



# Getting Started

with the  
Avaya™ S8700 Media Server  
with MCC1 or SCC1 Media Gateway

555-233-141  
Comcode 700253396  
Issue 2  
October 2002

## 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.

## Your Responsibility for Your Company's Telecommunications Security

The final responsibility for securing both this system and its networked equipment rests with you - an Avaya customer's system administrator, your telecommunications peers, and your managers. The scope of your responsibilities is based upon 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, and their underlying hardware/software platforms and interfaces
- Any other equipment networked to your Avaya products.

## 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 and how to get help

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.

For additional support telephone numbers, see the Avaya web site: <http://www.avaya.com>

Click on Support, click on Escalation Lists US and International. This web site includes phone numbers for escalation within the United States. For escalation phone numbers outside the United States, click on Global Escalation List. This list contains the phone numbers for the Centers of Excellence in each Avaya-defined region.

## Voice over Internet Protocol (VoIP)

If the equipment supports Voice over Internet Protocol (VoIP) facilities, you may experience certain compromises in performance, reliability and security, even when the equipment performs as warranted. These compromises may become more acute if you fail to follow Avaya's recommendations for configuration, operation and use of the equipment. YOU ACKNOWLEDGE THAT YOU ARE AWARE OF THESE RISKS AND THAT YOU HAVE DETERMINED THEY ARE ACCEPTABLE FOR YOUR APPLICATION OF THE EQUIPMENT. YOU ALSO ACKNOWLEDGE THAT, UNLESS EXPRESSLY PROVIDED IN ANOTHER AGREEMENT, YOU ARE SOLELY RESPONSIBLE FOR (1) ENSURING THAT YOUR NETWORKS AND SYSTEMS ARE ADEQUATELY SECURED AGAINST UNAUTHORIZED INTRUSION AND (2) BACKING UP YOUR DATA AND FILES.

## 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 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.

## Ordering Information

|               |                                   |                 |
|---------------|-----------------------------------|-----------------|
| <b>Call:</b>  | US Voice:                         | 1 800 457 1235  |
|               | US Fax:                           | 1 800 457 1764  |
|               | non-US Voice:                     | +1 410 568 3680 |
|               | non-US Fax:                       | +1 410 891 0207 |
| <b>Write:</b> | Globalware Solutions              |                 |
|               | 200 Ward Hill Avenue              |                 |
|               | Haverhill, MA 01835 USA           |                 |
| <b>Order:</b> | Document No.555-233-141, Issue 2, |                 |
|               | October 2002                      |                 |

## European Union Declaration 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, Class B) and Low Voltage Directive (73/23/EEC). This equipment has been tested to meet the CTR4 Primary Rate Interface (PRI) specification.

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://support.avaya.com/elmodocs2/DoC/IDoC/index.jhtml>

## Federal Communications Commission Statement

### Part 15:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### 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.

This equipment complies with Part 68 of the FCC Rules. On the rear 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.

The REN is used to determine the quantity of devices which 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 table.

| Manufacturer's Port Identifier | FIC Code           | SOC/REN/A.S. Code | Network Jacks |
|--------------------------------|--------------------|-------------------|---------------|
| Ground start CO trunk          | 02GS2              | 0.5A              | RJ11C         |
| Loop start CO trunk            | 02LS2              | 0.5A              | RJ11C         |
| DID CO trunk                   | 02RV2-T            | AS.2              | RJ11C         |
| 1.544 Mbit digital interface   | 04DU9-BN           | 6.0Y              | RJ48C         |
|                                | 04DU9-DN           | 6.0Y              | RJ48C         |
|                                | 04DU9-IKN          | 6.0Y              | RJ48C         |
|                                | 04DU9-ISN          | 6.0Y              | RJ48C         |
| Primary Rate Interface         | 04DU9-<br>ISN(PRI) | 6.0Y              | RJ48C         |
| Basic Rate Interface           | 02IS5              | 6.0F              | RJ49C         |

If the terminal equipment 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. 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.



## *- Process and Specifications -*

- 1** *Verifying the Equipment*
- 2** *Installing the Hardware*
- 3** *Configuring the Hardware*
- 4** *Connecting the Cables*
- 5** *Configuring the UPS and the Ethernet Switch*
- 6** *Connecting to the Media Gateway - New Installation*
- 7** *Connecting to the Media Gateway - Migration*
- 8** *Troubleshooting*

### *Installation Computer Specifications*

#### Hardware

- Windows 95/98/NT/2000/XP/ME operating system
- 32 MB RAM
- 40 MB available disk space
- RS232 port connector
- Ethernet network connection (NIC card)

#### Software

- FTP program
- Telnet program
- Terminal emulation program (HyperTerminal)
- Web browser (Netscape [4.7.x] or Internet Explorer [5.0 or higher] only)

### *Hardware Specifications*

| Equipment       | Weight       |             | Dimensions    |             |    |
|-----------------|--------------|-------------|---------------|-------------|----|
|                 | English (lb) | Metric (kg) | English (in)  | Metric (cm) | Us |
| Servers         | 23           | 10.5        | 3.5 x 17 x 17 | 9 x 43 x 43 | 2  |
| UPS             | >34          | >15         | 3.5 x 17 x 19 | 9 x 43 x 48 | 2  |
| Ethernet switch | 16.5         | 7.5         | 3.5 x 17 x 18 | 9 x 43 x 46 | 2  |

## - Legend -



*Avaya technician  
or business partner*



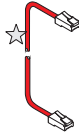
*Customer*



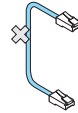
*Product  
documentation*



*Green  
CAT5 cable*



*Red  
CAT5 cable*



*Crossover  
cable*



*Services  
laptop*



*Customer  
network*

2

*Sequence step*



*Duplex  
Reliability*



*High / Critical  
Reliability*



*Nonswitched  
electrical outlet*



*System  
administration*



*Customer-provided  
network information*



*Stop!  
Follow prompts  
on screen*



*Anti-static  
wrist ground strap  
required*



*Warning!  
Use 2 people  
to lift equipment*

# 1 Verifying the Equipment



Product documentation



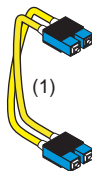
PCMCIA Flashcard



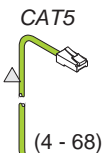
Modem (2)



