without stopping all processes first. Failure to do this corrupts the hard drive.

- 1 Under Server, click **Shutdown Server** then
 - deselect **Restart Server after Shutdown**.
 - select **Delayed shutdown**
 - select **Shut down even if this is the active server**.
- 2 Click **Shutdown**.



CAUTION:

Do not hold down the power button for more than a split second. Holding the button down too long causes the media server to reboot.

- 3 Press the power-control button on the front of the server. The internal fan shuts off.

Disconnect the cables

- 1 Disconnect the laptop from the services port.
- 2 Disconnect the power cord from the UPS.
- 3 Disconnect the power cord from the RSA.
- 4 Disconnect the modem from the RS-232 port on the RSA.
- 5 Disconnect the LAN connection (if used) from the Ethernet port on the RSA.
- 6 Disconnect and label the cable from the Ethernet port on the dual NIC (if used).

3 Migrating from an S8700 Media Server to an S8710 Media Server

These procedures explain how to migrate existing S8700 Media Servers on release 1.2 through 2.0 of Avaya Communication Manager to a S8710 Media Servers on release 2.1. If the media servers are on release 1.0/1.1, you must upgrade them to release 1.2 or 1.3 before the migration. In this migration, you reuse the system and translation files from the S8700 Media Servers. If on release 1.2 or 1.3, this migration requires a new license file. If on release 2.0, no new license file is required unless the customer purchases new features.

Because with this migration you are upgrading to Release 2.1 of Communication Manager, you must upgrade local survivable processors (LSPs), if they are being used, *before* the S8710 Media Server takes control.

Pre-Migration Setup

Same as for the S8700 except where noted.

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

- [S8710](#): If migrating from S8500 or S8700, verify that you have the:
 - external flash drive and formatted disk if backing up files to the flash disk.
 - IP addresses, subnet mask, and gateway for port 1 (Eth0) if backing up files to the customer's network.
 - appropriate login and password if backing up to and restoring files from the customer's network.
- [S8710](#): If migrating from an S8500 Media Server, verify that you have new license and Avaya authentication file.
- [S8710](#): If migrating from an S8700 Media Server with Release 1.x of Avaya Communication Manager, verify that you have new license and Avaya authentication files.

Day of migration

- **S8710:** Verify that the open, customer-supplied, EIA 310D (or equivalent) standard *4-post* 19-inch (48-centimeter) equipment rack is properly installed and solidly secured. Make sure it is installed close to the existing S8700 Media Server to reuse the UPSs and Avaya Ethernet switch(es).

If moving the UPSs and Avaya Ethernet switch(es) from the 2-post rack to the 4-post rack, make sure you have

- a crosspoint (Philips) screwdriver
 - rail kits (700230741) for a 4-post rack for the UPSs
 - cage nuts to attach the screws to the rack, if necessary.
 - and at least 2 people to lift the equipment.
- **S8710:** Verify that the 4-post 19-inch EIA 310D (48-centimeter) open equipment rack was grounded per *Approved Grounds* (555-245-772).

Basic Migration Steps

- Upgrade G350 or G700 Media Gateways and local survivable processors (LSPs) if being used.
- Install the Avaya S8710 Media Servers either
 - in a 19-inch, 4-post rack as described in the *Quick Start for Hardware Installation: Avaya S8700 or S8710 Media Server* (555-245-703).
 - on a pullout shelf attached to the existing 2-post rack.
- If release 1.2 or 1.3, install the pre-upgrade update (patch).
- Back up the system files from both S8700 Media Servers to the customer's network using the **Linux Migration (Backup/Restore)** link on the Maintenance Web Interface.
- If release 2.0, back up the security files from both S8700 Media Servers to the customer's network using the **Backup Now** link on the Maintenance Web Interface.
- Install the R2.1 software on the S8710 Media Servers.
- Restore the security files from the customer's network to both S8710 Media Servers using the **View/Restore Data** link.
- Restore the system files from the customer's network to both S8710 Media Servers using the **Linux Migration (Backup/Restore)** link.
- Connect the duplication cables after restoring files to the second media server.

NOTE:

If moving Ethernet switch(es) and UPSs to the 4-post rack, do it here before the cutover.

- Connect the control network Ethernet cables to the new S8710 Media Servers, standby media server first.
- Complete the post-migration administration.

Verify hardware

You can reuse some of the equipment and cables when migrating a S8700 Media Servers to S8710 Media Servers; see [Table 15, Reusable hardware](#), on page 137. But you need new equipment to complete the migration; see [Table 16, Required new hardware](#), on page 137.

Table 15: Reusable hardware

Comcode	Description	Quantity
408357002 408427409 700181928	Powerware 9125 uninterruptible power supply (UPS) with SNMP adapter installed (if Avaya-provided) – US & Canada – International – Japan	2
108873233 108563123 108644451	10/100BaseT Ethernet switch (if Avaya-provided) – Avaya Ethernet P133 switch – Avaya Ethernet P333 switch – Avaya Ethernet P334 switch	1 or more
700169121	External V.90 56K USB modem with cable (if used)	2
700170012 700178056 700178064	Green CAT5 Ethernet cables – 5-meter (16 feet) – 25-meter (82 feet) – 50-meter (164 feet)	4 2-68 2-68
700170004 700178072 700178122	Red CAT5 Ethernet cables (if duplicated control network) – 5-meter (16 feet) – 25-meter (82 feet) – 50-meter (164 feet)	4 2-68 2-68
700170053	Black CAT5 Ethernet crossover cable for laptop computer	1
407063478	Electrostatic discharge (ESD) wrist strap	1

Table 16: Required new hardware 1 of 2

Comcode	Description	Quantity
700326416	Avaya S8710 Media Server	2
700230741	4-post rail kits if moving UPSs to 4-post rack (Powerware code: 05146726-5501)	2
700290448	Compact 4-slot flash drive	2
700290430	Compact flash media	2
700287964	Avaya Communication Manager CD for Linux Servers	1

Table 16: Required new hardware 2 of 2

Comcode	Description	Quantity
700335797	Documents for Avaya Communication Manager, Media Gateways, and Servers CD (03-300151)	1
700169998	Blue CAT5 Ethernet crossover cable for duplication	1
	Yellow single-mode fiber optic cable with LC connectors	1
700290422	– 4.6 meters (15 feet)	
700326382	– 100 meters (328 feet)	

Upgrade G350 or G700 Media Gateways and LSPs (if being used)

NOTE:

If the customer has no G350 or G700 Media Gateways or no local survivable processors (LSPs), skip these tasks and go to [On the S8700 Media Server](#) on page 143.

If the configuration is using G350 or G700 Media Gateways and media modules and newer firmware exists for them, you must upgrade the firmware on them first. If the media server is the primary controller for a G700 Media Gateway equipped with a local survivable processor (LSP), you must upgrade the software on the LSPs (S8300) *before* you transfer control to the S8710 Media Servers. The correct order is:

- 1 Upgrade media gateway firmware to latest version.
- 2 Upgrade media modules firmware to latest version.
- 3 Upgrade S8300 Media Server software to latest version if using LSPs.
- 4 Transfer control to the S8710 Media Server.

Upgrade firmware on media gateways and media modules

For more detailed information on the firmware upgrade process, see *Installation and Upgrades for the Avaya G700 Media Gateway and Avaya S8300 Media Server* (555-234-100) or for more complete information.

Upgrade software on the LSPs

For more detailed information on the software upgrade process, see *Installation and Upgrades for the Avaya G700 Media Gateway and Avaya S8300 Media Server* (555-234-100).

