AVAYA

Quick Start for Hardware Installation:

Avaya G700 Media Gateway
and
Avaya S8300 Server

Contents

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Chapter 1: Before You Go to the Installation Site

The following activities must be completed before going to an installation site.

Other documents

Obtain access to the following documentation:

- The G700/S8300 Installation guide: *Installation and Upgrades for Avaya G700 Media Gateway and Avaya S8300 Server*, 555-234-100.

- The documentation library on CD, installed on your laptop, or accessible from the Avaya Support web site: *Documentation for Avaya Communication Manager, Media Gateways and Servers*, 03-300151*.*

License file, software, and firmware

The following tasks must be completed before you can install an Avaya S8300 Server and Avaya G700 Media Gateway.

To do before you install the S8300 and G700

1. Meet with the customer to complete the ***Electronic Preinstallation Worksheet***. The Electronic Preinstallation Worksheet contains specific information about the customer's network configuration and telephony requirements. This information is required to use the Avaya Installation Wizard to configure the Avaya IP solution.

   Note:
   > To use the Avaya Installation Wizard, Release 3.0 or later of Communication Manager must be installed on the Server. If a pre-3.0 release of the Communication Manager is installed on the Server, the software must be upgraded before the Avaya Installation Wizard can be used.

   Note:
   > The current release of the Avaya Installation Wizard supports only an English-language operating system.

2. If you are using the Avaya Installation Wizard to generate *basic translations* on an S8300 primary controller in a G700, get the customer's Name and Number list file and the Custom Templates. Copy these files to your laptop. The Electronic Preinstallation Worksheet contains instructions for the Name/Number and Custom Templates files.

3. Retrieve the required license file from Remote Feature Activation (RFA).

   Note:

   > A separate license file for SIP Enablement Services (SES) is required if SES is optioned for coresidency with Communication Manager on the S8300 Server. After you install Communication Manager and you enable SES, you use the SES interface to install the SES license.

   Note:

   > As of Communication Manager Release 3.1, the Avaya Installation Wizard no longer requires the inclusion of the FEAT_DADMIN login permissions in the license in order to generate basic translations. However, for Business Partners, the license may still include the FEAT_DADMIN login permissions.

4. Obtain a password (authentication) file from Authentication File System (AFS).

5. Obtain the most recent versions of software and firmware on CD-ROM. Check for and download the most recent versions of firmware from http://support.avaya.com or, if necessary, from the Download Center.

6. Determine if the customer purchased a USB CD-ROM drive as part of the order. If the order does not include a USB CD-ROM drive, obtain a USB CD-ROM drive for temporary use at the site.

7. The technician will be advised if ProVision will be used in addition to the Avaya Installation Wizard. ProVision can be used to upload all of the *Communication Manager* translations. Information on the Avaya Installation Wizard options for ProVision is in the Electronic Preinstallation Worksheet.

Laptop requirements

The laptop PC that you use to access the S8300 and/or G700 and to launch the Avaya Installation Wizard must meet the following requirements:

- A minimum display resolution of 800 by 600

- 10/100 ethernet card installed

- Windows 95 or later

- Internet Explorer 5.0 or later

- A serial communication interface

Once you have verified that all the above activities are completed, you can begin product hardware installation following the instructions in this guide.

Chapter 2: Conduct Equipment Inventory

The following list of equipment contains items that may not be needed for your configuration — those items are specified as "optional" and may not be included in your inventory.

