AVAYA

Job Aid: Avaya Installation Wizard

For Avaya S8300, S8400, S8500, and S8700-Series Servers, Enterprise Survivable Servers, and Avaya G250, G250-BRI, G250-DCP, G250-DS1, G350, G450, and G700 Media Gateways

> **Note:**
>> For a demo of the Avaya Installation Wizard, please visit http://support.avaya.com/avayaiw and click the Avaya Installation Wizard Demos link.

Introduction

The Avaya Installation Wizard (IW) is a browser-based wizard that is available on the S8300, S8400, S8500, and S8700-series Servers running Avaya Communication Manager 5.0 or higher software. The IW guides you through the steps required to install and configure a server with associated gateways.

> **Note:**
>> The server Home Page contains a link to access the IW for installations. You can get the latest version of the IW RPM file and all wizard template files by downloading them from the http://support.avaya.com/avayaiw web site. Also visit this web site to get additional information about how the use of the wizard template files can make your job easier.

Configurations supported by the Avaya Installation Wizard

You can use the Avaya Installation Wizard (IW) to do the following:

- Install an S8400 as a main server
- Install an S8500, S8710, S8720, or S8730 Server as a main server or an Enterprise Survivable Server (ESS)
- Install an S8500 configured as a Local Survivable Processor (LSP)
- Install an S8300/G700 stack with S8300 configured as a primary controller or Local Survivable Processor (LSP)
- Install an S8300/G350 with S8300 configured as a primary controller or Local Survivable Processor (LSP)

- Install an S8300/G450 with S8300 configured as a primary controller or Local Survivable Processor (LSP)

- Install an S8300/G250/G250-BRI/G250-DS1, or G250-DCP with S8300 configured as a primary controller or Local Survivable Processor (LSP)

- Install and configure IA770 INTUITY AUDIX software on an S8300 Server (*only* if you run the installation concurrently with the Communication Manager installation)

  ⚠ **CAUTION:**

  The IA770 Messaging software can only be installed when installing the Communication Manager software. If you forget to install the IA770 Messaging software and later want to install it, you will need to re-install the Communication Manager software.

- Install service packs on Communication Manager software

- Install security updates for the server

- Upgrade Communication Manager R3.0 and later software on an S8300, S8400, S8500, or S8700-series Server to a future release

- Upgrade IA770 INTUITY AUDIX software from Communication Manager R5.0 on an S8300 Server to a later release (*only* if you run the upgrade concurrently with the Communication Manager upgrade)

  ⚠ **CAUTION:**

  If you are upgrading IA770 software to a future release of Communication Manager (later than R5.0), be sure that messaging is enabled *before* you run the IA770 software upgrade with the Installation Wizard. You can check this with the Maintenance Web Interface by selecting Messaging Software under Miscellaneous. Messaging is enabled if you see the Disable button and "Internal Messaging is enabled" at the end of the note on the screen. The IA770 upgrade will fail if you disable IA770 prior to running the IW for the upgrade.

  In addition, if you upgrade Communication Manager, but *do not* upgrade IA770 Messaging at the same time, then, later, if you want to upgrade IA770, you must also upgrade Communication Manager again along with IA770.

- Configure a G250, G250-BRI, G250-DCP, G250-DS1, G350, G450, or G700 Media Gateway

- Upgrade firmware on a G250, G250-BRI, G250-DCP, G250-DS1, G350, G450, or G700 Media Gateway and their media modules

- Set Product ID and install unicode files

- Configure modems

- Configure OSS/SNMP Alarming

- For the S8300 only, configure telephony, trunking parameters, trunk diagnostics, and endpoint parameters

Configurations not supported by the Avaya Installation Wizard

You **cannot** use the IW to do the following:

- Upgrade Communication Manager from pre-3.0 releases to R5.0
- Install a G700 that is not in a stack containing an S8300 Server
- Install a G250, G250-BRI, G250-DCP, G250-DS1, G350, or G450 that does not contain an S8300 Server
- Install IG550 Integrated Gateway
- Install an LSP or media gateway remotely from an S8400, S8500 or S8700-series Server. That is, to install or upgrade software on a server, the IW must be running on that server. To install or upgrade firmware on a media gateway, IW must be running on the S8300 that resides in the media gateway; or, for a G700 stack, IW must be running on an S8300 that resides in a G700 in the stack.
- Install a P330 Expansion Module in a G700
- Install a C360 Ethernet switch

Electronic worksheets and templates

To allow the IW to automatically configure and install the system, obtain the following files from the project manager and load them onto your laptop:

- Electronic Pre-Installation Worksheet
- Name and Number List (S8300 only)
- Custom Template (S8300 only)

Information on how to use these files is contained within the files themselves.

Electronic Pre-Installation Worksheet

The Electronic Pre-Installation Worksheet (EPW) is filled in by the customer and either the project manager, the software specialist, or another support person who configures Voice over IP systems. The data from this worksheet is automatically pulled into IW to configure the servers and gateways.

Name and number list (with S8300 only)

The Name and Number List, like the EPW, is an Excel spreadsheet. The Name and Number List contains administration data for multiple users. The IW pulls this data to automatically administer users on the new system. This administration includes users' names, unicode names (for native names in Chinese, Japanese, and other non-ASCII character languages), extensions, telephone types, classes of service, languages, locations, and voice mail capability. The Name and Number List also includes hunt group port configuration for new IA770 INTUITY AUDIX systems.

> ⚠️ **CAUTION:**
> For the IW to configure an IA770 INTUITY AUDIX Messaging system, you *must* complete the subscriber data on the Name and Number List and then use the Name and Number List with the IW.

As each user's name and accompanying data is imported, the wizard administers the station using the provided information along with default values for other station fields. After the import has completed, each station will be ready to be plugged into the wall jack and activated. Analog and digital phones will be ready for a TTI registration sequence. IP phones will be ready for an IP registration sequence.

The default values used by the wizard can be viewed at http://support.avaya.com/avayaiw under the **View Default Parameters** link. If the wizard defaults do not meet the customer's needs, you can use a custom template.

Custom Template (with S8300 only)

The Custom Template is a third Excel spreadsheet that allows automatic administration of key custom Communication Manager translations. These are:

- Classes of Service
- Feature Access Codes
- Trunk Access Codes
- Telephone button assignments
- TTI codes
- Voice mail hunt group number and coverage path

Tasks to complete before going onsite

Before going on site to perform an installation, you must perform some or all of the tasks in the following checklist:

Task	Who does it?	Description
Create Password (Authentication) File for Communication Manager	Project Manager or Technician	The Project Manager, software specialist, or another support person who configures Voice over IP systems normally creates the file from the Authentication File Server Web site and sends it to the installer.
Create License File for Communication Manager	Project Manager or Installer	The Project Manager normally creates the file from the RFA Web site and sends it to the installer. If the server being installed is an S8300 or S8500 configured as an LSP, the **FEAT_LSP** feature must be enabled when creating the license file. **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 on an S8300 Server. However, for Business Partners, the license may still include the FEAT_DADMIN login permissions.
For G250, G250-BRI, G350, or G450 (with or without S8300): Create RFA License File for VPN (Optional)	Project Manager or Installer	The Project Manager normally creates the file from the RFA Web site and sends it to the installer. The license file is required only if the customer wants to enable VPN on the media gateway.
For G250 or G350 (with or without S8300): Create AFS Authentication File	Project Manager or Installer	The G250, including all models, and the G350 Media Gateways require the installation of an authentication file to allow secure remote access for services personnel. To create this authentication, access the Authentication File System (AFS), available from the Avaya support Web site. The authentication file is pre-installed in the G450 Media Gateway if the customer is under service contract with Avaya Services.