Services laptop (1)

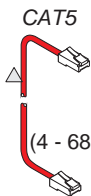


Fiber

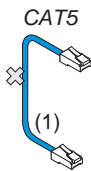


(4 - 68)

IPSI cables

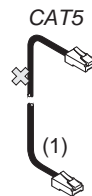


(4 - 68)



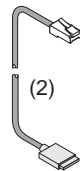
(1)

Duplication cable



(1)

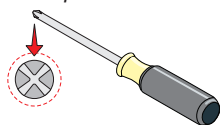
Laptop to server cable



(2)

Modem cable

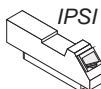
Cross-point screwdriver



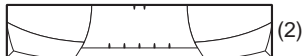
Hex-head wrench (1/8 in., 3 mm)



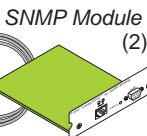
IPSI adapter (1 - 64)



Media server



(2)



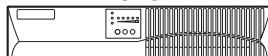
SNMP Module (2)

Ethernet switch



(1 or more)

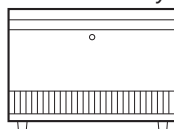
UPS



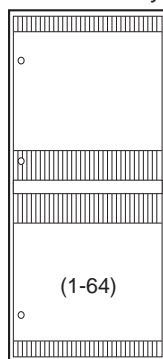
(2)

(4-176)

Avaya™ SCC1 Media Gateway



Avaya™ MCC1 Media Gateway



(1-64)

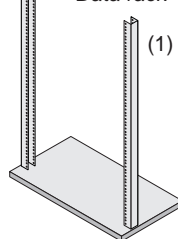


Customer network



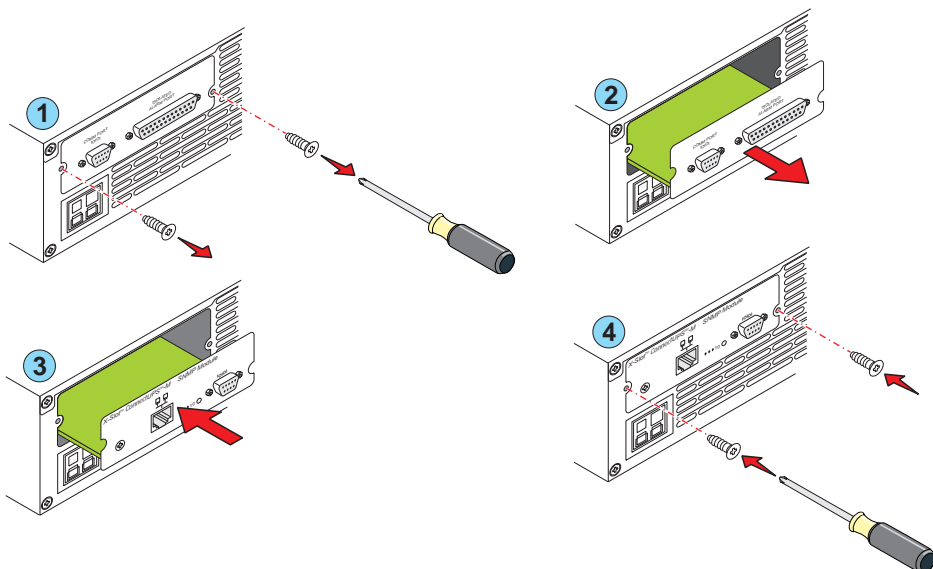
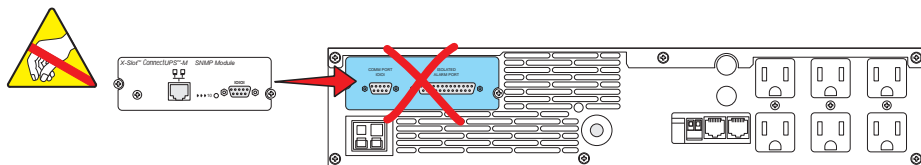
System administration and network information

19 in. (48.3 cm) Data rack

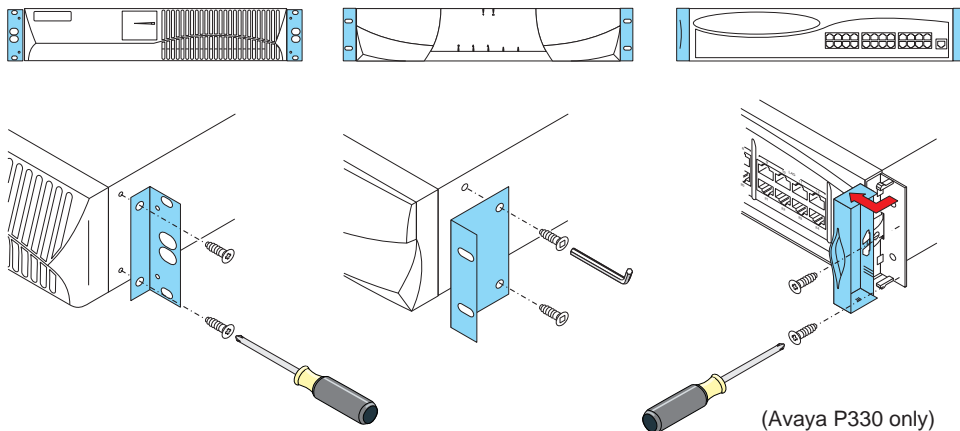


(1)