NOTE:

Although the LSPs remain registered with the primary controller, the LSPs will not accept translations if they are running an older version of the software than the primary controller.

You may use the Upgrade Tool to upgrade the firmware on the G700 Media Gateway. For more detailed information on using the Upgrade Tool, see the job aid for Release 2.0 titled *Job Aid: Upgrade Tool and Worksheets* (555-245-757, Issue 1).

You may be able to use the Upgrade Tool to upgrade the software on the S8300 Media Server, depending on the media server version. For more information see *Installation and Upgrades for the Avaya G700 Media Gateway and Avaya S8300 Media Server* (555-234-100).



CAUTION:

You must stop call processing on the LSPs during the migration process. You can do this procedure on either the active or standby media server.

Task list for R1.2/1.3.x to R2.1

On the S8700 Media Servers:

- 1 [Clear the ARP cache on the laptop](#) on page 143
- 2 [Connect to the active media server](#) on page 144
- 3 [Access the media server](#) on page 145
- 4 [Clear alarms](#) on page 145
- 5 [Start a SAT session](#) on page 145
- 6 [Check link status](#) on page 145
- 7 [Record all busyouts](#) on page 146
- 8 [Check clock synchronization](#) on page 146
- 9 [Disable scheduled maintenance](#) on page 146
- 10 [Busyout MMI circuit packs \(duplicated control only\)](#) on page 146
- 11 [Check for translation corruption](#) on page 147
- 12 [Access active S8700 Media Server](#) on page 147
- 13 [Check software release \(pre-R2.0 only\)](#) on page 147
- 14 [Back up the system files](#) on page 147
- 15 [Back up the security files](#) on page 148
- 16 [Record the Product ID](#) on page 149
- 17 [Access the standby S8700 Media Server](#) on page 149
- 18 [Shut down the standby S8700 Media Server](#) on page 149

On first S8710 Media Server:

NOTE:

This media server becomes media server 1.



CAUTION:

The duplication cables must not be connected. If connected, disconnect.

- 1 [Power up the media server](#) on page 150
- 2 [Access the media server](#) on page 150
- 3 [Set up Telnet \(if necessary\)](#) on page 150
- 4 [Install Communication Manager](#) on page 151

- 5 [Access the media server](#) on page 152
- 6 [Check software version](#) on page 152
- 7 [Verify date and time](#) on page 153
- 8 [Copy files to the media server \(if any\)](#) on page 153
- 9 [Configure the network parameters](#) on page 154
- 10 [Verify connectivity to the network server](#) on page 155
- 11 [Restore the security files](#) on page 156
- 12 [Restore the Linux migration backup files](#) on page 156
- 13 [Install software update \(if any\)](#) on page 157
- 14 [Verify software update installation](#) on page 158
- 15 [Verify media server configuration](#) on page 158

On second S8710 Media Server:

NOTE:

This media server becomes media server 2.



CAUTION:

The duplication cables must not be connected. If connected, disconnect.

- 1 [Install Communication Manager and restore files](#) on page 159
- 2 [Connect duplication cables](#) on page 159
- 3 [Verify date and time](#) on page 159
- 4 [Install software update, if any](#) on page 159

Move the cables from the S8700 Media Servers to the S8710 Media Servers:



CAUTION:

The following task causes an interruption of service; 2-5 minutes if moving only the cables, up to 30 minutes if moving the Ethernet switch(es) and UPSs.

- 1 [Move the cables](#) on page 159

NOTE:

At this time, the active S8710 Media Server is controlling call processing.

On the standby S8710 Media Server:

- 1 [Access the standby media server](#) on page 160
- 2 [Ping all the connections to the media server](#) on page 160
- 3 [Release the standby media server](#) on page 160
- 4 [Back up files on the media server](#) on page 160
- 5 [Release alarm suppression \(optional\)](#) on page 161
- 6 [Set the Product ID](#) on page 161

- 7 [Log off all administration applications](#) on page 161
- 8 [Disconnect from the media server](#) on page 161

On the active S8710 Media Server:

- 1 [Access the active media server](#) on page 161
- 2 [Resolve alarms](#) on page 162
- 3 [Back up files on the media server](#) on page 162
- 4 [Release alarm suppression \(optional\)](#) on page 162
- 5 [Set the Product ID](#) on page 162
- 6 [Log off all administration applications](#) on page 162
- 7 [Disconnect from the media server](#) on page 162
- 8 [Register the system](#) on page 162

On the active S8700 Media Server:

- 1 [Access the media server](#) on page 163
- 2 [Shut down the media server](#) on page 163
- 3 [Disconnect the cables](#) on page 163

Task list for R2.0 to R2.1

On the S8700 Media Servers:

- 1 [Clear the ARP cache on the laptop](#) on page 143
- 2 [Connect to the active media server](#) on page 144
- 3 [Access the media server](#) on page 145
- 4 [Clear alarms](#) on page 145
- 5 [Start a SAT session](#) on page 145
- 6 [Check link status](#) on page 145
- 7 [Record all busyouts](#) on page 146
- 8 [Check clock synchronization](#) on page 146
- 9 [Disable scheduled maintenance](#) on page 146
- 10 [Busyout MMI circuit packs \(duplicated control only\)](#) on page 146
- 11 [Check for translation corruption](#) on page 147
- 12 [Access active S8700 Media Server](#) on page 147
- 13 [Check software release \(pre-R2.0 only\)](#) on page 147
- 14 [Back up the system files](#) on page 147
- 15 [Back up the security files](#) on page 148
- 16 [Record the Product ID](#) on page 149
- 17 [Access the standby S8700 Media Server](#) on page 149
- 18 [Shut down the standby S8700 Media Server](#) on page 149

On first S8710 Media Server:

NOTE:

This media server becomes media server 1.



CAUTION:

The duplication cables must not be connected. If connected, disconnect.

- 1 [Power up the media server](#) on page 150
- 2 [Access the media server](#) on page 150
- 3 [Set up Telnet \(if necessary\)](#) on page 150
- 4 [Install Communication Manager](#) on page 151
- 5 [Access the media server](#) on page 152
- 6 [Check software version](#) on page 152
- 7 [Verify date and time](#) on page 153
- 8 [Copy files to the media server \(if any\)](#) on page 153
- 9 [Configure the network parameters](#) on page 154
- 10 [Verify connectivity to the network server](#) on page 155
- 11 [Restore the security files](#) on page 156
- 12 [Restore the Linux migration backup files](#) on page 156
- 13 [Install software update \(if any\)](#) on page 157
- 14 [Verify software update installation](#) on page 158
- 15 [Verify media server configuration](#) on page 158

On second S8710 Media Server:

NOTE:

This media server becomes media server 2.



CAUTION:

The duplication cables must not be connected. If connected, disconnect.

- 1 [Install Communication Manager and restore files](#) on page 159
- 2 [Connect duplication cables](#) on page 159
- 3 [Verify date and time](#) on page 159
- 4 [Install software update, if any](#) on page 159

Move the cables from the S8700 Media Servers to the S8710 Media Servers:



CAUTION:

The following task causes an interruption of service; 2-5 minutes if moving only the cables, up to 30 minutes if moving the Ethernet switch(es) and UPSs.

- 1 [Move the cables](#) on page 159

NOTE:

At this time, the active *S8710* Media Server is controlling call processing.

