

Quick Start for Hardware Installation:

Avaya G450 Media Gateway

03-602053 Issue 1 January 2008

© 2008 Avaya Inc. All Rights Reserved.

Notice

While reasonable efforts were made to ensure that the information in this document was complete and accurate at the time of printing, Avaya Inc. can assume no liability for any errors. Changes and corrections to the information in this document may be incorporated in future releases.

For full support information, please see the complete document, *Avaya Support Notices for Hardware Documentation*, document number 03-600759.

To locate this document on our Web site, simply go to <u>http://www.avaya.com/support</u> and search for the document number in the search box.

Documentation disclaimer

Avaya Inc. 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.

Link disclaimer

Avaya Inc. is not responsible for the contents or reliability of any linked Web sites referenced elsewhere within this documentation, and Avaya does not necessarily endorse the products, services, or information described or offered within them. We cannot guarantee that these links will work all of the time and we have no control over the availability of the linked pages.

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.

Copyright

Except where expressly stated otherwise, the Product is protected by copyright and other laws respecting proprietary rights. Unauthorized reproduction, transfer, and or use can be a criminal, as well as a civil, offense under the applicable law.

Avaya support

Avaya provides a telephone number for you to use to report problems or to ask questions about your product. The support telephone number is 1-800-242-2121 in the United States. For additional support telephone numbers, see the Avaya Web site: http://www.avaya.com/support.

Chapter 1: Before you Start

Before you install your Avaya G450 Media Gateway, prepare all the information, resources, and tools that you need during the installation process.

Preparing the Pre-Installation Worksheet

The Electronic Pre-installation Worksheet (EPW) is a customized Excel spreadsheet that you can use to collect configuration information. The EPW verifies that you have a complete set of installation information. Once filled out by the customer and project manager, the EPW can be loaded directly into the Avaya Installation Wizard (IW) or Gateway Installation Wizard (GIW) for configuration. The EPW should be completed before the installation. Download the latest version of the EPW spreadsheet from the Avaya Web site at http://support.avaya.com/avayaiw.

Preparing Contacts you might need

Ensure that you have the names and phone numbers of any people you might need to contact at the installation site. This list might include the people responsible for network architecture, system administration, site security, site deliveries, etc.

Preparing Installation Files

Ensure that you load the latest versions of all firmware files for the G450, S8300, and Media Modules onto your laptop before configuration. If you install a G450 without an S8300 Server, the configuration process prompts you for the filenames of all firmware files needed. You can download the firmware files needed for your installation from the Avaya Support Web site, at http://support.avaya.com.

Preparing the G450 Serial Number

In order to create the license file, you need the serial number of the G450. The serial number is printed on a sticker on the back of the G450 chassis.

Obtaining RFA access

You need to obtain a personal Single Sign-On (SSO) for Remote Feature Activation (RFA) web site authentication login before going to the site for installation. You must complete the authentication process before you can be assigned an SSO authentication login.

Before you Start

As a first-time user:

- Business Partners should point their browsers to the Business Partner portal option sales_market, services-voice, training tools and procedures to select RFA.
- Associates should point their browsers to the Avaya Associate portal.
- Contractors should point their browsers to Avaya.com.
- Alternatively go directly to http://rfa.avaya.com.

From that point, log into SSO and complete the process to obtain your personal login.

Downloading a G450 license file to your laptop

If you are installing VPN, obtain a VPN license file from the Remote Feature Activation (RFA).

- 1. Create a directory on your laptop for storing license files (for example, C:\licenses).
- 2. Access the Internet from your laptop and go to rfa.avaya.com.
- 3. Login using your SSO login and password. The AFS and RFA information home page appears.
- 4. Start the RFA application from the RFA information page. To create and download the license file, follow the instructions outlined in the *Avaya Remote Feature Activation (RFA) User Guide*, 03-300149.

Downloading CM license and authentication files to your laptop

If you are installing a G450 with an S8300 Server as a primary controller, you need license and authentication files for the Communication Manager.