## 2a Installing the Hardware: SNMP Module

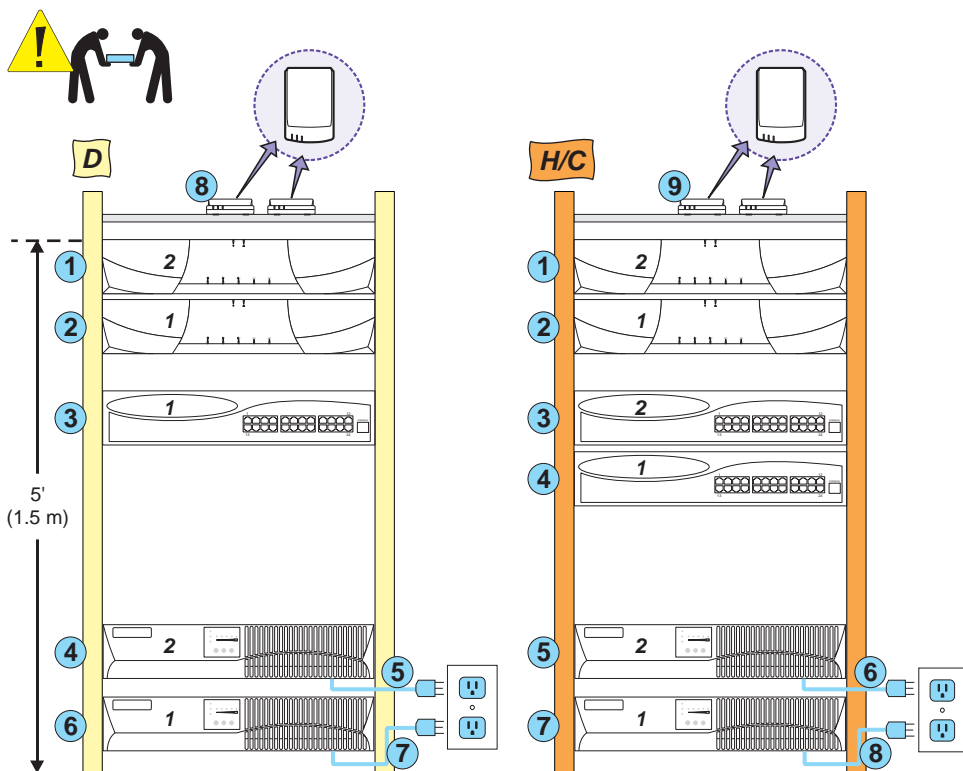


## 2b Installing the Hardware: Mounting Brackets

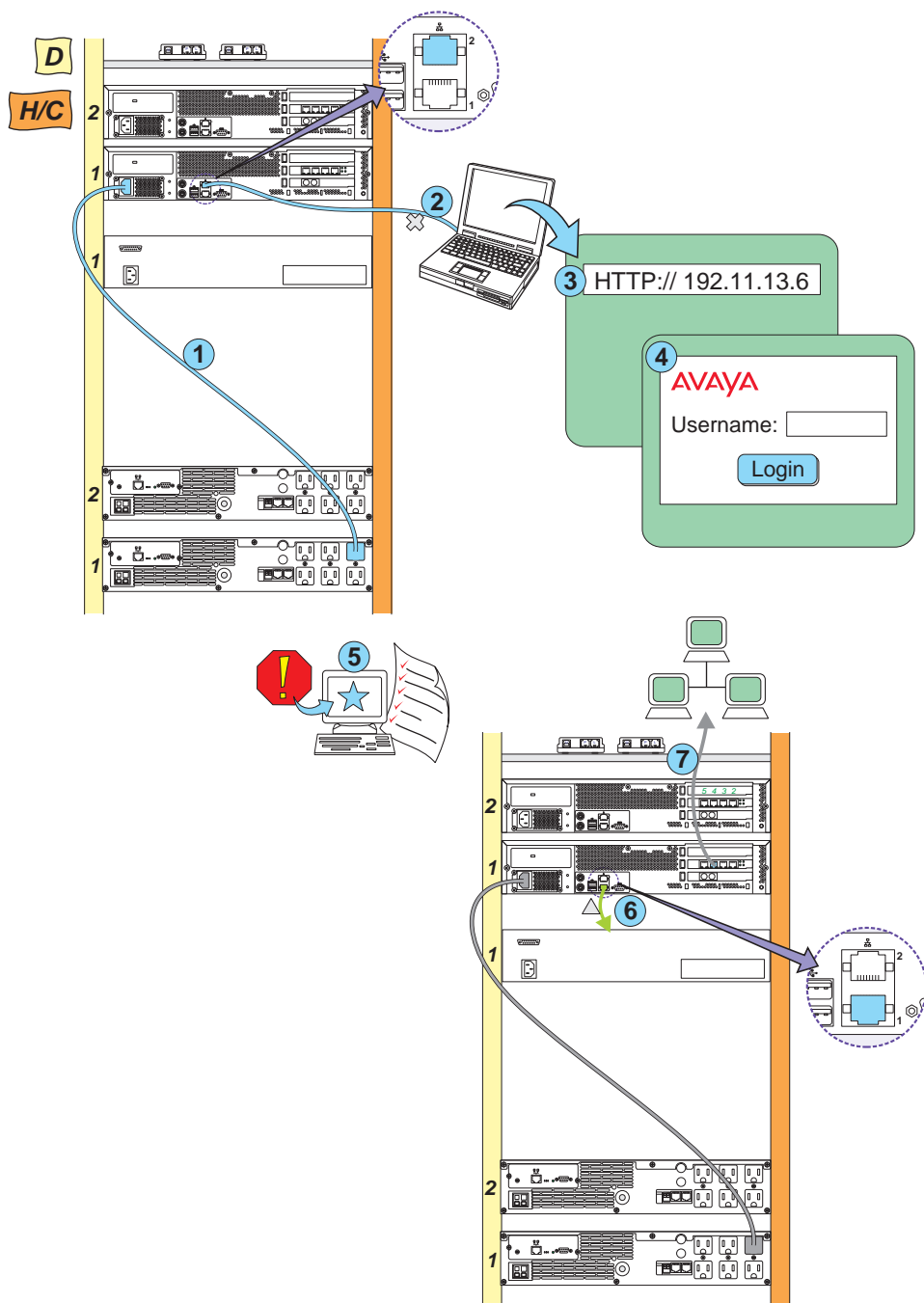