On the standby S8710 Media Server:

- 1 [Access the standby media server](#) on page 160
- 2 [Ping all the connections to the media server](#) on page 160
- 3 [Release the standby media server](#) on page 160
- 4 [Back up files on the media server](#) on page 160
- 5 [Release alarm suppression \(optional\)](#) on page 161
- 6 [Set the Product ID](#) on page 161
- 7 [Log off all administration applications](#) on page 161
- 8 [Disconnect from the media server](#) on page 161

On the active S8710 Media Server:

- 1 [Access the active media server](#) on page 161
- 2 [Resolve alarms](#) on page 162
- 3 [Back up files on the media server](#) on page 162
- 4 [Release alarm suppression \(optional\)](#) on page 162
- 5 [Set the Product ID](#) on page 162
- 6 [Log off all administration applications](#) on page 162
- 7 [Disconnect from the media server](#) on page 162
- 8 [Register the system](#) on page 162

On the active S8700 Media Server:

- 1 [Access the media server](#) on page 163
- 2 [Shut down the media server](#) on page 163
- 3 [Disconnect the cables](#) on page 163

On the S8700 Media Server

Clear the ARP cache on the laptop

NOTE:

Depending on your laptop computer's operating system (generally Windows 2000), you may need to clear the Address Resolution Protocol (ARP) cache before entering a new IP address. If you enter an IP address, and your computer cannot connect, then you may need to clear the cache.

- 1 On your laptop computer, click **Start > Run** to open the *Run* dialog box.

3 Migrating from an S8700 Media Server to an S8710 Media Server

On the S8700 Media Server

- 2 Type **command** and press **Enter** to open a MS-DOS Command Line window.
- 3 Type **arp -d 192.11.13.6** and press **Enter** to clear the Address Resolution Protocol (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 appear in the ARP cache.

Connect to the active media server

- 1 Connect the laptop to the services port (2) on the back of the *active* media server using a crossconnect CAT5 cable. See [Figure 23, Services laptop computer connected directly to the S8700 Media Server](#), on page 144.

Figure 23: Services laptop computer connected directly to the S8700 Media Server

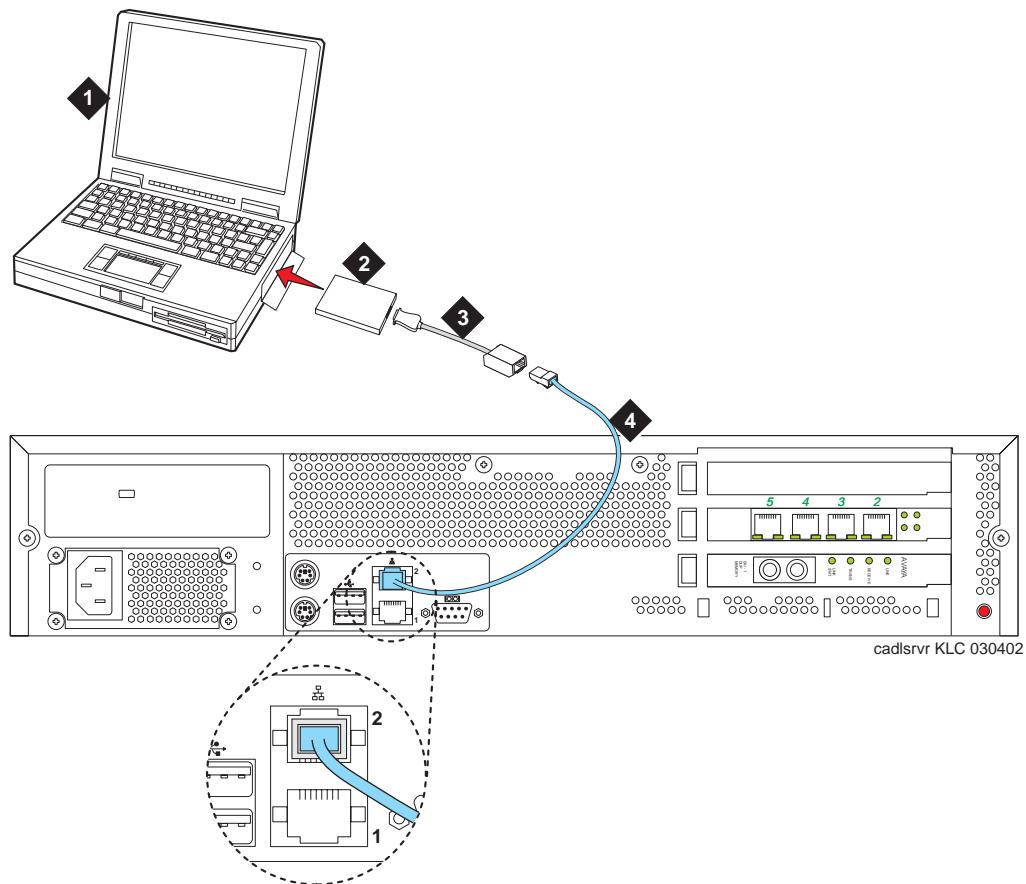


Figure notes

- | | |
|--------------------------------|------------------------------------|
| 1 Services laptop | 3 NIC adapter cable (if necessary) |
| 2 Network Interface Card (NIC) | 4 Black CAT5 crossconnect cable |

Access the media server

- 1 Launch the Web browser.
- 2 Type **192.11.13.6** in the **Address** field and press **Enter** to open the logon page.
- 3 Log on as **craft** or **dadmin** and suppress alarm origination.
- 4 Click **Launch Maintenance Web Interface** to get to the Main Menu.

Clear alarms

- 1 If Release 1.x, under Alarms and Notification, click **View Current Alarms**.

If Release 2.0, under Alarms, click **Current Alarms**.
- 2 Select the server alarms to be cleared and click **Clear**.
- 3 Resolve any major alarms using SAT commands and a terminal emulation application, such as Native Configuration Manager or MS HyperTerminal.

NOTE:

Tasks [Start a SAT session](#) on page 145 through [Check for translation corruption](#) on page 147 are SAT commands and can only be done on the *active* media server.

Start a SAT session

- 1 Open a terminal emulation application, such as Native Configuration Manager or MS HyperTerminal.
- 2 Type **192.11.13.6 5023** and press **Enter**.
- 3 Log on as **craft** or **dadmin** and suppress alarm origination.

Check link status

NOTE:

Because some links may be down by choice, make note of them before the upgrade.

- 1 Type **display communication-interface links** and press **Enter**.
- 2 Note all administered links.
- 3 Type **status link *number*** and press **Enter** for each administered link.
Check the following fields for the values listed:
 - **Link Status** = connected
 - **Service State** = in service
- 4 Type **list signaling group** and press **Enter**.
- 5 Note the signaling groups listed by number.
- 6 For each of the signaling groups listed, type **status signaling group *number*** and press **Enter**.
- 7 Under the **Group State** field, make note of any links that are out of service.

Record 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 busied-out state after the upgrade.

Check clock synchronization

- 1 Type **status sync** and press **Enter** to verify that the clock synchronization is good.
- 2 Make sure the **Switching Capabilities** field shows **enabled**.

NOTE:

Because of a change in Release 1.3 of the Avaya Communication Manager, you do not need to disable Terminal Translation Initialization (TTI) before an upgrade or migration or enable it afterwards.

Disable scheduled maintenance

To prevent scheduled daily maintenance from interfering with the upgrade:

- 1 Type **change system-parameters maintenance** and press **Enter**.
- 2 If scheduled maintenance is in progress, set the **Stop Time** field to 1 minute after the current time.

or

If scheduled maintenance is not in progress, set the **Start Time** field to a time after the upgrade will be completed.

For example, if you start the upgrade at 8:00 P.M. and the upgrade takes 90 minutes, set the **Start Time** field to 21:30.