- 1. Create a directory on your laptop for storing license and authentication files.
- 2. Access the Internet from your laptop and go to rfa.avaya.com.
- 3. Login using your SSO login and password. The AFS and RFA information home page appears.
- 4. Start the RFA application from the RFA information page. To create and download the license file and authentication file, follow the instructions outlined in the *Avaya Remote Feature Activation (RFA) User Guide*, 03-300149.
- 5. Use the download or e-mail capabilities of the RFA web site to download the license and authentication files to your laptop.

Preparing the INADS IP address

The INADS IP address is required in order to configure the S8300's modem for alarming. If you are preparing a G450 with an S8300 for a remote installation, you must first obtain an INADS IP address. Use the Automatic Registration Tool (ART) to obtain an IP address for an INADS alarming modem.

1. Access the ART Web site on your laptop at http://art.dr.avaya.com.

- 2. Select Administer S8x00 Server products for installation script, and then log in.
- 3. Enter the customer information, select Installation Script, and click Start Installation script & IP Addr Admin. A script file is created and downloaded or e-mailed to you.

Preparing Needed Hardware

- Laptop to configure the Avaya G450 Media Gateway, you need to prepare a laptop with a serial port. The laptop must have Internet Explorer installed. If you install a G450 without an S8300, you must prepare the laptop with a Windows 2000 or Windows XP operating system and a TFTP server.
- Modem in order to set up a remote configuration of the G450, you must prepare a USB modem. Currently, the G450 supports the MultiTech USB modem, model MT5634ZBA-USB-V92. If a USB modem is not available, you can also use a serial modem, the Multitech MultiModem ZBA, MT5634ZBA-V92.

Preparing Tools Needed for Mounting

To mount on a rack or wall, prepare a Phillips head screwdriver.

To mount on a wall prepare also:

- Plywood board ½ in (1.2 cm) thick and at least 2 x 2 ft (0.6 x 0.6 m) in size
- Minimum of four wood screws
- Minimum of four screws (pan head at least ½ in, # 10-12 screw) to fasten the G450 to the wall

You might also need wire cutters to attach the grounding conductors, if your site uses a ground block.

Choosing the Installation Site

Ensure that the location where you install your G450 fulfills the following requirements:

- Cables are away from sources of electrical noise such as radio transmitters, broadcast amplifiers, power lines, fluorescent light fixtures
- Water or moisture cannot enter the case of the chassis.
- Air can flow freely around all sides of the chassis.
- The vents on the sides of the case are not blocked.
- The installation is no more than 25 feet (7.6 m) from an approved ground.

Note:

If the G450 is more than 25 feet away from an approved ground, you must contact a licensed electrician to install a supplementary ground conductor.

- The environmental conditions match the following requirements:
 - Ambient temperature 32° to 104°F (0° to 40°C)

- Relative humidity 10-90% relative humidity
- Minimum clearance for ventilation 18 in. (45 cm)
- Weight support 22.5-35 lbs (10-16 kg)

Chapter 2: Unpack the Device



Wear an anti-static wrist ground strap whenever you handle components of a G450 Media Gateway. Connect the strap to an approved ground, such as an unpainted metal surface.

Equipment

Open the box that contains the Avaya G450 Media Gateway, and ensure that it contains the following components and accessories:

- One Avaya G450 Media Gateway chassis. The required media modules may be installed.
- An Accessory Kit (see <u>Table 1</u>)

Removing the Power Supply Units

For ease of installation, it is recommended to remove the power supply unit(s) before unpacking the G450.

- 1. Open the package. Note that the G450 is lying flat. Turn it so that the rear panel is facing up.
- 2. Remove the power supply unit (PSU). If you ordered two power supplies, remove them both.
 - a. Loosen the two PSU captive screws, one on each side of the PSU.
 - b. Grasp the two side handles and pull the PSU up and out.
 - c. Place the PSU carefully on the table.

Other Components

The Avaya Partner Contact Closure adjunct box, if ordered, is packaged separately.

Table 1: G450 Accessory Kit

A				
One 115V 3 Wire Power Cable Note : Outside the US, the cord must be VDE Certified or Harmonized (HAR), rated 250V, 3-conductor (3 rd wire ground), 1.0 mm ² minimum conductor size	One Grounding Cable Assembly	Four Rubber Standoffs		
Two 19 in. Rack mount brackets	One Cable Management Assembly	Fifteen 3/8 in. Flat Head Screws		
897 av	***			
Two 5/16 in. Round Head Screw	Two Serrated Lock Washers	One Ground Screw One Jumper for Bridging NVRAM init Pins		

Chapter 3: Mount the Device

You can position the Avaya G450 Media Gateway on a suitable table, or mount it in a rack or on the wall. Once the G450 is mounted, re-insert the Power Supply Units.