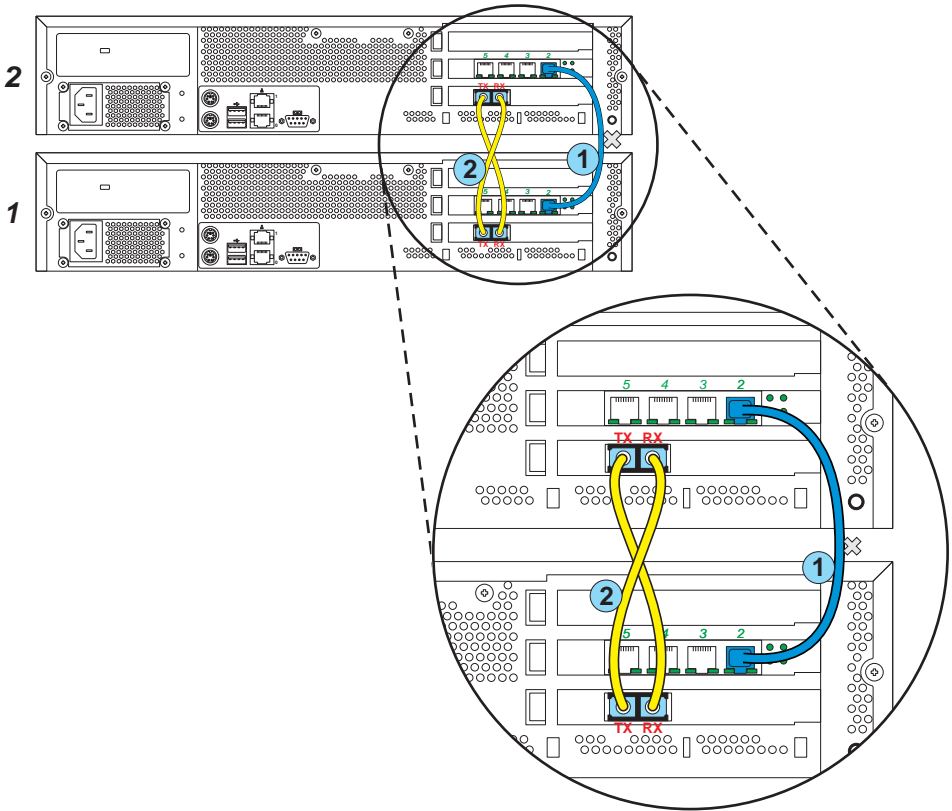
## 2c *Installing the Hardware: Rack Installation*



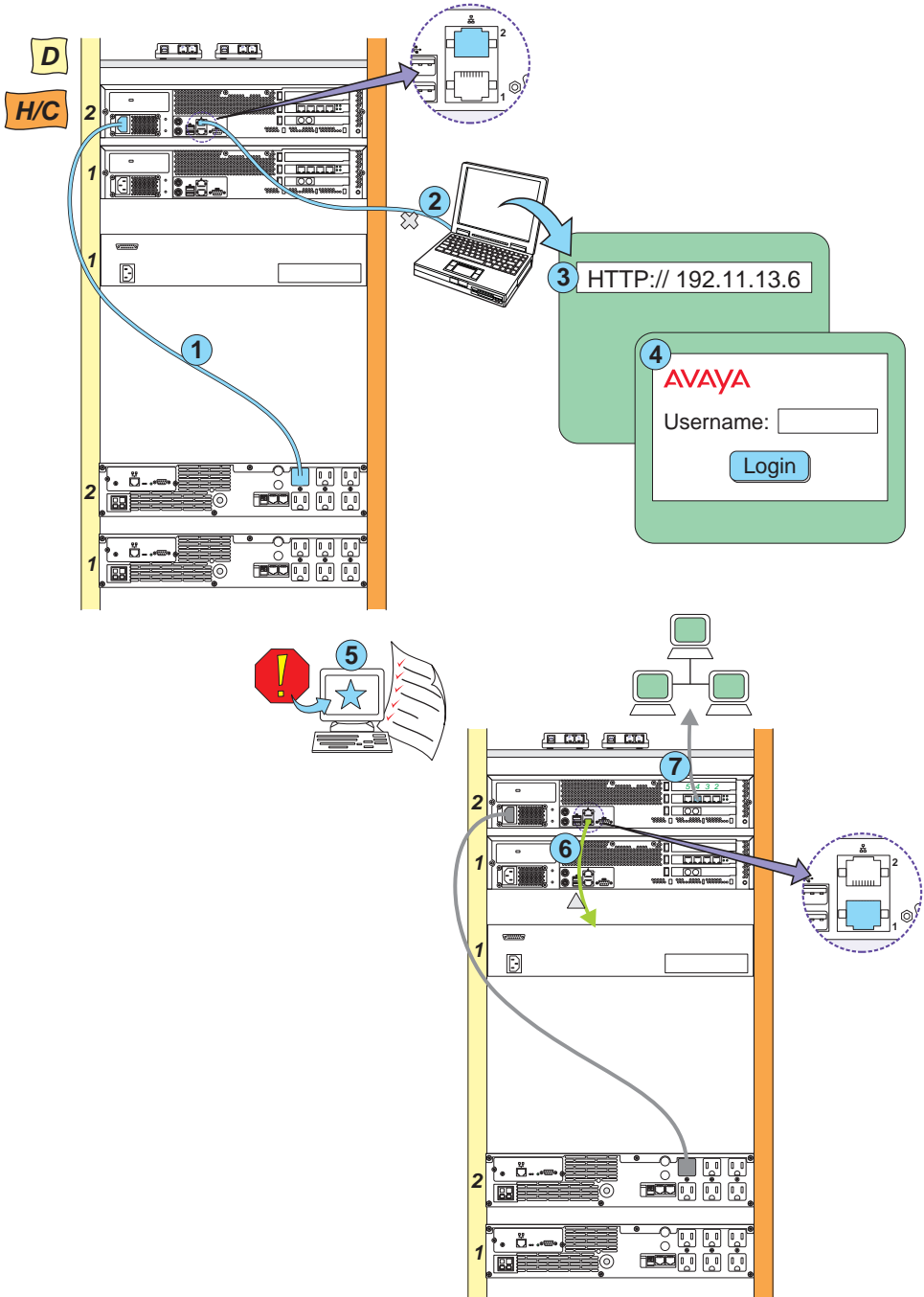
### 3a Configuring the Hardware: Server 1