Task	Who does it?	Description
For S8300 or S8400 only (main server or LSP): Get USB CD-ROM/ DVD drive. Get the Communication Manager software distribution CD.	Installer through Tier 3	For a new installation of the S8300 or S8400, the hard drive contains the Linux operating system software and the Remastering Program only. The Remastering Program copies the .rpm files from the software CD to the hard drive. The software CD also contains the G250, G350, G450, and G700 firmware. The software CD also normally contains the most recent version of firmware for the SIPI board. However, you should always check the most recent version of firmware from the Avaya support Web site.
For S8500 and S8700-series (main server, ESS, or LSP): Get the Communication Manager software distribution CD	Installer through Tier 3	For a new installation, or an upgrade from Communication Manager R1.3 or earlier, of the S8500 or S8700-series Server, the hard drive must be reformatted. This is done using the internal CD-ROM drive and the software CD containing the server .rpm files and the Linux operating system software. The software CD also normally contains the most recent version of firmware for the IPSI board. However, you should always check the most recent version from the Avaya support Web site.
If you have not already done so, get the most recent Installation Wizard RPM file	Installer	Download the most recent IW .rpm file from the Avaya support Web site to your laptop. If the wizard installed on the server is not as recent, the wizard provides the option to update itself with the .rpm file you downloaded.
Get the most recent Unicode Message files (Optional)	Installer	Download the most recent Unicode message files for the languages the customer wants.
Get the most recent firmware files and Communication Manager service packs	Installer	Download the most recent firmware and service packs. These may be more recent than those on the software CD.
Complete the Wizard Electronic Preinstallation Worksheet (EPW)	Project Manager with Customer	The Project Manager, software specialist, or another support person who configures Voice over IP systems normally completes the EPW with the customer and sends it to the installer.

Task	Who does it?	Description
For S8300 only: If doing basic translations, complete the Custom Template (spreadsheet) (Optional, based on customer's desire for custom settings)	Project Manager with customer	The Project Manager, software specialist, or another support person who configures Voice over IP systems normally completes the Custom Template with the customer and sends it to the installer. The Custom Template is used by the wizard to override wizard translation defaults.
For S8300 only: If doing basic translations, complete the Name and Number List (spreadsheet)	Project Manager with Customer	The Project Manager, software specialist, or another support person who configures Voice over IP systems normally completes the Name and Number List with the customer and sends it to the installer. The Name and Number List is used by the wizard to administer stations and to assign IA770 mailboxes to stations.
Load all items required for the installation on the technician's laptop	Installer	Items that must be loaded are Authentication and License file(s). Only the G450 gateway authentication file is pre-installed in the G450. Items that might need to be loaded are: .tar.gz file, individual firmware files, EPW, Name and Number List, Custom Template, and Wizard RPM file.
Set telnet parameters on your laptop and load an SSH program like PuTTY	Installer	You must use telnet to remaster the server hard drive and load software. You must use SSH to log into the Communication Manager server after the software is loaded.

Installing hardware

Once you have verified that all activities are completed, you can begin product hardware installation following instructions in one of the server installation and upgrades manuals. Choose the appropriate documentation from the following list.

For S8300 with G700:

Quick Start for Hardware Installation: G700 Media Gateway & S8300 Server, 555-233-150

Installing and Upgrading the Avaya G700 Media Gateway and Avaya S8300 Server, 555-234-100

For S8300 with G450:

Quick Start for Hardware Installation: Avaya G450 Media Gateway, 03-602053

Installing and Upgrading the Avaya G450 Media Gateway, 03-602054

For S8300 with G350:

Quick Start for Hardware Installation: Avaya G350 Media Gateways, 03-300148

Installing and Upgrading the Avaya G350 Media Gateway, 03-300394

For S8300 with G250/G250-BRI/G250-DS1/G250-DCP:

Quick Start for Hardware Installation: Avaya G250 Media Gateways, 03-300433

Installing and Upgrading the Avaya G250 Media Gateway, 03-300434

For S8400:

Quick Start for Hardware Installation: Avaya S8400 Media Server in an Avaya G650 Media Gateway, 03-300705

Quick Start for Hardware Migration: Avaya S8400 Media Server in an Avaya CMC1 or G600 Media Gateway, 03-300706

Installing and Configuring the Avaya S8400 Server, 03-300678

For S8500:

Quick Start for Hardware Installation: Avaya S8500 Server, 555-245-701

Installing and Configuring the Avaya S8500 Server, 03-300143

For S8710/S8720/S8730:

Quick Start for Hardware Installation: Avaya S8700 Series Server, 555-245-703

Installing and Configuring the Avaya S8700 Series Server, 03-300145

When instructed in the manual, launch the Avaya Installation Wizard.