	Avaya G700 Media Gateway Chassis
	Optional Avaya S8300B Server
	Optional Avaya S8300C Server
	Optional Avaya MM710 T1/E1 Media Module
	Optional Avaya MM711 Analog Media Module
	Note: The Analog and the DCP media modules look similar. Check their labels to verify the module type.
	Optional Avaya MM712 DCP Media Module
	Note: The DCP and the Analog media modules look similar. Check their labels to verify the module type.
	Optional Avaya MM714 4FXS x 4FXO Analog Media Module
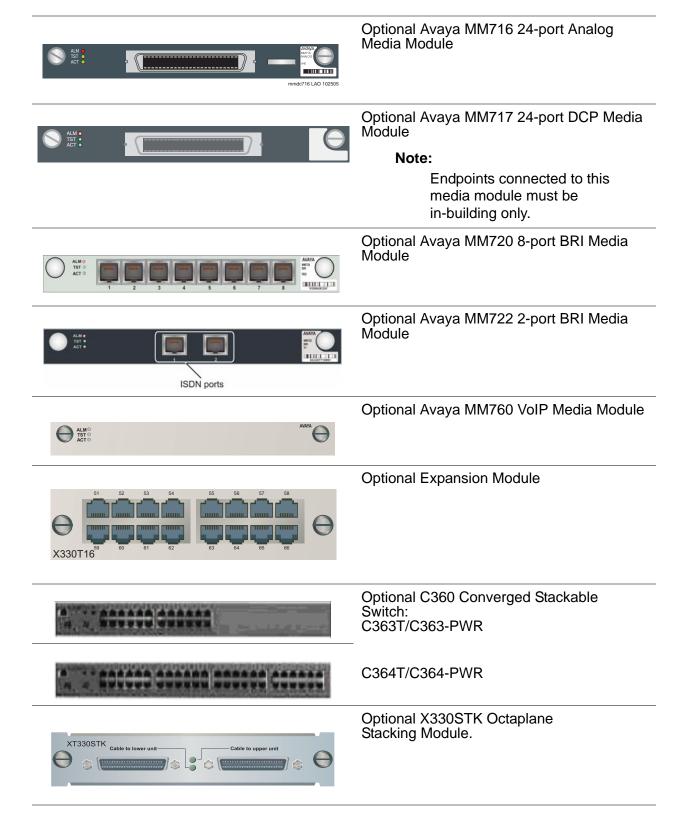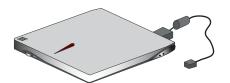
	Optional Avaya MM716 24-port Analog Media Module
	Optional Avaya MM717 24-port DCP Media Module **Note:** Endpoints connected to this media module must be in-building only.
	Optional Avaya MM720 8-port BRI Media Module
	Optional Avaya MM722 2-port BRI Media Module
	Optional Avaya MM760 VoIP Media Module
	Optional Expansion Module
	Optional C360 Converged Stackable Switch: C363T/C363-PWR
	C364T/C364-PWR
	Optional X330STK Octaplane Stacking Module.

Optional USB modem.
Material ID: 700235526.

Optional CD-ROM or DVD/CD-RW drive:

- Teac USB CD-ROM Drive. Material ID: 700289580.

- Addonics USB DVD/CD-RW Drive. Material ID: 700406267 (Available with S8300C only).
- DVD/CD-RW drive for S8300/S8400. Material ID: 700406267.

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Optional industrial-strength Compact Flash card and Compact Flash drive available through your Avaya sales representative

Optional Uninterruptable Power Supply (UPS) for AC-Powered Gateways only

Note:

A stand-alone version of the UPS is shown.

Screw Packet and Rack Mount Brackets

For each bracket:

- Three flat-head machine screws attach the bracket to the G700

- Two round-head lock-washer machine screws attach the bracket to the rack
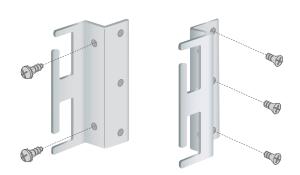
  Note:

  > There are four sizes of lock-washer screws in the packet for attaching the brackets to the rack. Use the appropriate size screws to match the specific hole size of the rack.

Optional X330SC Short Cable

Note:

> The X3300SC Short Cable is sometimes shipped attached to the X3300STK Octaplane Stacking Module.

Optional X3300RC Redundancy Cable

Optional X3300 LC Long Cable
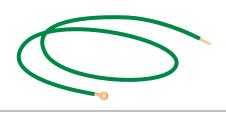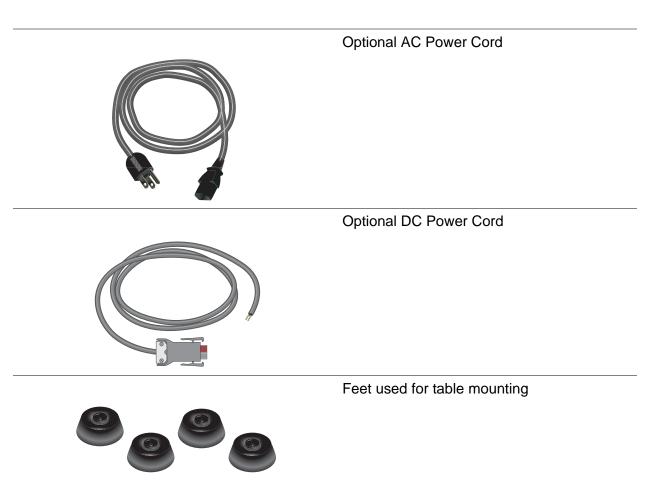
Optional USB Cable and Adapter for use with the USB modem