Positioning on a Table

To install the Avaya G450 Media Gateway as a tabletop unit:

- 1. Remove the four rubber standoffs from their package.
- 2. Turn the G450 upside down.
- 3. Position each standoff into one of the mounting sites, near each corner of the chassis.

Mounting in a Rack

You can fasten the G450 to a standard 19-inch rack either at the front of the G450 or at its middle. Before you mount the G450, attach the mounting brackets to the device.

Front Mounting Bracket Placement

Attach a regular mounting bracket to one side of the G450, near the front, as shown in <u>Figure 1: Front</u> <u>mounting bracket placement</u> on page 10. Attach a mounting bracket with cable guides to the other side of the G450 (refer to <u>Figure 3: Attaching a mounting bracket with cable guides</u> on page 10).

Middle Mounting Bracket Placement

Attach regular mounting brackets to the sides of the G450, as shown in <u>Figure 2: Middle mounting bracket</u> <u>placement</u> on page 10. Attach a mounting bracket with cable guides on one side of the G450, as shown in <u>Figure 3: Attaching a mounting bracket with cable guides</u> on page 10.

Figure 1: Front mounting bracket placement



Figure 2: Middle mounting bracket placement



Figure 3: Attaching a mounting bracket with cable guides



Attaching Mounting Brackets

Follow these steps to attach the mounting brackets:

- 1. Position a bracket over the desired mounting position.
- 2. Affix the bracket to the chassis with five flat head 3/8 in. screws.
- 3. Tighten the screws with the screwdriver.

Mounting the G450

- 1. Insert two mounting screws, one on either side of the rack. These will be the bottom screws of the mounting brackets. Turn the screws only 3-4 times, so that a part of them is protruding.
- 2. Position the G450 in the rack so that the bottoms of the brackets are resting on the protruding screws.
- 3. Position the G450 in the rack. Ensure that there is adequate ventilation.
- 4. Insert five mounting screws on each side.
- 5. Tighten the mounting screws. Avoid overtightening.
- 6. Either tighten the two bottom-most screws inserted in step 1, or remove them completely.
- 7. Verify that ventilation vents are not obstructed.

Mounting on the Wall

To mount the G450 on a wall, use the two mounting brackets without cable guides. You can also add a mounting bracket with cable guides if desired (refer to Figure 3: Attaching a mounting bracket with cable guides on page 10).

- If the wall does not have a portion of plywood available, mount a plywood sheet at least ½ in (1.2 cm) thick and at least 2 x 2 ft (0.6 x 0.6 m) in size, horizontally onto the wall. Make sure the plywood screws are sufficiently anchored in the wall. Use a minimum of four wood screws and ensure the screws are driven into wall studs, or use four wall anchors rated not less than 50 pounds (22.5 kg) shear strength each.
- 2. Mark the plywood with the location of the G450 bracket screw holes before fastening the plywood to the wall.
- 3. Position the G450 so that its front panel is facing up, and secure it to the plywood using a minimum of four screws (pan head at least ½ in, # 10-12 screw).



Figure 4: Wall mounting bracket placement

Installing the Power Supply Units

When the G450 chassis is installed, first insert the power supply unit(s) if you removed them before installation (refer to <u>Removing the Power Supply Units</u> on page 7).

- 1. Position the power supply unit before the opening at the rear of the G450 and engage both sides of the PSU in the interior guides.
- 2. Slide the PSU slowly into the chassis, maintaining an even pressure to assure that the PSU does not become twisted or disengaged from the guides.
- 3. Close and tighten the two PSU captive screws, one on each side of the PSU.

Figure 5: Inserting the power supply unit



Chapter 4: Install Media Modules

The required media modules may be pre-installed in the G450 chassis. If this is the case, skip this chapter.