Remastering the hard drive and installing software

Once you have verified that all activities are completed, you can begin software installation following instructions in one of the server installation and upgrades manuals listed previously.

Accessing the Communication Manager Maintenance Web pages

More details on how to set up your laptop connection to the S8xxx server can be found in the documents listed previously.

1. Make sure your laptop is correctly configured as shown below.

    Note:

    > If you are not using Netswitcher, write down the previous settings so you can re-configure your laptop after the installation.

    a. IP Address: **192.11.13.5**

    b. NetMask: **255.255.255.252**

    c. Disable DNS

    d. Clear the primary WIN and secondary WIN IP Addresses

2. Open the Microsoft Internet Explorer and disable the Proxy Server. Alternatively, you may continue to use the Proxy Server, but you must enter **192.11.13.6** in the Exceptions box.

3. Connect the laptop to the server's Ethernet Services port with a crossover cable.

4. Launch Microsoft Internet Explorer on the laptop.

5. Do one of the following:

    ● Type the following address into the browser in lower case to access the S8xxx server Home Page: **http://192.11.13.6**.

6. Enter the appropriate login and password.

    If you have not previously installed a password file, use the **craft** login and default password. Otherwise, use one of the services logins or the **dadmin** login.

    Select **Launch Maintenance Web Interface**.

Creating a customer login

You must create a customer login before you install the authentication file.

To create a login:

1. 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.

2. Under **Security**, select **Administrator Accounts**.

   The **Administrator Accounts** screen appears.

3. Type the login name in the **Enter Login ID or Group Name** field.

4. Select **Add Login**, and click **Submit**.

   The Administrator Logins -- Add Login screen appears.

5. Type **susers** in the **login group** field.

6. Type **prof18** in the **additional groups** field. *prof18* is the code for the customer superuser.

7. Put a check in the **allow Linux shell access** field.

8. Skip the **lock this account** and **date on which account is disabled** fields.

9. For the **select type of authentication** option, select **password**.

10. Complete the following fields:

    - enter key or password
    - re-enter key or password
    - force password/key change on first login

    Note:

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

11. Leave the defaults in the remaining fields.

12. Click **Add**.

    The system tells the login is added successfully.

Accessing the Avaya Installation Wizard

More details on how to set up your laptop connection to the S8xxx server can be found in the documents listed above.

1. Select the **Launch Installation Wizard** link from the home page to launch the wizard.

2. If the currently installed version of the wizard is older than the version you downloaded, select **Install new version of the wizard from my laptop**. Otherwise, go to step 3.

3. If you are installing a new version of the wizard, click the **Browse** button, select the latest wizard RPM file that you previously downloaded from http://support.avaya.com/avayaiw, and click the **Continue** button.

4. Proceed as guided through the wizard screens, entering information when prompted to do so.

   Note:

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

Overview of wizard tasks

Installation tasks

The following checklist shows the tasks you perform with the IW during an installation. If a task is optional, you can leave the page for that task blank and move to the next page of the IW.