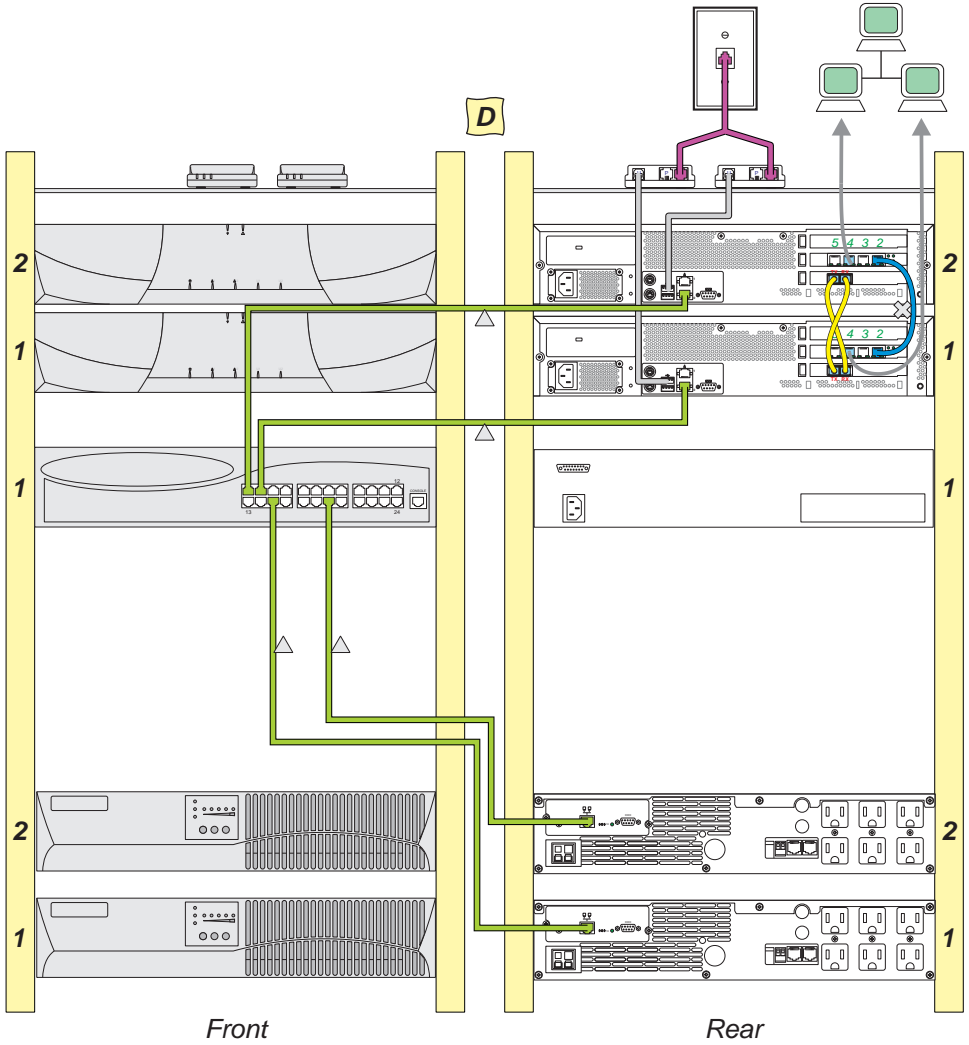
### 3b *Configuring the Hardware: Duplication Cabling*



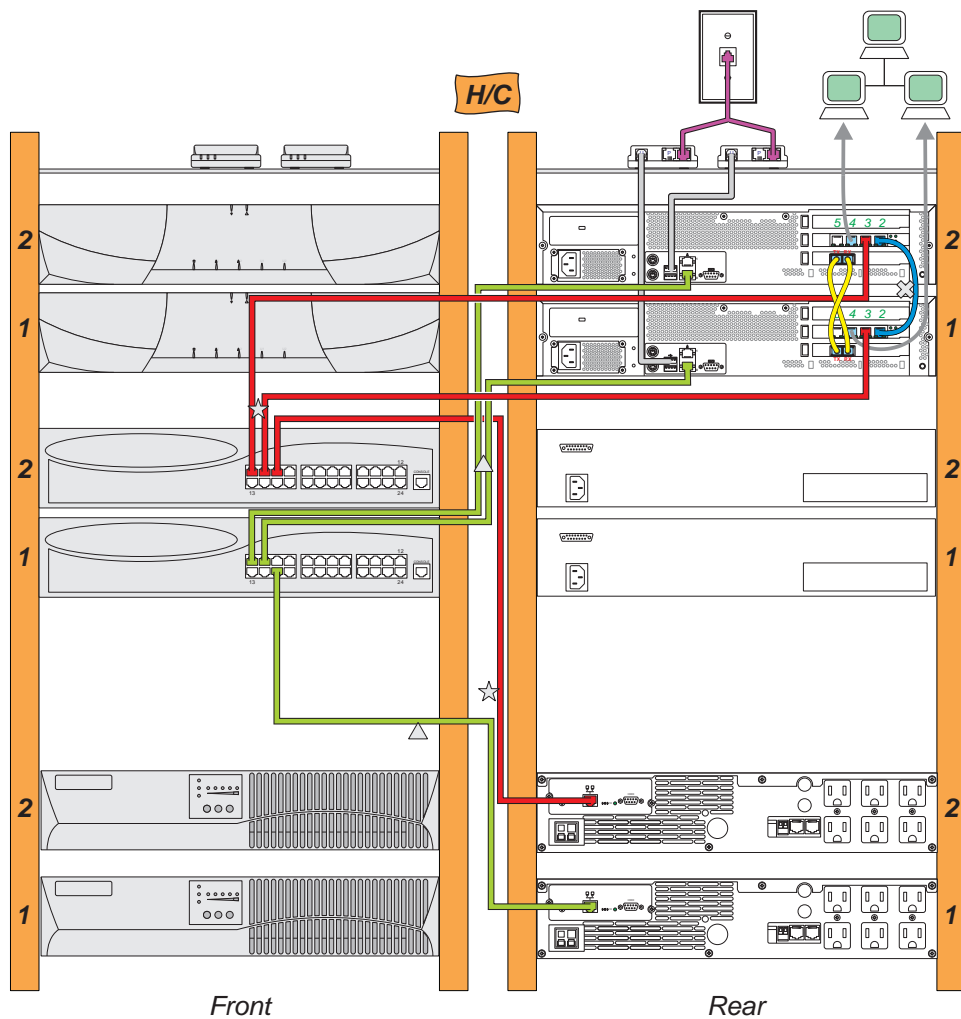
### 3c *Configuring the Hardware: Server 2*