If the media modules are not pre-installed, or if you want to replace modules or add new media modules, install the necessary Media Modules and related components to support the configuration required for your site. If this Media Gateway needs to function as an ICC or as an LSP, install an S8300 Server module.

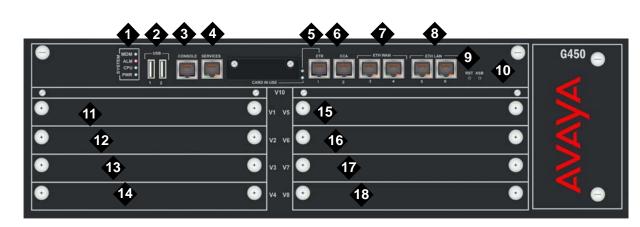


Figure 6: The G450 front panel ports and slots

Figure notes:

- 1. System LEDs
- 2. USB ports
- 3. Console port
- 4. Services port
- 5. ETR (Emergency Transfer Relay) port
- 6. CCA (Contact Closure) port
- 7. ETH WAN ports
- 8. ETH LAN ports
- 9. RST button
- 10. ASB button

- 11. V1 slot for standard media module or S8300 Server
- 12. V2 standard media module slot
- 13. V3 standard media module slot
- 14. V4 standard media module slot
- 15. V5 standard media module slot
- 16. V6 standard media module slot
- 17. V7 standard media module slot
- 18. V8 standard media module slot

Media module	Permitted slots	Description	
MM340	V3, V4, V8	Provides one E1/T1 WAN port for connecting to a WAN endpoint device.	
MM342	V3, V4, V8	Provides one USP WAN port for connecting to a WAN endpoint device.	
MM710	V1 – V8	Provides one E1/T1 trunk port for connecting an E1/T1 telephone trunk.	
MM711	V1 – V8	Provides eight universal analog ports for connecting analog telephones or trunks.	
MM712	V1 – V8	Provides eight ports for connecting DCP telephones.	
MM714	V1 – V8	Provides four analog ports for analog telephones and four analog ports for analog trunks.	
MM716	V1 – V8	Provides one amphenol connector that connects to a punch down block to provide 24 analog line ports.	
MM717	V1 – V8	Provides one amphenol connector that connects to a punch down block to provide 24 ports for connecting DCP telephones.	
MM720	V1 – V8	Provides eight ports for connecting up to eight ISDN trunks or 16 ISDN BRI stations.	
MM722	V1 – V8	Provides two ports for connecting ISDN trunks.	
S8300	V1	Server	

Table 2: Permitted slots for media modules

Installing an S8300 Server Module

The S8300 can only be inserted in slot V1 on the left side of the Avaya G450 Media Gateway.

- 1. If you are inserting an S8300/B or S8300/C module, remove the plate above slot V1, labelled "Remove before removing or inserting S8300 module".
- 2. Remove the blank plate from slot V1.
- 3. Position the media module squarely before the V1 bay opening and engage both sides of the module in the interior guides.
- 4. Slide the S8300 module slowly into the chassis. Maintain an even pressure to ensure that the module does not become twisted or disengaged from the guides.

Figure 7: Inserting the S8300 Server module.



- 5. Apply firm pressure to engage the connectors.
- 6. Tighten the spring-loaded captive screws on the front of the module to lock the S8300 Server module into the chassis.
- If you are inserting an S8300/B or S8300/C module, replace the plate labelled "Remove before removing or inserting S8300 module" above slot V1 and tighten the screws on the front of the plate.

Installing other Media Modules

Media Modules are restricted to certain slots. Ensure that you insert each module in a slot appropriate for that module. For a list of allowable slots for each Media Module, see <u>Table 2</u>.

Insert the Media Modules needed for your configuration.

Install Media Modules

Chapter 5: Install Media Resources and PSU

You can add or remove media resources (VoIP) modules or a power supply unit (PSU).

Adding or removing media resources

You can add or remove media resources (VoIP) modules in the G450 main board. To do so, you must pull out the G450 main board. The G450 supports hot insertion and removal of the main board without power drop. However, all services are suspended while the G450 main board is out, and all calls are disconnected. Any translation and other data that is in the running configuration but has not been saved to the startup configuration is lost.