Crossover Ethernet Cable (CAT5)

Serial or "Console" Cable and Adapter

Ground wire

	Optional AC Power Cord
	Optional DC Power Cord
	Feet used for table mounting

Chapter 3: Mount Media Gateway

1. Wear an anti-static ground wrist strap and attach to an approved ground.

2. For rack mount, install the mounting brackets on the left and right sides of the gateway chassis using the flathead screws from the bracket packet.

   Note:
   > The brackets can also be installed in the middle of the chassis.

3. Lift the media gateway chassis and mount in a rack using two lock-washer screws for each bracket.

   ⚠ **CAUTION:**
   > The weight of the media gateway is unevenly distributed and may require two persons to mount in the rack.

4. For desktop mount. Install feet using plastic push rivets.

5. Connect the ground wire to the ground conductor on the back of the media gateway.

6. Attach the other end of the ground wire to an approved ground.
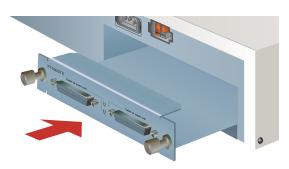
Chapter 4: Install Octaplane Stacking Module

Note:

Complete these steps only if you are connecting more than one G700 Media Gateway in a stack configuration.

1. Remove the blank faceplate from the Octaplane slot on the back of the media gateway.

2. Align the X330STK Octaplane Stacking Module with the interior guides and insert until firmly seated.

   ⚠ **WARNING:**

   To prevent damage to equipment, handle the module by the faceplate or edge.
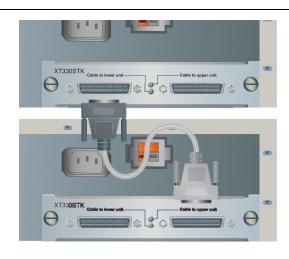
3. Tighten the captive screws.

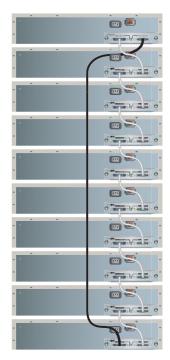**Install Octaplane Stacking Module**

Chapter 5: Connect Media Gateways

Note:

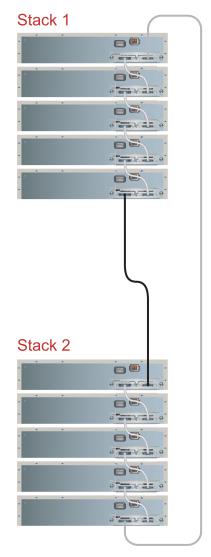Complete these steps only if you are connecting more than one G700 Media Gateway in a stack configuration.

1. Using the gray X330SC short cables, connect the media gateways from the bottom up:

   ● Connect the light gray connector to the port labeled "Cable to upper unit."

   ● Connect the dark gray connector to the port labeled "Cable to lower unit."

   ● Repeat both steps until all units in the stack are connected (maximum of 10 units).

Single-stack redundancy

2. For single-stack redundancy, connect the bottom unit and the top unit using the black X330RC redundancy cable:

   ● Connect the light gray connector to the port labeled "Cable to upper unit: on the top unit of the stack.

   ● Connect the dark gray connector to the port labeled "Cable to lower unit" on the bottom unit of the stack.

Stack 1

Stack 2

Multiple-stack redundancy

3. For multiple stack redundancy, connect
the stacks using the black X330RC
redundancy cable and the gray X330LC
long cable:

- Connect the light gray connector of the
black X330RC redundancy cable to the
port labeled "Cable to upper unit" on
the top unit of the stack 2.

- Connect the dark gray connector of the
black X330RC redundancy cable to the
port labeled "Cable to lower unit" on
the top unit of the stack1.

- Connect the light gray connector of the
gray X3300LC long cable to the port
labeled "Cable to upper unit" on the top
unit of the stack 1.

- Connect the dark gray connector of the
gray X330LC long cable to the port
labeled "Cable to lower unit" on the
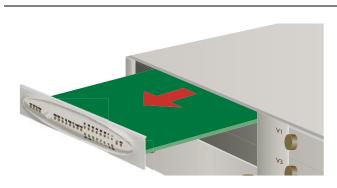bottom unit of the stack 2.