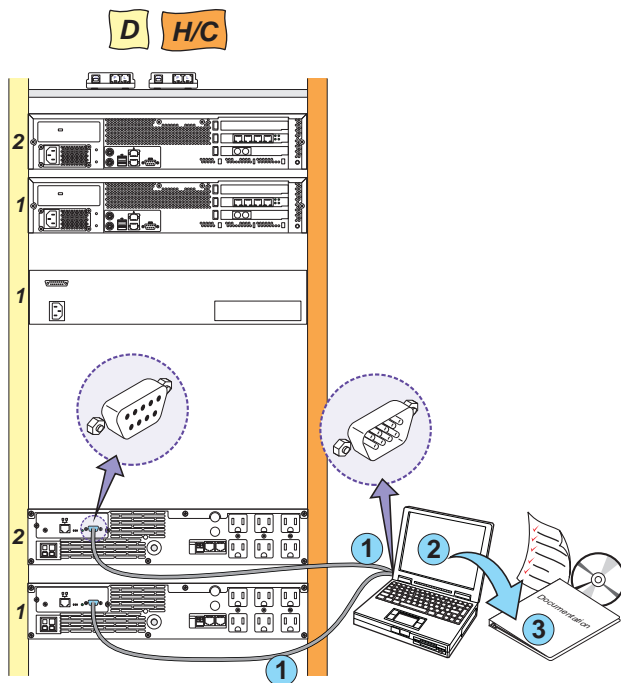
## 4a Connecting the Cables: Duplex Reliability