This procedure requires the following steps:

- 1. <u>Removing the G450 main board</u>
- 2. Adding or removing media resource modules: MP20 and MP80
- 3. Inserting the G450 main board

Removing the G450 main board

- 1. Unscrew the two captive screws, one at each side of the G450 main board front panel.
- 2. Open the latches on both sides of the main board.
- 3. Grasp the latches and pull out the main board from its slot.
- 4. Place the main board carefully on a table.

Figure 8: Removing and inserting the G450 main board



Adding or removing media resource modules: MP20 and MP80

The G450 main board has four slots for media resources. Each slot can accommodate either an MP20 (Media Processor 20) module or an MP80 (Media Processor 80) module. An MP20 provides 20 channels, and an MP80 provides 80 channels. However, the G450 supports a maximum of 240 active channels. Therefore, the following number of active channels can be supported: 20, 40, 60, 80, 100, 120, 140, 160, 180, 200, or 240. Note that 220 channels cannot be supported.

- 1. To insert an MP20 or MP80 module:
 - a. Locate the MP20 or MP80 module slot (see Figure 9).



Figure 9: Location of MP20 and MP80 modules

Figure notes:

- 1. MP20 or MP80 module slot
- **2.** MP20 or MP80 module slot
- 3. MP20 or MP80 module slot
- 4. MP20 or MP80 module slot
- b. Position the MP20 or MP80 module at a 45 degree angle to the main board, and start inserting it into an MP20 or MP80 slot (see Figure 10).

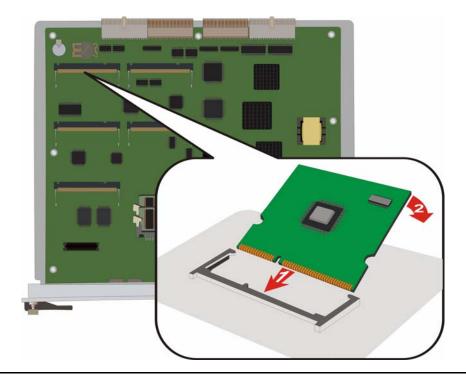


Figure 10: Adding or removing an MP20 or MP80 module

- c. Push the module in all the way. Do not use too much force.
- d. Flatten the module so it is flush with the main board. The latches at both sides click shut.
- 2. To remove an MP20 or MP80 module:
 - a. Open the latches on both sides of the module slot. The module lifts up.
 - b. Pull out the module. Touch the module only at the edges.

Inserting the G450 main board

- 1. Open the latches on both sides of the slot.
- 2. Insert the G450 main board vertically into the slot.
- 3. Push the main board in until the latches begin to close.
- 4. Close and tighten the two captive screws on the front panel.

Inserting a power supply unit

The G450 provides full redundant, load sharing power supply units (1 + 1). A single power supply unit provides sufficient power for any G450 configuration. If you choose to install two power supply units, they operate in a load sharing mode.

Figure 11: Inserting a power supply unit



- 1. Position the power supply unit before the opening and engage both sides of the unit in the interior guides.
- 2. Slide the power supply unit slowly into the chassis, maintaining an even pressure to assure that the unit does not become twisted or disengaged from the guides.
- 3. Close and tighten the two captive screws on the front panel.
- 4. Connect a power cable to the power connector on the power supply unit.
- 5. Plug the power cable into a mains socket.

Chapter 6: Power Up

Grounding Requirements

Note:

Grounding requirements differ widely from country to country. In addition to the grounding instructions presented in this section, you must follow the local electrical installation codes for your location.

You must use two safety grounds to ensure safe operation of the G450 Media Gateway:

- The ground conductor that is part of the AC power cord.
- The field-installed green/yellow conductor, referred to as the supplementary ground conductor.



Both safety grounds must be connected to an approved ground (see Chapter 2 of *Installing and Upgrading the Avaya G450 Media Gateway*, 03-602054, for the definition of an approved ground). If a power cord accompanies the G450, use that cord whenever possible.

WARNING:

Connection of both grounds (the AC power cord and the supplementary ground conductor) is required for safe operation of the G450 Media Gateway.

WARNING:

An improper ground can cause electrical shock, equipment failures, and service outages.

