Job Aid:
Upgrade Tool And Worksheets
for Avaya S8300 (LSP) Media Server and Avaya G350 and G700 Media Gateways

555-245-757
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This job aid describes the steps required to use the Upgrade Tool to upgrade software and firmware on an S8300 Media Server configured as a Local Survivable Processor (LSP), and/or a G350 or G700 Media Gateway. It also contains the **Upgrade Tool Worksheets** you need to run the Upgrade Tool. **Worksheets appear at the end of this document** and should be filled in with actual customer data by the project manager, along with the customer administrator. The project manager should then send a printout of the worksheets to the person running the upgrade. Better yet, since this document is a Word file, the project manager can also type data directly into the file and email the file to the person running the upgrade.

Important: To complete the worksheets in Word, simply tab to the fields and type the data. Then, save the file by selecting **File>Save As**, then enter a name for the file.

Note: For additional information on the Upgrade Tool, use the online help available on the Upgrade Tool itself.

Purpose

The Upgrade Tool allows you to upgrade Local Survivable Processors (LSPs) (including applying a patch, if necessary) and G350 and G700 Media Gateways automatically from the primary controller. The primary controller can be an S8300, S8500, or S8700 Media Server. With the Upgrade Tool, you do not have to physically be at the LSP and gateway locations in order to perform the upgrades. Additionally, you do not have to run the upgrades one by one. Simply type the needed information for all LSPs and gateways into the Upgrade Tool. Then run the Upgrade Tool, which automatically upgrades the software and firmware on all LSPs and G350 or G700 gateways, respectively.

> NOTE: The Upgrade Tool cannot be used while running on an LSP. It must be running on a primary controller.

You cannot use the Upgrade Tool to do the following:

- Install a new LSP or a new G350 or G700 Media Gateway. For each new installation, you must be on site and use the Avaya Installation Wizard (for an LSP), the Avaya Gateway Installation Wizard (for a media gateway), or perform a manual installation.
- Upgrade LSPs to Communication Manager Release 2.0. An LSP must already have Communication Manager 2.0 or higher. Thus, the Upgrade Tool is used for upgrades to software releases higher than Communication Manager 2.0.
- Upgrade an S8500 or S8700 Media Server.
- Upgrade an S8300 Media Server acting as the primary controller.
- Upgrade an active LSP (one that has taken control of calls because of a problem with the primary controller).
- Upgrade P330 Expansion modules.
- Upgrade G600, G650, CMC1, SCC1, or MCC1 Media Gateways

Configurations Supported by the Upgrade Tool

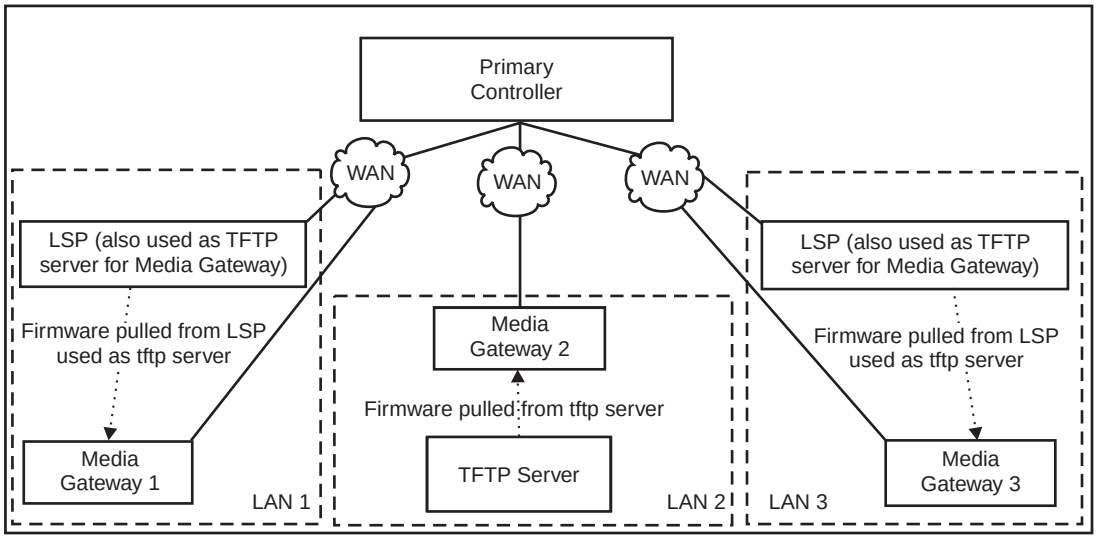
The Upgrade Tool supports upgrades of:

- G350 and G700 Media Gateways only
- G350 and G700 Media Gateways supported by LSPs
- A mix of G700 Media Gateways, some that are supported by LSPs (Figure 1)

To upgrade an LSP or gateway with the Upgrade Tool, the LSP or gateway must already be administered and registered with the primary controller. To check, use the Query Versions option on the Upgrade Tool main menu. The Query Versions screen will show an IP address next to each registered LSP and gateway.

If there are LSPs in the configuration, the LSPs are upgraded first, then the gateways. This sequence allows the Upgrade Tool to use the TFTP server capability of the LSPs to supply the gateway upgrade firmware to the gateways. An S8300 primary controller can also serve as the TFTP server for the gateways.

Figure 1: Configurations supported by the Upgrade Tool



Primary Controllers: S8700, S8300, and S8500 Media Servers
Gateways: G700 Media Gateway & G350 Media Gateway

Special Considerations for an S8700 Media Server

If you run the tool from an S8700 Media Server, start each upgrade from the active server. The upgrade of each target LSP or gateway begins and ends on the same physical S8700 Media Server. If, during an upgrade, an interchange occurs such that the S8700 standby server becomes the active server, the originally active server will continue with any upgrades until they are complete. The status for LSP or gateway upgrades that you run on a particular server will be shown on that server only. The upgrade status on the two servers will therefore be different.