Busyout MMI circuit packs (duplicated control only)



CAUTION:

Multimedia-to-voice station calls are *not* preserved on an upgrade. Failure to busy-out the TN787 Multimedia Interface (MMI) circuit packs results in unusable TN787 and TN787 Multimedia Voice Conditioner ports.

- 1 Type **display system-parameters customer-options** and press **Enter**. On screen 2 or 3 under the Multimedia Call Handling (MMCH) options, check the **Basic** and **Enhanced** fields.
- 2 If either the **Basic** or **Enhanced** field is **y**, type **list configuration all** and press **Enter** to locate all MMI (TN787) circuit packs.
- 3 If there are MMI circuit packs, type **busyout board UUCSS** and press **Enter** for each MMI circuit pack. The variable **UUCSS** is the slot location (*UU* = cabinet, *C* = carrier, *SS* = slot).

Check for translation corruption

- 1 Type **newterm** and press **Enter**.
- 2 If you do not get a login prompt, but instead see the following message
Warning: Translation corruption detected . . .
then follow the normal escalation procedure for translation corruption before continuing the upgrade.

Access active S8700 Media Server

- 1 Clear the ARP cache on the laptop if necessary. See [Clear the ARP cache on the laptop](#) on page 143 and return here.
- 2 If not already connected to media server 1, connect to it.
- 3 Log in. See [Access the media server](#) on page 145 and return here.

Check software release (pre-R2.0 only)

- 1 Under Server Upgrades, click **Software Version** to see what software release is on the media server.

Back up the system files

NOTE:

Because the S8710 Media Server does not have a PCMCIA flash drive, you must back up the files to the customer's network so they can be restored to the S8710 Media Server later in the process.

- 1 Under Server Upgrades, click **Linux Migration (Backup/Restore)**.
- 2 Select **Initiate new backup or restore** and click **Submit**.
- 3 Under Backup Method, select FTP; fill in the **User Name**, **Password**, **Host Name (must use host IP address)**, and **Directory** fields for where you are backing up the files.
- 4 Click **Submit**.
- 5 Click **Status** to view the Backup History.
- 6 Check the box next to the file being backed up and click **Check Status**. When the backup is complete, the following message displays:

Backup is finished



CAUTION:

Check the text to verify that there are no error messages.

Back up the security files

If installing new license and Avaya authentication files, skip this step and go to [Access the standby S8700 Media Server](#) on page 149. If migrating from a media server with Release 1.x of Avaya Communication Manager or if the customer is getting newly purchased features, you must install a new license file.

NOTE:

Because the S8710 Media Server does not have a PCMCIA flash drive, you must back up the files to the customer's network so they can be restored to the S8710 Media Server later in the process.

- 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

Start Backup **Help**

- 2 Select **Security Files** and **FTP** as the backup method.
- 3 Fill in the **User Name**, **Password**, **Host Name** (*must use host IP address*), and **Directory** fields for where you are backing up the files.
- 4 Click **Start Backup** to begin the backup process.
- 5 Click **Backup History** to view the progress of the backup process.

Record the Product ID

- 1 Click **Start** > **Run** to open the *Run* dialog box.
- 2 Type **telnet 192.11.13.6** and press **Enter**.
- 3 Log in as **craft** or **dadmin**.
- 4 At the prompt, type **productid** and press **Enter**.
Record the product ID for future use.

Access the standby S8700 Media Server

- 1 Clear the ARP cache on the laptop, if necessary. See [Clear the ARP cache on the laptop](#) on page 143 and return here.
- 2 Disconnect the laptop from media server 1 and connect it to the services port (2) on media server 2
- 3 Log in. See [Access the media server](#) on page 145 and return here.
- 4 Repeat [Back up the system files](#) on page 147 and [Back up the security files](#) on page 148 for media server 2.

Shut down the standby S8700 Media Server



CAUTION:

Make sure you are connected to the standby media server.

- 1 Under **Server**, click **Shutdown Server**, then **Shutdown** then
 - deselect **Restart Server after Shutdown**.
 - select **Delayed shutdown**
 - select **Shut down even if this is the active server**.
- 2 Click **Shutdown**.
- 3 Disconnect the laptop from the services port.
- 4 Disconnect the power cord from the UPS.

On first S8710 Media Server

NOTE:

This media server becomes media server 1.



CAUTION:

The duplication cables must not be connected. If connected, disconnect.

Power up the media server

- 1 Connect the AC power cord to media server 1 and to UPS 1 to power it up.
- 2 Push the power button.

Access the media server

NOTE:

You must place the CD in the drive immediately.

To access the media server:

- 1 Clear the ARP cache from the laptop if necessary. (See [Clear the ARP cache on the laptop](#) on page 143 and return here.)
- 2 Connect the laptop to the services port (2) on the back of the media server using a crossconnect cable.
- 3 Place the CD with Communication Manager in the CD-ROM drive on the media server.
- 4 Wait at least 3 minutes after powering up before starting a Telnet session to access the information on the CD.

Set up Telnet (if necessary)

NOTE:

Use a telnet session to access the information on the CD.

The Microsoft Telnet application may be set to send a carriage return (CR) and line feed (LF) each time you press Enter. The installation program sees this as 2 key presses. If running Windows 2000/XP, you need to correct this before you copy the Remaster Program to the hard drive.

- 1 Click **Start > Run** to open the **Run** dialog box.
- 2 Type **telnet** and press **Enter** to open a Microsoft Telnet session.
- 3 Type **display** and press **Enter** to see the current settings. If message says

Sending only CR

then close the dialog box.

If message says

Sending both CR & LF

then continue with step 4.

- 4 Type **unset crlf** and press **Enter**.
- 5 Type **display** and press **Enter** to verify that the settings changed. The message says

Sending only CR

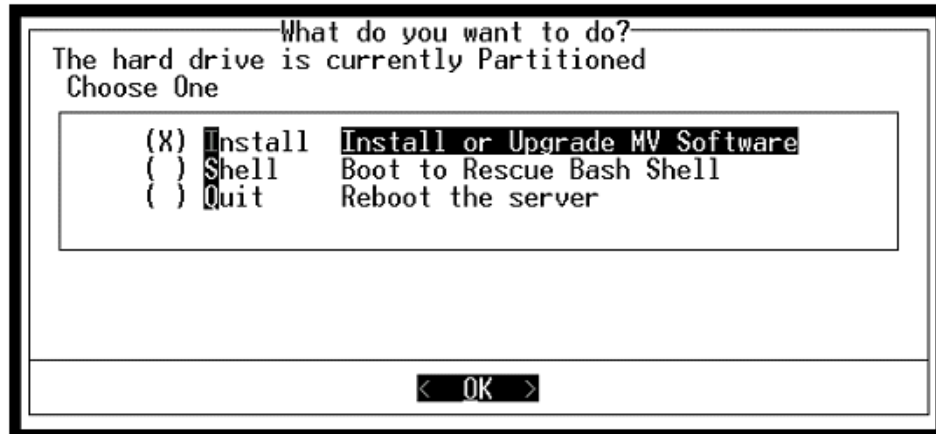
- 6 Close the dialog box.

Install Communication Manager

NOTE:

Use a telnet session to access the information on the CD.