Chapter 6: Install S8300 Server

Note:

> Complete these steps if you are installing an S8300 Server (configured as the primary controller or as a Local Survivable Processor).
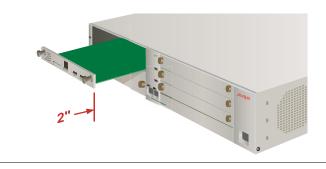

1. From the front of the G700 Media Gateway, remove the blank faceplate from slot V1.

2. For an S8300B, remove the LED module (located above slot V1) and place in an anti-static bag.
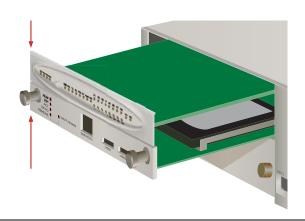
   For an S8300C, you do not need to remove the LED module.

3. Align the S8300 Server with the lower interior guides.

   For an S8300B, insert about 2" into slot V1.

   For an S8300C, insert all the way into slot V1 until the faceplate is flush with the LED module.

4. For an S8300B, align the LED module with the upper interior guides and insert until the faceplate is flush with the S8300B Server.

5. For an S8300B, continue inserting both modules together until firmly seated.

⚠ **WARNING:**

Failure to seat both modules together could result in equipment damage.

6. Tighten the captive screws on the S8300.

Chapter 7: Install Media and Expansion Modules

Note:

> In each gateway, a single expansion module can be installed in the lower left slot only. If the S8300 is installed (in slot V1), up to 3 media modules can be installed in slots V2–V4. If no S8300 is installed, a fourth media module can be installed in Slot V1.
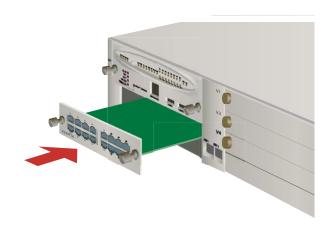
1. To install a media module, first remove the upper right blank faceplate.

   Note:

   > All slots must have either a module installed or be covered by a blank face plate. Do not leave any slots uncovered.

2. Align the media module with the interior guides and insert into slot until firmly seated.

3. Tighten the captive screws.

4. Repeat steps 1 through 3 for each media module to be installed.

5. To install the expansion module, first remove the lower left blank faceplate.

6. Align the expansion module with the interior guides and insert into slot until firmly seated.
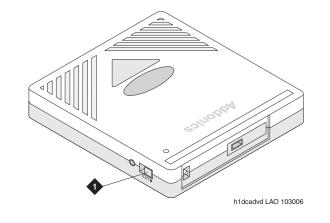
7. Tighten the captive screws.

Chapter 8: Install USB Modem and CD-ROM Drive

USB Modem

1. Connect the USB cable to one of the USB ports on the faceplate of the S8300.

2. Following the instructions packaged with the modem, connect the other end of the USB cable to the modem.

3. Connect the analog telephone line to the RJ-11 jack on the modem.

USB CD-ROM/DVD Drive

The USB CD-ROM or DVD/CD-RW drive is used primarily as a software source location when remastering an S8300 hard drive.

1. Connect the USB cable into one of the USB ports on the faceplate of the S8300.

2. Connect the other end of the USB cable to the CD-ROM or DVD/CD-RW drive.

3. If you are using an Addonics DVD/ CD-RW drive, connect the power cord to the drive and an electrical outlet.

   Note:
   > The TEAC drive and S8300/ S8400 drive get their power from the server over the USB connection.

4. If you are using an Addonics DVD drive, set the power source switch on the side to **EXT**, *not* **USB**. See item **1** in the figure to the left.

5. If you are using an S8300/S8400 DVD/ CD-RW drive, set the on/off switch to **On**.

   Be sure to set the S8300/S8400 drive to **Off** when not in use.

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Install USB Modem and CD-ROM Drive
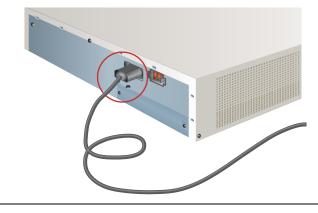
Chapter 9:   Install UPS and Apply Power

UPS (AC only)

1. The UPS is an option for AC-powered gateways only. From the back of the G700 Media Gateway, connect the Uninterruptable Power Supply (UPS) using the manufacturer's instructions.