Connecting Ground Conductors

- 1. Remove the ground screw on the rear of the chassis adjacent to the ground symbol.
- 2. Place the ring terminal of the 10 AWG (4 mm²) supplementary ground conductor on the screw.
- 3. Replace the ground screw on the chassis and securely tighten the screw so the screw cannot be loosened without the use of a tool.
- 4. Attach the supplementary ground conductor to an approved ground.

Using a Ground Block

A ground block might be provided for use with multiple Media Gateway installations. Usually, the customer electrician mounts the ground block.

To attach the supplementary ground conductor (that is already attached to the grounding screw on the chassis) to a ground block:

- 1. Cut the supplementary ground conductor to the length needed to terminate the conductor into one of the terminals of the ground block. Do not coil the supplementary ground conductor.
- Attach one end of the remaining 10 AWG (4 mm²) ground wire to one of the terminals in the ground block and the other end to an approved ground. Cut this ground wire to the length needed to reach the approved ground. Do not coil this wire.

Connecting Power

- 1. Connect the AC power cable to the inlet receptacle on the rear of the chassis.
- 2. Connect the other end of the power cable into a mains socket.

LED Sequence

When you turn on the G450, the following LED sequence occurs:

- 1. The PWR LED on the front panel lights, indicating the operational status of the power supply unit (see <u>Table 3</u>).
- 2. The CPU LED lights if the firmware is running.
- 3. At least one LED on each media module lights initially and then goes off after about 20 seconds.

Table 3: Power Supply Unit PWR LED	
------------------------------------	--

LED	Name	State	Color	Indication
PWR Power	Power	On	Green	Power is OK
		On	Red	A power fault
		Off		The PSU unit is broken or not powered

Chapter 7: Prepare for Configuration

Before you prepare the G450 for configuration, ensure that you load the completed Electronic Pre-Installation Worksheet onto the laptop. You should also load any firmware or license files that you have prepared onto the laptop.

Preparations for configuration differ depending on whether your G450 contains an S8300 Server. This chapter describes both options.

Preparing a G450 with an S8300 Server

Use the Avaya Installation Wizard (IW) to configure the G450 with an S8300. If a remote technician is configuring the G450, see <u>Preparing the G450 with an S8300 for a remote configuration</u> on page 25.

- 1. Connect a laptop computer to the Services port of the S8300, using a crossover cable.
- 2. Make sure the laptop is configured as follows:
 - IP Address: 192.11.13.5
 - NetMask: 255.255.255.252
 - Disable DNS
 - Clear the primary WINS and secondary WINS IP Addresses
 - Disable the Proxy Server in the Internet Explorer
- 3. Launch Internet Explorer on the laptop and type the following URL to access the S8300 Server Home Page: http://192.11.13.6.

The welcome screen for Avaya Integrated Management appears.

- 4. Click **Continue**. The Logon screen for Integrated Management appears.
- 5. Enter the appropriate login name and password.
- Ask a customer representative for a login name and password that the customer would like for the superuser login. If you are a business partner, you can also repeat this procedure to add the dadmin login.

Note:

Make sure the customer can change this login, its password, or its permissions later.

- 7. From the Integrated Management main menu, select Launch Maintenance Web Interface.
- 8. From the navigation menu of the Maintenance Web Pages, select **Security > Administrator Accounts**.

The Administrator Accounts screen appears.

9. Select Add Login.

10. Select Privileged Administrator and click Submit.

The Administrator Logins -- Add Login: Privileged Administrator screen appears.

- 11. Type a login name for the account in the **Login name** field.
- 12. Verify the following:
 - susers appears in the Primary group field.
 - prof18 appears in the Additional groups (profile) field. *prof18* is the code for the customer superuser.
 - /bin/bash appears in the Linux shell field.
 - /var/home/login name appears in the Home directory field, where login name is the name you entered in step 11.
- 13. Skip the fields Lock this account and Date on which account is disabled-blank to ignore.
- 14. For the Select type of authentication option, select password.

Note:

Do not lock the account or set the password to be disabled.

- 15. Enter the password in the Enter password or key field and the Re-enter password or key field.
- 16. In the section Force password/key change on next login select no.
- 17. Click Submit.

The system informs you the login is added successfully.

18. From the Integrated Management main menu, select Launch Avaya IW. The Avaya Installation Wizard (IW) opening screen appears.