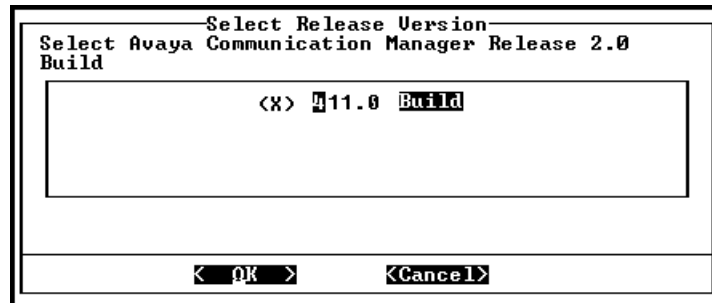
- 1 Type **telnet 192.11.13.6** and press **Enter** to view the first screen.



NOTE:

To navigate on these screens, use the arrow keys to move to an option, then press the space bar to select the option. Press **Enter** to submit the screen.

- 2 Select **Install**, make sure OK is highlighted, and press **Enter**.
- 3 Select <Yes> and press **Enter**.



- 4 Select <OK> and press **Enter** to partition the hard drive and reformat the partitions

3 Migrating from an S8700 Media Server to an S8710 Media Server

On first S8710 Media Server

Once the drive is properly configured, the program begins the installation process and reports the progress.

```
21:26:38 | copying iputils-20020124-8.i386.rpm
21:26:38 | copying libattr-2.0.8-3.i386.rpm
21:26:38 | copying libcap-1.10-12.i386.rpm
21:26:39 | copying libelf-0.8.2-2.i386.rpm
21:26:39 | copying libgcc-3.2-7.i386.rpm
21:26:39 | copying libjpeg-6b-21.i386.rpm
21:26:39 | copying libtermcap-2.0.8-31.i386.rpm
21:26:39 | copying libtool-libs-1.4.2-12.i386.rpm
21:26:39 | copying losetup-2.11r-10.i386.rpm
21:26:39 | copying lrzsz-0.12.20-14.i386.rpm
21:26:39 | copying lsof-4.63-2.i386.rpm
21:26:39 | copying ltrace-0.3.10-12.i386.rpm
21:26:39 | copying mailx-8.1.1-26.i386.rpm
21:26:39 | copying minigetty-1.00-3.i386.rpm
21:26:39 | copying mktemp-1.5-16.i386.rpm
21:26:39 | copying ncompress-4.2.4-31.i386.rpm
21:26:39 | copying net-tools-1.60-7.i386.rpm
21:26:40 | copying patch-2.5.4-14.i386.rpm
21:26:40 | copying pcre-3.9-5.i386.rpm
21:26:40 | copying popd-1.8-0.69AV1.i386.rpm
21:26:40 | copying rdate-1.2-5.i386.rpm
21:26:40 | copying rusers-0.17-21.i386.rpm
21:26:40 | copying setserial-2.17-9.i386.rpm
```

These processes can take up to 20 minutes. When the media server is ready to reboot, the CD-ROM drive drawer opens. You must remove the CD from the drive at this time.

The reboot may take up to 3 minutes. The telnet session drops automatically.

Access the media server

- 1 Click **Start > Run** to open the **Run** dialog box.
- 2 Type **telnet 192.11.13.6** and press **Enter** to see if you get a login prompt. Repeat until you get the login prompt.
- 3 Exit the Telnet session.
- 4 Log onto the Maintenance Web Interface. See [Access the media server](#) on page 145 and return here.

Check software version

- 1 Under **Server**, click **Software Version**.
- 2 Verify the software version.

Verify date and time

- 1 Under Server, click **Server Date/Time**.
- 2 Verify that the date, time, and time zone are correct. Make changes as necessary.
- 3 Click **Submit** only if you made changes.

Copy files to the media server (if any)

You must copy the required files from the laptop to the media server. This includes the software update file and firmware for programmable circuit packs. Do not copy the backup file using this method.

NOTE:

The latest firmware for the programmable circuit packs and media modules may be on the CD.

- 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)

☐ Install this file on the local server
**If the above box is checked, you may specify only one file for downloading.

- 2 Select **File(s) to download from the machine I'm using to connect to the server**.
- 3 Click **Browse** next to the top field to open the File Upload window on your computer. Find the files that you need to copy to the media server.
- 4 Click **Download** to copy the file to the media server.

Configure the network parameters

NOTE:

You must readminister the Ethernet port connecting to the customer's network. You must have the host name, IP address, subnet mask and default gateway for the two media servers and the active server as well as the IP address for the Ethernet port connecting to the customer's network.

- 1 Under Server Configuration, click **Configure Server** to open the first page (Select server type) of the Configure Server process.

Configure Server

Steps

- Review Notices**
- Set Identities**
- Configure Interfaces**
- Configure LSP**
- Configure Switches**
- Set DNS/DHCP**
- Set Static Routes**
- Configure Time Server**
- Set Modem Interface**
- Update System**

Select server type:

The server type for this server is not set. Select which type of server this is:

- ☐ Avaya S8700 Series Media Server for Multi-Connect configuration
- ☐ Avaya S8700 Series Media Server for IP Connect configuration

Click **CONTINUE** to proceed.

Continue **Help**

- 2 Select the appropriate server type and click **Continue**.
- 3 Click **Continue** through the Review Notices to get to the *Specify how you want to use this wizard* page.
- 4 Select **Configure individual services** and the correct server number and click **Continue**.
- 5 Select **Configure Interfaces** from the menu on the left.
- 6 Fill in the correct IP addresses, Gateway, and Subnet mask (or use the default addresses) for the Ethernet port and select AUTOSENSE for the speed.
 - <_SysID>S8710 IP: Eth 0
 - <_SysID>S8710 MC: Eth 4Click **Change** to update and reboot the media server. When the screen displays

Successfully configured ethernet interfaces.

the Ethernet ports are configured.
- 7 Click **Close Window** to close the Configure Server wizard.

Verify connectivity to the network server

To verify that the Ethernet port is working, ping from the media server the network server where the backup files are stored.

NOTE:

You may need to restart your browser before doing the next steps.

- 1 Move the Ethernet cable connected to the customer's network from the busied-out standby S8700 Media Server to the S8710 Media Server (IP: Eth0; MC: Eth4). See [Figure 24, Port connections on the back of the S8710 Media Server](#), on page 155.

Figure 24: Port connections on the back of the S8710 Media Server

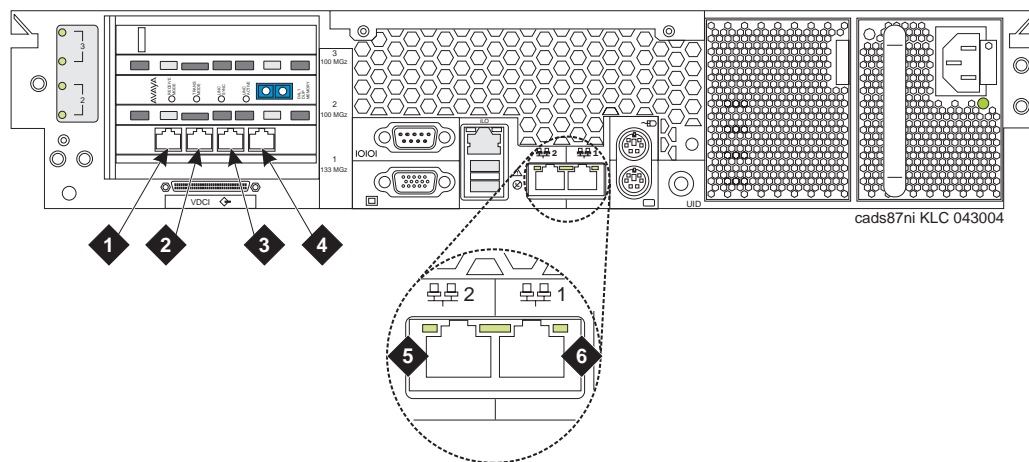


Figure notes

- | | |
|--------------|--------------|
| 1 Ethernet 2 | 4 Not used |
| 2 Ethernet 3 | 5 Ethernet 1 |
| 3 Ethernet 4 | 6 Ethernet 0 |

- 2 Under Diagnostics, click **Ping**.
- 3 Select Host Name or IP Address and type the IP address of the server where the system files are stored
- 4 Click **Execute Ping**.
If you can successfully ping the server, then you can restore the backed up Security Files and Linux migration files.