## 4b Connecting the Cables: High or Critical Reliability

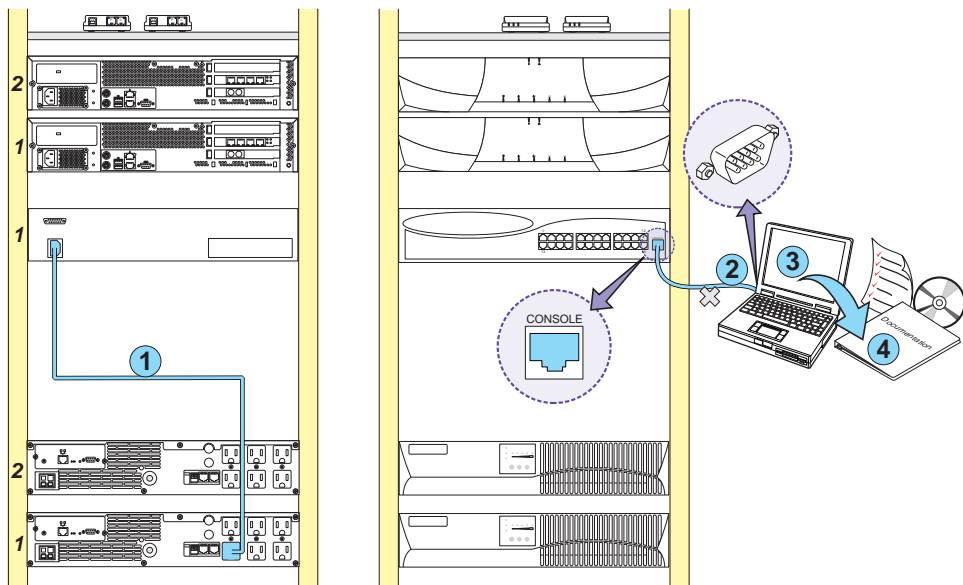


5a

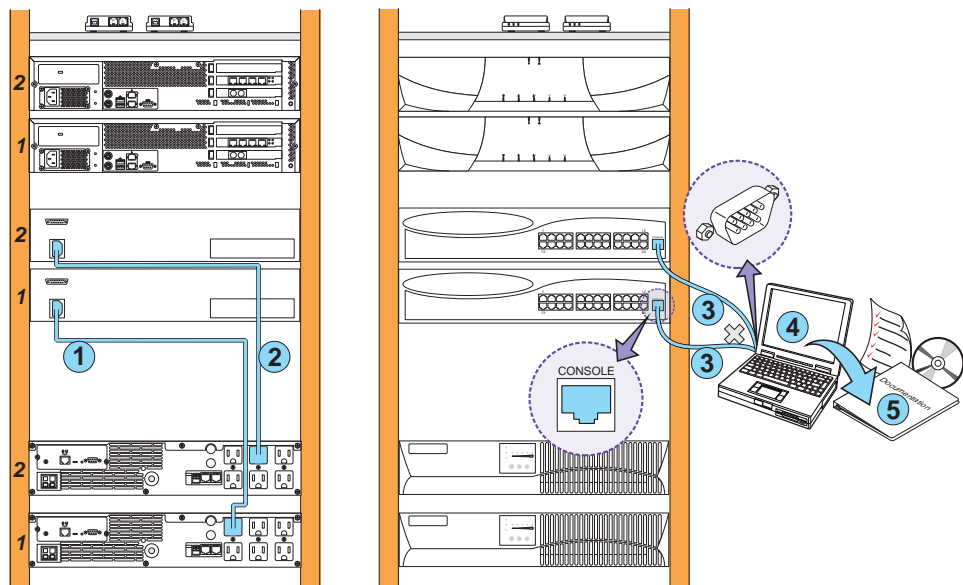


## 5b Configuring the UPS and the Ethernet Switch

**D**



**H/C**

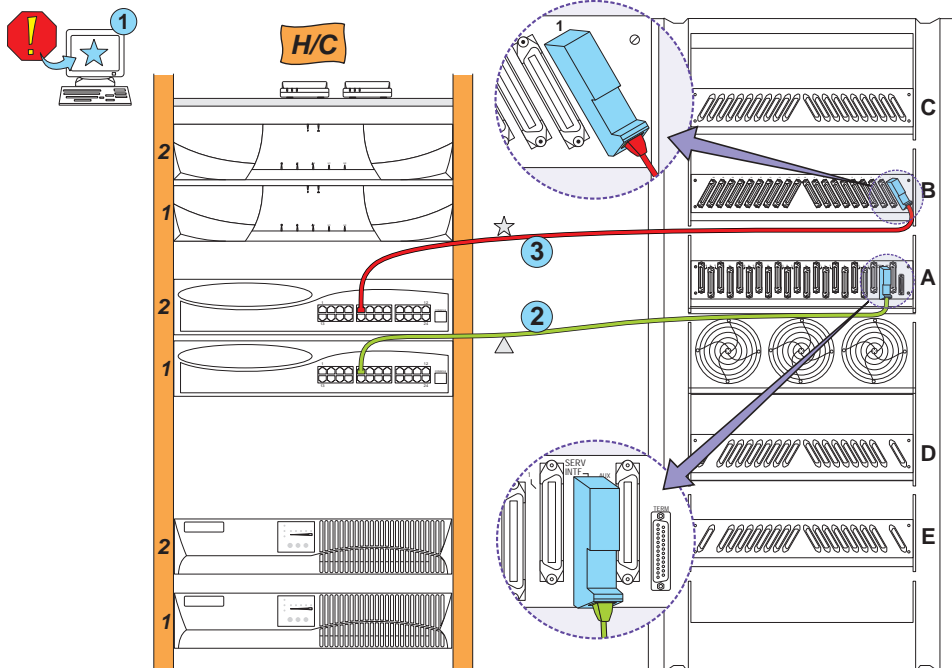
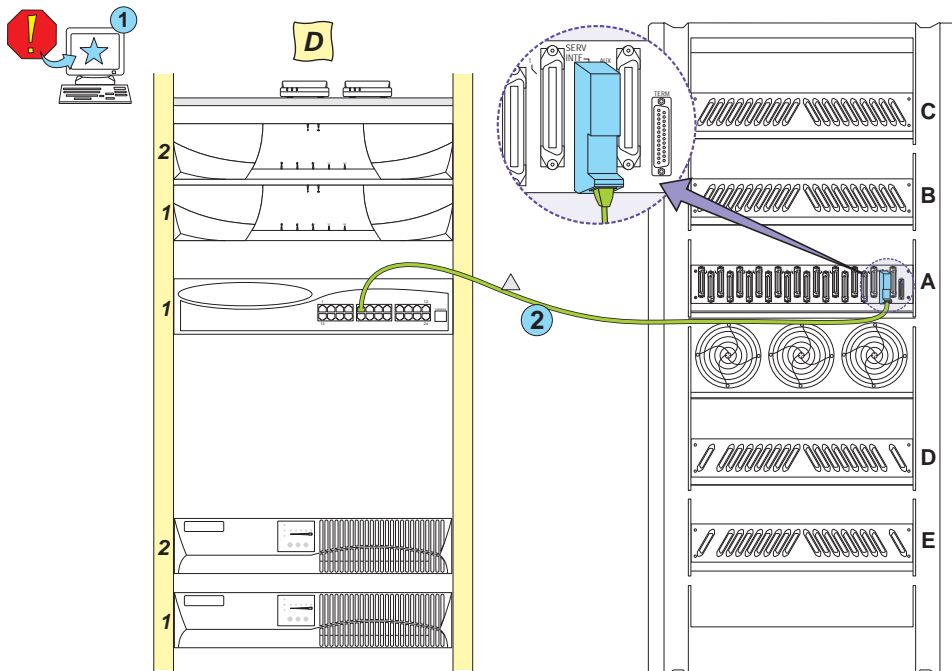




6a

## Connecting to the Media Gateway - New Installation:

### Avaya™ MCC1

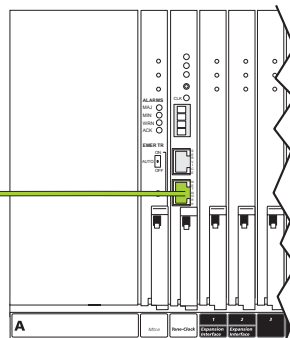
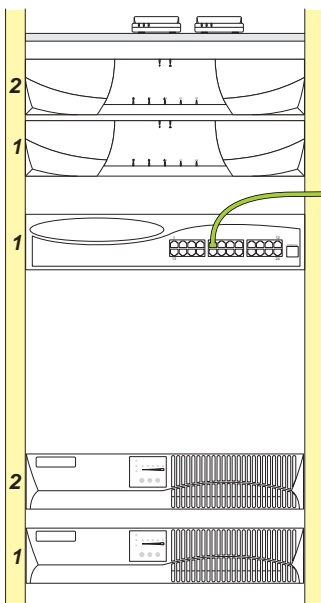