Configuring the G450 and S8300 using the Avaya IW

Step through the screens of the Avaya IW to configure the S8300 and the G450. Take note of the following items:

- On the initial IW screen, you can upgrade the wizard if you have a more current version of the AIW.rpm wizard file. You can download the most current version of the AIW .rpm wizard file from the Avaya Web site at http://support.avaya.com/avayaiw. The format of the name of the file is <a href="silesis38300-<version_number>.noarch.rpm">silesis38300-<version_number>.noarch.rpm, where <version_number> is the Avaya IW version number.
- 2. On the Import EPW screen, import the Electronic Pre-Installation Worksheet (EPW) that was prepared.
- 3. On the Usage Options screen, verify the role of this S8300 server.
- 4. Use the NVRAM Init screen to initialize the G450.
- 5. On the Date/Time screen, set the correct date, time, and time zone.
- 6. Upgrade the Communication Manager software to the latest version on the Software Upgrade screen.
- 7. On the SES Co-Res screen, you can enable SES.

- 8. If you have a software update (patch) file for Communication Manager, use the Software Update screen to select the file and update the software.
- 9. On the Phone Message Files screen, you can install standard and custom phone message files.
- 10. On the Media Server IP Addresses screen, enter IP information for the S8300.
- 11. If you selected the **Install this media server as an LSP** option in the Usage Options screen, the LSP Controller screen appears. Enter the primary controller IP addresses for registration and synchronization.
- 12. You can configure optional services: Uninterruptible Power Supply (UPS), Domain Name Service (DNS), Network Time Protocol (NTP), or INADS remote support.
- 13. If you are *not* using IW to generate basic translations, select the **Translation will be added after the installation** option on the Translation Source screen.
- 14. On the Security File screen, load the CM License file that you prepared from your laptop.
- 15. On the IP Addresses screen, click 🍄 to configure the following information for the G450:
 - a. To specify the details of the Primary Management Interface of the G450, use the PMI screen.
 - b. To specify SNMP community strings and trap destinations, use the SNMP screens.
 - c. To specify the Media Gateway Controller(s) used to manage the G450, and the Transition Point information, use the MGC List screen. Click **Ping Test** to test the accessibility of each MGC.
- 16. On the Firmware screen, upgrade G450 and Media Module firmware. New firmware files can be loaded from your laptop directly into the server /tftpboot directory, if needed.
- 17. Use the Change Master Key Optional screen to optionally change the master key which is used to encrypt gateway secrets (passwords, etc.) in the gateway configuration file.
- 18. If you will be using the VPN feature, use the Gateway License screen to install the gateway license file.
- 19. Review the status of the Field Replaceable Units (FRU) in the FRU Status screen.
- 20. On the TFTP Server screen, configure the media gateway TFTP server capability to upload IP Phone configuration files.
- 21. You can configure the modem in the modem configuration screens.
- 22. If you selected the option **Use this wizard to create basic translations** in the Translation Source screen, you can configure Telephony, Trunking, and Endpoints.
- 23. Optionally configure alarming for the modem, OSS alarming, and SNMP alarming.
- 24. Optionally change the root password on the media gateway.
- 25. On the Authentication File screen, load the CM authentication file that you prepared from your laptop.

Preparing the G450 with an S8300 for a remote configuration

If you need to prepare the G450 with an S8300 for a remote configuration, you must attach and enable a modem.

1. Connect a USB modem to one of the USB ports on the S8300 Server.

Prepare for Configuration

- 2. From the Integrated Management Main Menu select Launch Maintenance Web Interface.
- 3. Enable the modem as follows:
 - a. From the navigation menu of the Maintenance Web Pages, select Security > Modem. The Modem screen appears.
 - b. Select Enable modem for unlimited incoming calls.
 - c. Click Submit.
- 4. To ensure that the modem is enabled correctly:
 - a. Setup a dialup connection on a remote PC with the following settings:
 - Automatically detect settings.
 - No Username, Password, or Domain.
 - Security > Show Terminal Window.
 - b. Dial in to the modem from the remote PC.
 - c. When prompted, provide the rasaccess login and password in the Terminal Window.
 - d. Close the Terminal Window to complete the connection.
- 5. A remote technician can now access the S8300 remotely and run Avaya IW.