Restore the security files



CAUTION:

You must restore S8700 Media Server 1 files to S8710 Media Server 1 and S8700 Media Server 2 files to S8710 Media Server 2.

- 1 Under Data Backup/Restore, click **View/Restore Data**.
- 2 Select FTP; fill in the **User Name**, **Password**, **Host Name** (*must use host IP address*), and **Directory** fields for the location of the Security files.
- 3 Click **View**.
- 4 Select the correct security (security_) file (the most recent one is at the top) and both force options.
- 5 Click **Restore**.
If the backup version is a mismatch, click **Force Restore**.
- 6 Click **Restore History** and select desired file.
- 7 Click **Status** to view the Restore status. When the restoration is complete, the following message displays:

```
Backup: 0: Restore of <filepath/filename> is completed successfully.
```

NOTE:

The passwords for the S8710 Media Server are now the same as those on the S8700 Media Server. You can use customer logins.

Restore the Linux migration backup files



CAUTION:

You must restore S8700 Media Server 1 files to S8710 Media Server 1 and S8700 Media Server 2 files to S8710 Media Server 2.



CAUTION:

Restore must be run only once. Running restore more than once may corrupt the system data. If a restore appears to have not completed, check the Backup History and Backup Logs on the Maintenance Web Interface and check the system log through the Linux command line interface. If all of these sources indicate that a restore has not completed, you can safely rerun the restore.

- 1 Under Server Upgrades, click **Linux Migration (Backup/Restore)**.
- 2 Select **Initiate new backup or restore** and click **Submit**
- 3 Under Restore Method, select **FTP**; fill in the **User Name**, **Password**, **Host Name** (*must use host IP address*), and **Directory** fields for the location of the backup files.
- 4 Click **Submit**.

- 5 Select the backup set to restore and both force options and click **Restore**.
If the backup version is a mismatch, click **Force Restore**.
- 6 Click **Status** to view the restore progress.
- 7 Select the backup set and click **Check Status** to view the restore progress.
- 8 The restoration is complete when the following message displays:
Backup: 0: Restore of <filepath/filename> is completed successfully.

NOTE:

If on media server 2, return to [Connect duplication cables](#) on page 159.

Install software update (if any)

NOTE:

Skip this procedure if there is no Communication Manager software update file to install.

This software update may or may not be call preserving.

Use a telnet session to install the software update file.

- 1 Click **Start > Run** to open the **Run** dialog box.
- 2 Type **telnet 192.11.13.6** and press **Enter**.
- 3 Log in as **craft**.
- 4 Type **cd /var/home/ftp/pub** and press **Enter** to access the pub directory.
- 5 At the prompt, type **ls -ltr** and press **Enter** to list files in the pub directory.
The media server displays a list of files in the FTP directory. Verify that the directory contains the Communication Manager .tar.gz file you have uploaded, if any.
- 6 Type **sudo update_unpack update.tar.gz**, where **update** is the release or issue number of the latest software update file. (For example, **00.0.411.0-xxxx.tar.gz**). Press **Enter**.
- 7 Type **update_show** and press **Enter** to list Communication Manager files to verify the new software update file was unpacked.
- 8 Type **sudo update_activate update**, where **update** is the release or issue number of the latest software update file. (For example, **00.0.411.0-xxxx**. Do *not* use the .tar.gz extension at the end of the file name). Press **Enter**.

The media server may reboot (reset system 4). If it reboots, it also may display the message

```
/opt/ecs/sbin/drestart 2 4 command failed.
```

Ignore this message. You must wait until the restart/reset completes before entering additional commands.

The media server displays a message that the software update (patch) was applied.

- 9 Type **update_show** again and press **Enter** to list Communication Manager files to verify the new software update file was activated.

Verify software update installation

- 1 Under Server, click **Software Version**.
- 2 Verify that the new software update is listed.

Verify media server configuration

- 1 Under Server Configuration, click **Configure Server** to start the configure server process to open the first page of the Configure Server process.
- 2 Click **Continue** through the Review Notices to get to the *Specify how you want to use this wizard* page.
- 3 Select **Configure all services using the wizard**.
- 4 Click **Continue** through all the screens, checking for new screens and new fields on existing screens as mentioned in the Software Release Letter.

NOTE:

You must click through all the screens whether there are changes or not.

NOTE:

You may need to reset the port speeds for the Ethernet interfaces.

NOTE:

You do not need to fill in the static routes for Release 2.0 or later.

- 5 When you complete all the new fields, if necessary, click **Continue** on the Update System screen. The Update System screen displays each configuration task as it completes. When done, the screen displays the line `All configuration information was entered`.
- 6 Click **Close Window** to close the Configure Server wizard.
- 7 Disconnect from the media server.

On second S8710 Media Server

NOTE:

This media server becomes media server 2.



CAUTION:

The duplication cables must not be connected. If connected, disconnect.

Install Communication Manager and restore files

- 1 Repeat tasks [Power up the media server](#) on page 150 through [Restore the Linux migration backup files](#) on page 156 for media server 2 and return here.



CAUTION:

Make sure you restore the files from media server 2.

Connect duplication cables

- 1 Connect the fiber optic and CAT5 duplication cables to both media servers.

Verify date and time

- 1 Under Server, click **Server Date/Time**.
- 2 Verify that the date, time, and time zone are correct. Make changes as necessary.
Click **Submit** only if you made changes.

Install software update, if any

- 1 Repeat tasks [Install software update \(if any\)](#) on page 157 through [Verify media server configuration](#) on page 158 for media server 2 and return here.

Move Ethernet cables

Moving the CAT5 cables from the S8700 Media Servers to the S8710 Media Servers transfers control to the S8710 Media Servers.

Move the cables

- 1 If not already connected, disconnect the control network A (CNA) CAT5 cable (GREEN) from the powered down (standby) S8700 Media Server and connect it to the *standby* S8710 Media Server (Eth0). If IP Connect, this is also the connection to the customer's network.
- 2 From the SAT, type **set ips a** and press **Enter** to force the tone clock to reside on A.



CAUTION:

Before doing step 3, verify visually that the IPSIs connected to control network B (CNB) are not active. If they are, move the cable connected to CNA (GREEN).

If duplicated control network, disconnect the control network B (CNB) CAT5 cable from the *active* S8700 Media Server and connect it to the *active* S8710 Media Server (Eth3).

NOTE:

At this time, the active S8700 Media Server is still controlling call processing.



CAUTION:

The following steps cause an interruption of service; 2-5 minutes if moving only the cables, up to 30 minutes if moving the Ethernet switch(es) and UPSs.

- 3** Disconnect the CAT5 cable connected to the customer's LAN from the *active* S8700 Media Server and connect it to the *active* S8710 Media Server (IP: Eth0; MC: Eth4).
- 4** Disconnect the control network A (CNA) CAT5 cable from the *active* S8700 Media Server and connect it to the *active* S8710 Media Server (Eth0).
- 5** If duplicated control network, disconnect the control network B (CNB) CAT5 cable from the *standby* S8700 Media Server and connect it to the *standby* S8710 Media Server (Eth3).