   Note:
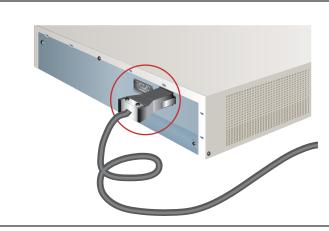   > A stand-alone version of the UPS is shown.

AC power

1. Apply power to each media gateway by connecting the AC power cord.

   Note:
   > There is no on/off switch. The units will power up when connected.

DC power

1. Apply power to each media gateway by connecting the DC power cord.
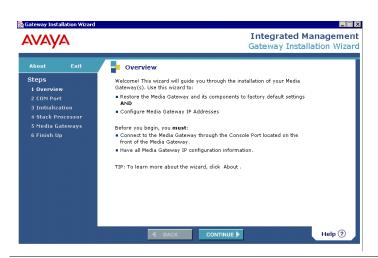
   Note:

   > There is no on/off switch. The units will power up when connected.

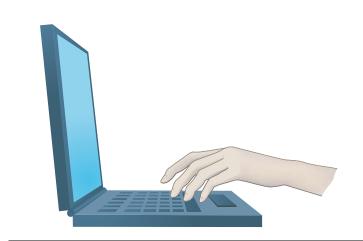# Chapter 10: Prepare for configuration — G700 without an S8300

This section assumes the G700 does not contain an S8300 Server. Use the Gateway Installation Wizard from the laptop to enter the initial gateway configuration parameters.
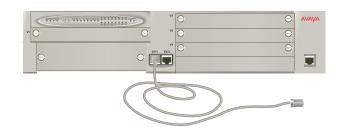

1. Connect the RJ45 end of a serial cable to the Console port on the lower right of the front of the G700.

2. Connect the other end of the cable to the Serial port on the laptop.

3. Power on the laptop.

4. Start a Hyperterm (or similar application) session.

5. Start the Gateway Installation Wizard (GIW).

6. Follow the GIW instructions to enter the configuration parameters.
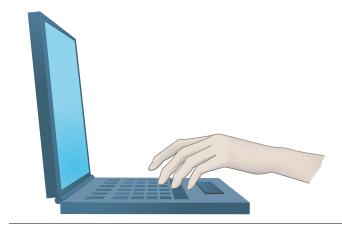
To connect to the customer's LAN

1. Connect a straight Ethernet cable to one of the Ethernet ports (labeled Ext 1 and Ext 2) on the front of the G700.

2. Connect the other end of the cable to a LAN connector.

Chapter 11: Prepare for configuration — G700 with S8300

This section assumes the G700 has an S8300 Server installed.

1. Connect a crossover Ethernet cable to the Services port on the faceplate of the S8300 Server.

2. Connect the other end of the cable to the Ethernet port on the laptop.

3. Power on the laptop.

4. Start an SSH session with PuTTY or another SSH tool.

5. Use SSH to connect to `192.11.13.6`.

6. Specify port 22, if requested.

7. When the first RP installer page appears, select options as appropriate and continue to complete the software installation.

8. Verify the Services network settings:

   a. IP Address: 192.11.13.5
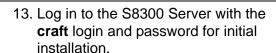
   b. Subnet Mask: 255.255.255.252

   c. Domain Name Service (DNS): disabled

9. Open MS Internet Explorer and disable the Proxy Server.

10. In the browser address field, initiate access to the S8300 by typing in lower case:

    http://192.11.13.6

11. Click **Continue** to access the Logon page.

12. Click **OK** or **Yes**, as appropriate, for any security pages that may appear prior to the Logon page.

13. Log in to the S8300 Server with the **craft** login and password for initial installation.

14. Add a superuser login:

   a. From the Integrated Management main menu, select **Launch Maintenance Web Interface**.

   b. In the Maintenance Web Pages, select **Security** > **Administrator Accounts**.

   c. In the Administrator Accounts screen, select **Add Login** and **Privileged Administrator**.

   d. In the Administrator Accounts -- Add Login: Privileged Administrator screen, enter a super-user (SUSER) login in the **Login name** field, and a password in the password fields.

   Note:
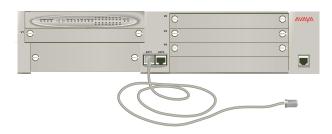
   An SUSER group must be created before you can install the authentication file. The authentication file is installed automatically by the Avaya Installation Wizard.