Configuring a G450 without an S8300 Server

You use the Gateway Installation Wizard (GIW) to configure the Avaya G450 Media Gateway without an S8300. You can perform the configuration on site, or prepare the G450 for a remote configuration.

- 1. Install the GIW software on your laptop. You can download the GIW software from the Avaya support Web site, at http://support.avaya.com/avayaiw and go to File Downloads.
- 2. Connect the flat RJ-45 to RJ-45 cable to the DB-9 cable adapter.
- 3. Plug the RJ-45 cable into the G450 Console port or Services port.
- 4. Plug the DB-9 end of the cable into a COM port of the laptop.
- 5. Double-click the GIW icon on the laptop to open the Gateway Installation Wizard. The Overview screen appears.
- 6. Click Continue. The COM Port Selection screen appears.
- 7. Select the COM port you are using on the laptop to connect to the G450 from the **COM Port** drop down list.

Note:

Not every COM port works with every laptop. If you have trouble connecting using the COM port you have selected, try a different COM port.

- 8. Click **Continue**. The Wizard Usage Options screen appears.
- 9. To perform an on site configuration using the GIW, continue with the next section. To prepare for a remote configuration, continue with <u>Preparing for a remote configuration of the G450</u> on page 27.

Configuring the G450 using the GIW

- 1. From the Wizard Usage Options screen, select **Continue the installation using this wizard**, and click **Continue**.
- 2. On the Initialize Components screen, check the options that are appropriate for your installation.
- 3. On the Import EPW screen, import the Electronic Pre-Installation Worksheet (EPW) that was prepared.
- 4. Use the IP Address screen to configure addresses and communication parameters for the G450. Click 🍄 to configure the following information for the media gateway:
 - a. To specify the details of the Primary Management Interface of the G450, use the PMI screen.
 - b. To specify SNMP community strings and trap destinations, use the SNMP screens.
 - c. To specify the Media Gateway Controller(s) used to manage the G450, and the Transition Point information, use the MGC List screen. Click **Ping Test** to test the accessibility of each MGC.
- 5. On the Firmware screen, identify the TFTP server used for file transfer, and specify the firmware upgrade files to load.
- 6. Use the Change Master Key Optional screen to optionally change the master key which is used to encrypt gateway secrets (passwords, etc.) in the gateway configuration file.
- 7. If you will be using the VPN feature, use the Gateway License screen to install the gateway license file.
- 8. Use the G450 Modem Type Selection screen to enable a modem attached to the G450.
- 9. Use the Change Root Password screen to set the root password for the G450.
- 10. Click **Finish** to complete the G450 configuration.

Preparing for a remote configuration of the G450

If you need to prepare the G450 for a remote configuration, you must attach a modem and enable it using the GIW.

- 1. From the Wizard Usage Options screen, select **Enable the modem for remote installation**, and click **Continue**. The Modem Type Selection screen appears.
- 2. Select the type of modem you are using, and click **Continue**.
- 3. Verify that the modem parameters are correct for the type of modem that you selected. Click **Continue**. The Connect Modem screen appears.
- 4. From the Connect Modem screen, click **Finish** to exit the Gateway Installation Wizard.
- 5. Connect the modem that you specified in Step 2.
- 6. Dial in to the modem to ensure that it is set up correctly.
- 7. A remote technician can now dial in to the G450 and complete the configuration using the CLI interface.

Next Steps

Using Avaya IW and GIW

The full configuration process is performed using the Avaya Installation Wizard or Gateway Installation Wizard interface. For more detailed information about IW and GIW:

- See the online help for IW and GIW at http://support.avaya.com/avayaiw.
- Review Job Aid: Avaya Installation Wizard, 555-245-754, and Job Aid: Avaya Gateway Installation Wizard, 555-245-756.

Using the Command Line Interface

For information about configuring the G450 with the Command Line Interface:

- For instructions on how to connect to the CLI, review Chapter 4 of Administration for the Avaya G450 Media Gateway, 03-602055 Accessing the Avaya G450 Media Gateway.
- For detailed information about CLI commands, refer to the Avaya G450 CLI Reference, 03-602056.