NOTE:

At this time, the active S8710 Media Server is controlling call processing.

- 6** Move the modem connections from the S8700 Media Servers to the S8710 Media Servers.

On the standby S8710 Media Server

Access the standby media server

- 1** Clear the ARP cache on the laptop if necessary. (See [Clear the ARP cache on the laptop](#) on page 143 and return here.)
- 2** If not already connected to the standby media server, connect to it.
- 3** Log in. (See [Access the media server](#) on page 145 and return here.)

Ping all the connections to the media server

- 1** Under Diagnostics, click **Ping**.
- 2** Select **Other server(s), All IPSIs, UPS(s), Ethernet switches** and click **Execute Ping**.

Release the standby media server

- 1** Under Server, click **Release Server** to release the standby server from busyout mode.
- 2** Click **Status Summary** to verify that the standby server is no longer busied out.

Back up files on the media server

- 1** Under Data Backup/Restore, click **Backup Now**.
- 2** Select the data sets and the backup method.

Select **Save ACP translations prior to backup** to save the translations to the hard drive before saving it to the backup media or customer's network.

- 3** Click **Start Backup** to begin the back up process.

Release alarm suppression (optional)

If you complete the migration well before the time set when you suppressed alarming, you may want to release alarm suppression manually rather than wait.

- 1 Click **Start > Run** to open the *Run* dialog box
- 2 Type **telnet 192.11.13.6** and press **Enter**.
- 3 Log in as **craft** or **dadmin**.
- 4 Type **almsuppress -n** and press **Enter** to release alarm suppression.
- 5 Log off.

Set the Product ID

NOTE:

It is different from the one on the S8700 Media Server.

- 1 Click **Start > Run** to open the *Run* dialog box.
- 2 Type **telnet 192.11.13.6** and press **Enter**.
- 3 Log in as **craft** or **dadmin**.
- 4 At the prompt type **productid -p number** and press **Enter**. The variable *product_id* is the product ID you received from the customer or the ART tool.

Log off all administration applications

When you have completed all the administration, log off all the applications used.

Disconnect from the media server

Disconnect the laptop from the media server.

On the active S8710 Media Server

Access the active media server

- 1 Clear the ARP cache on the laptop if necessary. (See [Clear the ARP cache on the laptop](#) on page 143 and return here.)
- 2 Connect to the active media server.
- 3 Log in. (See [Access the media server](#) on page 145.)

Resolve alarms

- 1 Under Alarms and Notification, click **Current Alarms**.
- 2 Select the server alarms to be cleared and click **Clear**.
- 3 Resolve new alarms since the migration using SAT commands and the *Maintenance Commands for Avaya Communication Manager 2.1, Media Gateways and Servers* and *Maintenance Alarms for Avaya Communication Manager 2.1, Media Gateways and Servers* books.

Back up files on the media server

- 1 Under Data Backup/Restore, click **Backup Now**.
- 2 Select the data sets and the backup method.

Select **Save ACP translations prior to backup** to save the translations to the hard drive before saving it to the backup media or customer's network.
- 3 Click **Start Backup** to begin the back up process.

Release alarm suppression (optional)

- 1 Repeat task [Release alarm suppression \(optional\)](#) on page 161 on the active media server and return here.

Set the Product ID

- 1 Repeat task [Set the Product ID](#) on page 162 on the active media server and return here.

Log off all administration applications

When you have completed all the administration, log off all the applications used.

Disconnect from the media server

Disconnect the laptop from the media server.

Register the system

Follow the existing process and procedures to register the Avaya S8710 Media Server.

On the active S8700 Media Server

Access the media server

- 1 Clear the ARP cache on the laptop if necessary. (See [Clear the ARP cache on the laptop](#) on page 143 and return here.)
- 2 Connect to the services port on the media server.
- 3 Log in and launch the Web browser. (See [Access the media server](#) on page 145.)

Shut down the media server

- 1 Under Server, click **Shutdown Server** then **Shutdown** then
 - deselect **Restart Server after Shutdown**.
 - select **Delayed shutdown**
 - select **Shut down even if this is the active server**.
- 2 Click **Shutdown**.

Disconnect the cables

- 1 Disconnect the laptop from the services port.
- 2 Disconnect the power cord from the UPS.

3 Migrating from an S8700 Media Server to an S8710 Media Server

On the active S8700 Media Server

4 Migrating a dedicated control network to a nondedicated control network

You can migrate a previously dedicated (private) control network to one that is nondedicated (through the customer's network). To do this, you must be on Release 2.0 or later of Communication Manager. You also must have a filled-out Electronic Preinstallation Worksheet (EPW) provided by the project manager or customer. The worksheet has the customer-provided IP addresses needed to reconfigure the media server.

For the actual process of migrating from a nondedicated control network to a dedicated one, see the white paper titled *Implementation of Control Network on Customer LAN: S8700 Multi-Connect System*.

Upgrading a TN2312AP to a TN2312BP IP Server Interface circuit pack

There may be an occasion when customers may want to upgrade their TN2312AP Internet Protocol Server Interface (IPSI) circuit pack to a TN2312BP. For an S8700 or S8710 IP-Connect configuration, the TN2312BP offers new functionality, including emergency transfer and CPE alarming.

The TN2312BP also is required if the customer wants to move from duplex reliability to high reliability in an IP Connect configuration. But this also requires that the customer use G650 Media Gateways.

You do not need to change any of the IPSI translations, assuming the functionality stays the same. However, there is a new alarming feature that needs to be administered.

The TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack is a hot swappable item. You do not need to power down the media gateway to replace it.

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 In the **CPE Alarm Activation Level** field, select **none** (default), **warning**, **minor**, or **major**, depending on the level the customer wants.

Replacing the circuit pack



CAUTION:

When adding or replacing any hardware and associated cables and adapters, be sure to ground yourself against electrostatic discharge (ESD) by wearing a grounded wrist strap.

NOTE:

To properly seat a circuit pack, push firmly on the front of the faceplate until the latch reaches the bottom rail of the carrier. Then close the latch until it is fully engaged.

- 1 Remove the TN2312AP Internet Protocol Server Interface (IPSI) circuit pack from slot A02 and place it in an antistatic bag.
- 2 Insert the TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack into slot A02.

Assigning IP addresses to the IPSI circuit pack

For the IPSI circuit pack to get a static IP address, you must administer it directly through the Ethernet port connection on the IPSI faceplate (top port). Go to [Using static addressing](#) on page 109 for specific information on how to do this.

Upgrading the IPSI 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. For the most current firmware load, go to the Avaya Support Web page (<http://avaya.com/support>) and click **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 Internet Protocol Server Interface (IPSI-2).

Upgrade the firmware on the just installed TN2312BP Internet Protocol Server Interface (IPSI-2) circuit pack if necessary. For information on how to do this, see "Upgrade the IPSI Firmware" in the section titled "Upgrading Software and Firmware," which is part of the *Documentation for Avaya Communication Manager, Media Gateways and Servers* (03-300151).