15. Use the Avaya Installation Wizard. Click **Launch Avaya Installation Wizard** and continue.

   Note:

   If you are *not* using the Avaya Installation Wizard, refer to *Installation and Upgrades for Avaya G700 Media Gateway and Avaya S8300 Server*, 555-234-100, for additional instructions.

To connect to the customer's LAN

1. Connect a straight Ethernet cable to one of the Ethernet ports (labeled Ext 1 and Ext 2) on the front of the G700.

2. Connect the other end of the cable to a LAN connector.
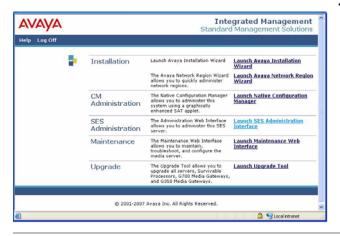
To connect USB Modem

To configure the G700 and S8300 remotely, connect the USB modem.

1. Connect the USB cable to either of the two USB port on the faceplate of the S8300.

2. Following the instructions packaged with the modem, connect the other end of the USB cable to the modem.

3. Connect the analog telephone line to the RJ-11 jack on the modem.

4. Go to the Maintenance Web Interface and select Modem in the Security Category.

5. Select the box labeled "Enable modem for unlimited incoming calls" and click **Submit**.

To enable and configure SES, if optioned

1. On the Maintenance Web Interface, under Miscellaneous, select **SES Software**.

2. Click **Enable**.

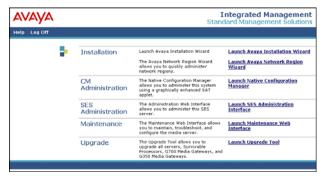   The system can take up to 30 seconds to enable SES.

3. Wait thirty seconds, then click the refresh button on your browser.

   When complete, the **SES is disabled** text changes to **SES is enabled**.

To verify SES is enabled

1. Return to the S8300 Web interface Welcome page, and refresh your browser.

   On the main menu for the Integrated Management Suite, the **SES Administration** menu option appears.
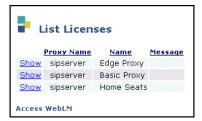
To install the SES license

From the WebLM server that is located on an edge or a combined home/edge server:

1. At the **Integrated Management Standard Management Solutions** main page, select **Launch SES Administration Interface**.

2. In the Integrated Management SIP Server Management **Top** page, select **Server Configuration > License**.

3. In the **List Licenses** page, click **Access WebLM**.

   Note:

   If the WebLM server is on a different subnet than the server, change the URL in your browser to include the server's DNS name. When you mouse-over the WebLM link on the List Licenses page, the URL includes an IP address, for example, "https://12.34.56.78/WebLM/index.jsp/." Change the URL to "https://*server-name*/WebLM/index.jsp/," where *server-name* is the DNS name of the server on which you want to install the SES license.

4. In the **WebLM** application screen, select **License Administration**.

5. In the **Authentication** screen, login as **admin** and enter the password.

6. At the prompt, change the password.

7. After you are logged out, log in again as **admin** with the newly-created password.

8. In the **Web License Manager (WebLM)** screen, select **Install License**.

9. In the **Install License** page, browse to the SES license that you want to install.
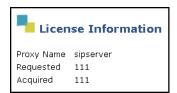
10. Click **Install**.

License information for the Edge Proxy license:

License information for the Basic Proxy license:

License information for the Home Seats license:

To verify SES license installation

1. Wait approximately 15 minutes.

2. In the Integrated Management SIP Server Management **Top** page, select **Server Configuration > License**.

3. In the **List Licenses** page, ensure the following three licenses are listed in the **Name** column:

   - Edge Proxy

   - Basic Proxy

   - Home Seats

4. Click **Show** by the Edge Proxy listing.

5. In the **License Information** page, ensure the following appears:

   ```
   Proxy Name  sipserver

   Requested   1

   Acquired    1
   ```

6. Click **Show** by the Basic Proxy listing.

7. In the **License Information** page, ensure the following appears:

   ```
   Proxy Name  sipserver

   Requested   1

   Acquired    1
   ```

8. Click **Show** by the Home Seats listing.

9. In the **License Information** page, ensure the following appears:

   ```
   Proxy Name  sipserver

   Requested   XXX

   Acquired    XXX
   ```

   where XXX is the actual number of seats in the license.

You must also administer SES. See *Administration of SIP Enablement Services on the S8300 Server*.