6b

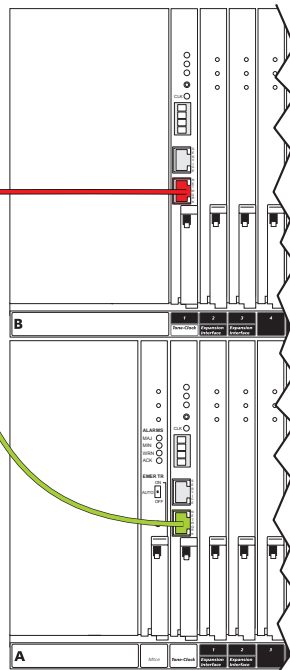
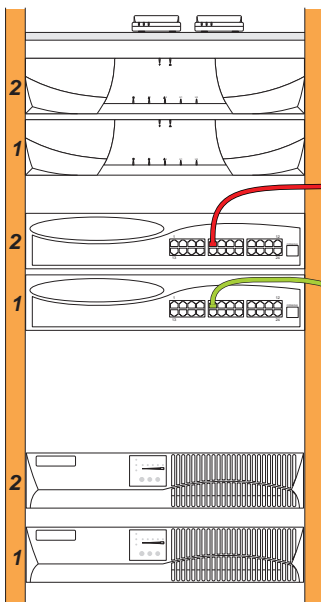
# Connecting to the Media Gateway - New Installation: Avaya™ SCC1



D



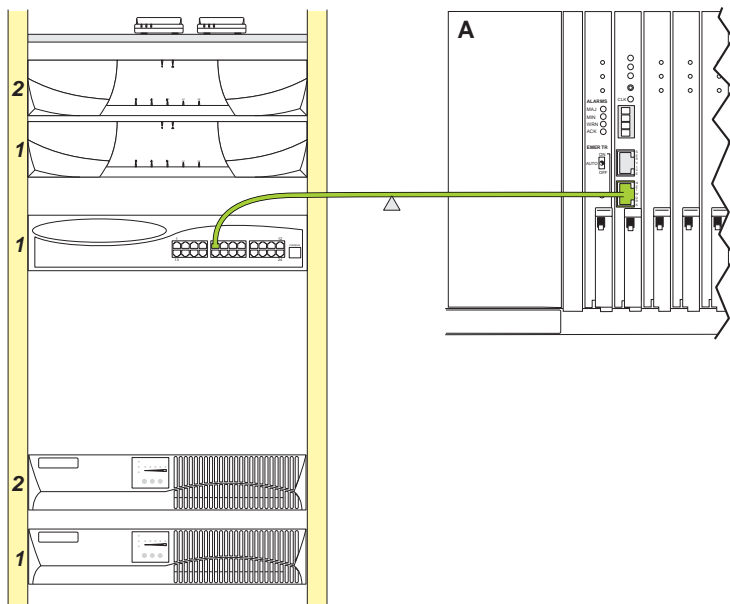
H/C



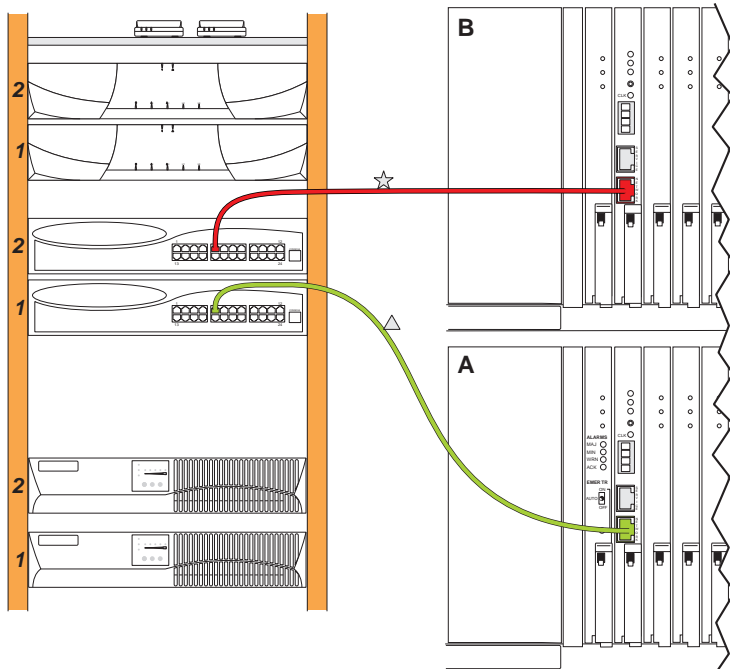
## 7 Connecting to the Media Gateway - Migration



**D**



**H/C**



| Problem:   | Solution:   |
|--|---|
| • Avaya equipment is missing                           | • Contact the project manager   |
| • Customer equipment is missing                        | • Contact the project manager   |
| • Customer network information is missing              | • Contact the project manager   |
| • No power to the UPS                                  | • Is the UPS plugged into the outlet?<br>• Does the outlet have power?  |
| • The alarm LEDs on the UPS are flashing               | • Refer to the UPS user's guide   |
| • No power to the Avaya Ethernet switch                | • Is the switch plugged into the UPS?<br>• Does the UPS have power?   |
| • Alarm LEDs on the Avaya Ethernet switch are flashing | • Refer to the user's guide   |
| • No power to the media server                         | • Is the media server plugged into the UPS?<br>• Does the UPS have power?<br>• Push the power button on the media server to start |
| • The green status LED on the server is flashing slow  | • The server is in the standby mode   |
| • No V on the IPSI LCD                                 | • Check the connection to the Avaya Ethernet switch   |