Index

A

accessing the media server, [125](#), [150](#)
administer
 IPSI, [47](#)
administering existing hardware, [56](#)
assigning IP addresses to IPSIs, [107](#)

B

backing up system files, Linux migration, [124](#), [147](#), [148](#)
backing up translations, [51](#)
basic migration steps, [28](#), [117](#), [136](#)

C

cabling
 connecting IPSI cables to Ethernet switches, [56](#)
 connecting media server to Ethernet switches, [56](#)
circuit pack replacement, completing, [77](#)
clearing ARP cache, [122](#), [143](#)
completing circuit pack replacement, [77](#)
connect to media server, [97](#)
connecting the CAT5 cables to IPSI circuit packs, [63](#),
 [72](#), [84](#), [88](#)
connecting to media server, [106](#)
converting IP600 control chassis to port network, [103](#)
converting IP600/DEFINITY ONE/CSI control chassis to
 port network, [99](#)
converting to a PN, [31](#)
copying translations
 from PCMCIA flashcard, [41](#)
 to S8700 or S8710 Media Server, [33](#)
 using blowback, [33](#)
 using MOST tool, [33](#), [35](#)

D

determining IPSI placement, [57](#)
DHCP
 programming IPSI for, [107](#)
documentation needed, [27](#)

E

enable alarms to INADS, [132](#), [133](#), [161](#), [162](#)
expansion interface circuit packs
 installing, [76](#), [85](#), [88](#)

H

high-level overview, [29](#)
 completing the migration, [32](#)
 converting the PPN to a PN, [31](#)
 cutover to S8700 or S8710 control, [32](#)
 installing and configuring S8700 or S8710 Media
 Server complex, [30](#)
 IPSI placement, [29](#)
 replacing tone clock circuit packs, [31](#)
 testing S8700 or S8710 Multi-Connect
 configuration, [32](#)
 transferring existing translations, [30](#)
 upgrading and replacing interface and maintenance
 circuit packs, [30](#)

I

INADS, enable alarms to, [132](#), [133](#), [161](#), [162](#)
installing and configuring S8700 or S8710 Media Server
 complex, [30](#)
IPSI
 adding IPSI information, [48](#)
 administer and enable, [47](#)
 assigning IP addresses to, [107](#)
 installing in CMC, [100](#)
 installing in G600, [106](#)
 installing in MCC, [84](#)
 installing in SCC, [88](#)
 programming for DHCP IP address, [107](#)
 setting alarm activation level, [50](#), [166](#)
 setting IPSI duplication, [49](#)
 setting static IP address, [109](#)
 verifying circuit pack version, [115](#)
 verifying connectivity, [113](#)
 verifying translations, [112](#)
IPSI circuit packs, [57](#)
 connecting the CAT5 cables, [63](#), [72](#), [84](#), [88](#)
 duplex reliability, [58](#)
 high-critical reliability, [61](#), [64](#)
IPSI placement, [29](#)

L

license file, verifying, [35](#)
Linux migration, backing up system files, [124](#), [147](#), [148](#)
local spare processor. *see* LSP, [120](#), [138](#)
LSP, upgrade, [120](#), [138](#)

M

magneto optical drive
 copy translations, [35](#)
 copying translations, [33](#)
 maintenance circuit packs, [57](#)
 installing in MCC, [84](#)
 installing in SCC, [88](#)
 replacing, [30](#)
 media server
 accessing, [125](#), [150](#)
 powering up, [125](#), [150](#)
 migrating a DEFINITY ECS SI in an MCC, [53](#)
 migrating dedicated to nondedicated control network, [165](#)
 migration
 completing, [32](#)
 from DEFINITY ECS R, [90](#)
 from DEFINITY ECS SI, [90](#)
 MCC to G650, [95](#)
 SCC to G650, [95](#)
 migration paths, [22](#)
 migration process, high level overview, [29](#)
 MOST tool
 copy translations, [33](#), [35](#)

P

PCMCIA flashcard, copying translations from, [41](#)
 port network
 converting, [78](#)
 converting a G600, [102](#)
 converting from a PPN, [31](#)
 converting to a CMC, [98](#)
 converting to an IP600, [102](#)
 converting to an MCC, [82](#)
 converting to an SCC, [86](#)
 powering up media server, [125](#), [150](#)
 PPN
 converting, [78](#)
 converting to a CMC, [98](#)
 converting to an IP600, [102](#)
 converting to an MCC, [82](#)
 converting to an SCC, [86](#)
 installing expansion control, [84](#)
 installing expansion control media gateway, [88](#)
 removing control carriers, [83](#)
 removing SCC control cabinet, [87](#)
 preconversion administration
 R,SI,CSI, [78](#)
 S8100, [80](#)
 pre-migration setup
 download Avaya authentication file, [23](#), [135](#)
 download license file, [23](#), [135](#)
 freeze translations, [23](#), [135](#)
 processor port network
 converting to port network, [78](#)
 processor port network in CMC
 converting to port network, [98](#)

processor port network in G600
 converting to port network, [102](#)
 processor port network in MCC
 converting to port network, [82](#)
 processor port network in SCC
 converting to port network, [86](#)

R

registering S8700 Media Server, [133](#), [162](#)
 replacing
 TN2314 with a TN2312BP, [100](#), [106](#)
 TN795 with a TN2312BP, [100](#), [106](#)
 TN799C with a TN799DP, [100](#), [106](#)
 WP cables with twisted pair I/O cables, [104](#)
 restoring translations, [45](#)

S

S8700 Media Server
 registering, [133](#), [162](#)
 S8700 or S8710 IP-Connect configuration
 migrating a DEFINITY ECS CSI in a CMC, [55](#)
 migrating a DEFINITY ECS SI in an SCC, [54](#)
 migrating a DEFINITY ONE in a CMC, [55](#)
 migrating an IP600, [55](#)
 migrating an S8100 in a CMC, [55](#)
 S8700 or S8710 Multi-Connect configuration
 migrating a DEFINITY ECS R in an MCC, [53](#)
 set
 Telnet, [125](#), [150](#)
 setting alarm activation level
 TN2312BP, [50](#)
 setting alarm activation level
 TN2312BP, [166](#)
 static IP address
 setting, [109](#)

T

Telnet
 setting up, [125](#), [150](#)
 terminal emulation settings, [36](#)
 testing S8700 or S8710 Multi-Connect configuration, [32](#)
 TN2302AP
 installing, [101](#), [106](#)
 TN2312BP
 replacing a TN2314, [100](#), [106](#)
 replacing a TN795, [100](#), [106](#)
 setting alarm activation level, [50](#), [166](#)
 TN2314
 replacing with a TN2312BP, [100](#), [106](#)
 TN23212AP
 upgrading to TN2312BP, [166](#)
 TN771
 installing, [101](#), [106](#)
 TN795
 replacing with a TN2312BP, [100](#), [106](#)

TN799C
 replacing with a TN799DP, [100](#), [106](#)
TN799DP
 replacing a TN799C, [100](#), [106](#)
tone clock circuit packs
 replacing, [31](#)
Tone clocks, replacing with IPSI, [57](#)
transferring existing translations, [30](#)
transferring translations, [35](#)
translations
 backing up, [51](#)
 copying from PCMCIA, [41](#)
 copying to S8700 or S8710 Media Server, [33](#)
 transferring, [35](#)
 verifying IPSI, [112](#)
translations, copy files to media server, [44](#)
translations, restoring, [45](#)
twisted pair I/O cables
 replacing WP cables, [104](#)

U

upgrade firmware
 G350 Media Gateway, [119](#), [138](#)
 G700 Media Gateway, [119](#), [138](#)
upgrade software
 on LSP, [120](#), [138](#)
upgrading
 TN2312AP to TN2312BP, [166](#)
upgrading existing hardware, [56](#)
upgrading hardware in each PN, [57](#)

V

verify
 IPSI circuit pack version, [115](#)
 license file, [35](#)

W

WP cables
 replacing with twisted pair I/O cables, [104](#)