1. (**For S8300 Only**) Enter a root password for the media gateway
2. View server type, serial number and Communication Manager software version
3. Import of Electronic Pre-installation Worksheet (EPW). Using the EPW provides default values from the EPW for the following steps.
4. Select wizard usage (Install main server, ESS [**S8500/S8700-series only**], or LSP [**S8300/S8500 only**], or upgrade)
5. Review Checklist
6. (**For S8300 Only**) Initialize NVRAM option (restore factory default settings on all media gateways) [optional]. This option is unnecessary for a new installation.
7. Set date, time and time zone

8. Enter Product ID [optional] (For S8500 only, enter a second Product ID for the RMB. For the S8400 only, enter a second Product ID for the MPC.)
9. Upgrade Communication Manager software, if software was previously installed. This option is unnecessary for a new installation.
10. (**For S8300 on a G450 Only**) Enable SES, if optioned by the customer
11. Install service packs and security updates, if necessary
12. Install Unicode and/or user-defined phone message files [optional] (**for main servers only**)
13. (**For S8710, S8720, and S8730 only — main server and ESS versions**) Specify whether you are copying configuration data from the duplicated server or entering it the first time
14. (**For S8710, S8720, and S8730 only — main server and ESS versions**) Specify whether you are configuring a system with hardware duplication or software duplication
15. (**For S8400 and S8500 only — main server, LSP, and ESS versions**) Define server names, Ethernet port assignments, and processor Ethernet interface
16. (**For S8710, S8720, and S8730 only — main server and ESS versions**) Define server names, the default active server, and Ethernet port assignments
17. (**For S8710, S8720, and S8730 only, both the main server and ESS versions**) Define duplication link
18. (**For S8400, S8500, S8710, S8720, and S8730 only, both the main server and ESS versions**) Define Control Network A
19. (**For S8500 — ESS only, or S8710, S8720, and S8730 — main server and ESS versions**) Define Control Network B, if any
20. (**For S8400, S8500, S8710, S8720, and S8730 only, both the main server and ESS versions**) Define LAN address
21. (**For the S8300 only**) Enter IP address information for the S8300 Server. (This task includes entering an integration IP address for IA770 INTUITY AUDIX Messaging. The IA770 integration IP address, which the server uses to send control messages and VoIP voice signals to the IA770 system, must be different from the server IP address.)
22. (**For S8300/G700 Only**) Enter IP address information for the P330 Stack Processor
23. (**For S8300/G700 Only**) Add IP routes, if appropriate
24. **(For S8300, S8400, S8500, and S8700-series LSP or ESS Only)** Enter primary controller IP addresses for registration and synchronization
25. Configure optional services (UPS, DNS, NTP, INADS) (**for S8710, S8720, and S8730, also configure Ethernet switches and static network routes**) (**for S8500, also configure RMB**) (**for S8400, also configure MPC**) [optional]

26. **(For S8300 only)** Select translations source (the wizard or skip to add translations after the installation via ProVision, the SAT, or another tool) [optional]
27. Install security file for the S8xxx server
28. (**For S8300 with G700 only**) Configure each G700: ● Enter MGP IP information (Address, Subnet mask, VLAN, IP routing info) ● Enter MGC list information ● Enter VoIP engine and VoIP media module IP addresses ● Media gateway is added to translations
29. (**For S8300 with G250/G250-BRI/G250-DS1/G250-DCP/G350/G450 Only**) Configure the following: ● Enter PMI IP information (Address, Subnet mask, VLAN, IP routing info) ● Enter SNMP community strings for SNMP v1 and SNMP v3 ● Enter MGC list information
30. (**For S8300 Only**) Upgrade the firmware for all media gateway components [optional]
31. (**For S8300 with G250/G250-BRI/G250-DS1/G250-DCP/G350/G450 Only**) Enter the Master Key. This key is used for encrypting configuration files during a backup, restore, or copy operation.
32. (**For S8300 with G250/G250-BRI/G250-DS1/G250-DCP/G350/G450 Only**) Install the media gateway license file, if any
33. (**For S8300 with G250/G250-BRI/G250-DS1/G250-DCP/G350 Only**) Install the media gateway authentication file to allow secure remote access for Avaya services personnel
34. (**For S8300 with G450 Only**) Check field-replaceable units (FRU) status
35. (**For S8300 with G250/G250-BRI/G250-DS1/G250-DCP/G350/G450 Only**) Configure the media gateway TFTP server capability for IP Phone configuration files. IP phones can download configuration files from the media gateway's TFTP server.
36. (**For S8300 with G250/G250-BRI/G250-DS1/G250-DCP/G350/G450 Only**) Configure the modem

37. **(For S8300 as Primary Controller Only)** If translations source is the wizard, generate basic translations: [optional] ● Enter country ● Import a custom template file that overrides the wizard defaults [optional] ● Enter call routing parameters ● Enter dial plan extension ranges ● Import the name and extension list to administer stations [optional] ⚠ **CAUTION:**   For the IW to install translations related to an IA770 INTUITY AUDIX Messaging system, you *must* complete both the subscriber data and the hunt group port data on the Name and Number List and then use the Name and Number List with the IW. ● Configure the IA770 [optional] ● Configure IP trunks [optional] ● Configure, check, and run diagnostics on T1/E1, BRI and analog CO trunks [optional]
38. **(For S8300 as Primary Controller Only)** Display FAC and security code for doing TTI merge of sets [optional]
39. Configure modem for alarming [optional]
40. Configure OSS Alarming [optional]
41. Configure SNMP alarming [optional]
42. (**S8300 only**) Assign root password
43. (**S8300 only**) Install authentication file for the S8xxx server
44. (**S8300 only, for which the translations source is the Wizard and Avaya Installer and dadmin license is used**) Install 2nd license file that disables "dadmin"
45. Save installation log file

Upgrade tasks

> ⚠️ **CAUTION:**
>
> For an upgrade from Communication Manager R1.x or R2.x to Communication Manager R5.0, you *cannot* use the IW. However, you can use IW to upgrade from R3.0 and higher releases of Communication Manager.

The following checklist shows the tasks you perform with the IW during an upgrade. If a task is optional, you can leave the associated page of the IW blank and move to the next page. Note that you do not use the EPW or other templates.

> **Note:**
>
> For an upgrade of an S8300 **from pre-R2.0 Communication Manager software**, you must replace the S8300 Server with an S8300B or C Server. In addition, you must remaster the new S8300B or C hard drive. Use the Communication Manager software distribution CD containing the software files and the USB CD-ROM drive on the server.
>
> For an upgrade of an S8300 **from R2.0 Communication Manager software**, the customer may or may not already have the S8300B Server. Check the hardware version to see if server replacement is necessary. If you replace the server, you must also remaster the hard drive as described above. For more information, see *Installing and Upgrading the Avaya G700 Media Gateway and Avaya S8300 Server*.

> ⚠️ **CAUTION:**
>
> Ensure that a login in the superuser (SUSER) group has already been created within Communication Manager before the upgrade. If one does not exist, create one using the SAT command `add login`, then perform the upgrade with AIW.

1. View server type, serial number and Communication Manager version
2. Import of Electronic Pre-installation Worksheet (EPW) [skip]
3. Select wizard usage (Upgrade)
4. Review checklist [skip]
5. Review IP addresses
6. Set date, time and time zone [optional]
7. Upgrade Communication Manager and, **for S8300 only**, IA770 INTUITY AUDIX Messaging software [optional]   ⚠ **CAUTION:**   Be sure that messaging is enabled *before* you run the IA770 software upgrade with the Installation Wizard. You can check this with the Maintenance Web Interface by selecting Messaging Software under Miscellaneous. Messaging is enabled if you see the Disable button and "Internal Messaging is enabled" at the end of the note on the screen. The IA770 upgrade will fail if you disable IA770 prior to running the IW for the upgrade.   In addition, if you upgrade Communication Manager, but *do not* upgrade IA770 Messaging at the same time, then, later, if you want to upgrade IA770, you must also upgrade Communication Manager again along with IA770.
8. Install service packs and/or security updates
9. Install the gateway license file [optional]
10. (**For G250/G350 only**) Install the gateway authentication file if you are upgrading a G250 or G350 to release 4.0 or above, and have a service contract with Avaya Services
11. (**For S8300 only**) Upgrade the firmware for all components on each media gateway [optional]