To view the current upgrade status if an interchange occurs, you should log in to the actual IP address or host name of the S8700 server that was used to do the upgrade, not the alias address or alias name for the active server. When scheduling further upgrade jobs, you must log in to the newly active server to run the tool.

Software and Firmware You Can Upgrade with the Upgrade Tool

The Upgrade Tool allows you to upgrade the LSP software (the S8300 software contained in the .tar file) as well as the firmware for the gateway processors and medial modules. The .tar file for LSP upgrades contains the firmware for the media gateways and their components that was available at the time of the LSP software was made available. If the firmware versions contained in the .tar file are the latest versions, the TFTP server capability of the upgraded LSP can be used by the Upgrade Tool and eliminates the need for separate loading of firmware into a TFTP server. However, if the firmware versions contained in the .tar file are not the latest, then the firmware files must be uploaded to the an TFTP server other than the LSP.

To use the Scheduling feature, you need to enter the software and firmware filenames in the appropriate fields. The correct filenames should first be entered on the Upgrade Tool Worksheet.

The software/firmware filenames have a different format for each type of device. The following table shows example filenames for each type of device.

Table 1: Example Software and Firmware Filenames

Component	Filename Example
LSP Software	S8x00-02.0-00.0.215.0.tar
LSP Patch	00.0.215.0-0001.tar.gz
G350 Processors	
G350 Processor	g350_sw_21_11_0.bin
G350 Device Manager	g350_emweb_1_0_7.bin
G700 Processors	
P330 Stack Processor	viisa3_12_1.exe
P330 Device Manager	p330Tweb.3.8.6.exe
G700 Media Gateway Processor (MGP)	mgp_21_11_0.bin
VoIP Media Module and Motherboard VoIP (MM760)	mm760v3.fdl
Media Modules (G350 and G700)	
MM710 E1/T1 Media Module	mm710v3.fdl
MMANALOG Media Module (Integrated Analog)	mmanalogv3.fdl

Prerequisite Tasks for Running the Upgrade Tool

To use the Upgrade Tool, the primary controller must already have Communication Manager Release 2.0 or higher software. In addition, any LSPs to be upgraded must also have Communication Manager Release 2.0 or higher software.

The tasks necessary to prepare for an upgrade of an LSP and/or media gateway are similar for manual upgrades and using the Upgrade Tool. For a detailed description of these tasks, see:

- *Installation for Avaya G350 Media Gateway*, Issue 1, 555-245-104
- *Installation and Upgrades for the Avaya G700 Media Gateway and Avaya S8300 Media Server*, Issue 4, 555-234-100.

Table 1: Prerequisite Task List to Using the Upgrade Tool

Task	Description
Get Upgrade Tool Worksheet and Release Notes from the Project Manager	The Release Notes specify the latest available versions of software and firmware. The Upgrade Tool Worksheet lists the target software and firmware versions. The worksheet also indicates what TFTP servers the tool must use, along with their IP addresses, logins and password, if any. **Note:** You can use the Query Version feature of the Upgrade Tool to automatically check the version of software and firmware currently installed on each upgrade target (S8300, G350, or G700).
Get the serial number of the gateways, if necessary	To get new license files for an LSP upgrade, you need the serial number of the gateway that houses an LSP. You can determine the serial number by going to the Maintenance Web Interface and clicking on Serial Numbers on the main menu. Alternatively, you can log in to the media gateway (mgp) with Telnet and enter the **show system** command.
Get all necessary software.	For each LSP you are upgrading, complete and download the license file to your laptop. If another technician is supporting a remote LSP, that remote technician should get the license file. **Note:** Your project manager may perform the RFA process and send you the license file(s).
	Get the CD-ROM that contains the .tar file. Check http://avaya.com/support to see if a later version of gateway firmware has become available since the CD was produced. If so, download it to your laptop. A CD-ROM may be required for each remote site for remote technicians.
	Download the latest Communication Manager Update Patches, if any, to your laptop. Pre-upgrade and post-upgrade patches may be required.
Connect your laptop to each LSP.	For each LSP, the tech laptop has a cross-connect cable connected to the Services port of the S8300 and the technician configures the laptop for the connection. Note: You can also connect over a network if the LAN bandwidth is high enough.
Upload the .tar file and license file from you laptop for each LSP. Also upload the Communication Manager	At each LSP location, you must upload the .tar file, license file, and patch files to the LSP's hard drive prior to running the Upgrade Tool. Use the Download Files (via browser) option on the Maintenance Web Pages main menu.

patches, if any.	
If necessary, have the firmware files loaded into the TFTP server(s)	For any gateway that does *not* have access to an LSP, send the firmware files to the customer and ask the customer to copy the files to their TFTP directory. This is normally the tar.gz file, but may be individual firmware files. If you are sending the tar.gz file, the customer will have to unzip it. **Note:** If the customer does not have a TFTP directory, the customer can create one using the downloadable TFTP Server software that is accessible at http://avaya.com/support. See instructions in the Installation and Upgrades document for the G700 Media Gateway.
Run the LSP/Gateway Upgrade Tool	See Running the Upgrade Tool.
Prepare for the Upgrade on the primary controller	Clear Alarms
	Back up system
	Record all Busyouts
	Disable Scheduled Maintenance
	Check for Translation Corruption

Running the Upgrade Tool

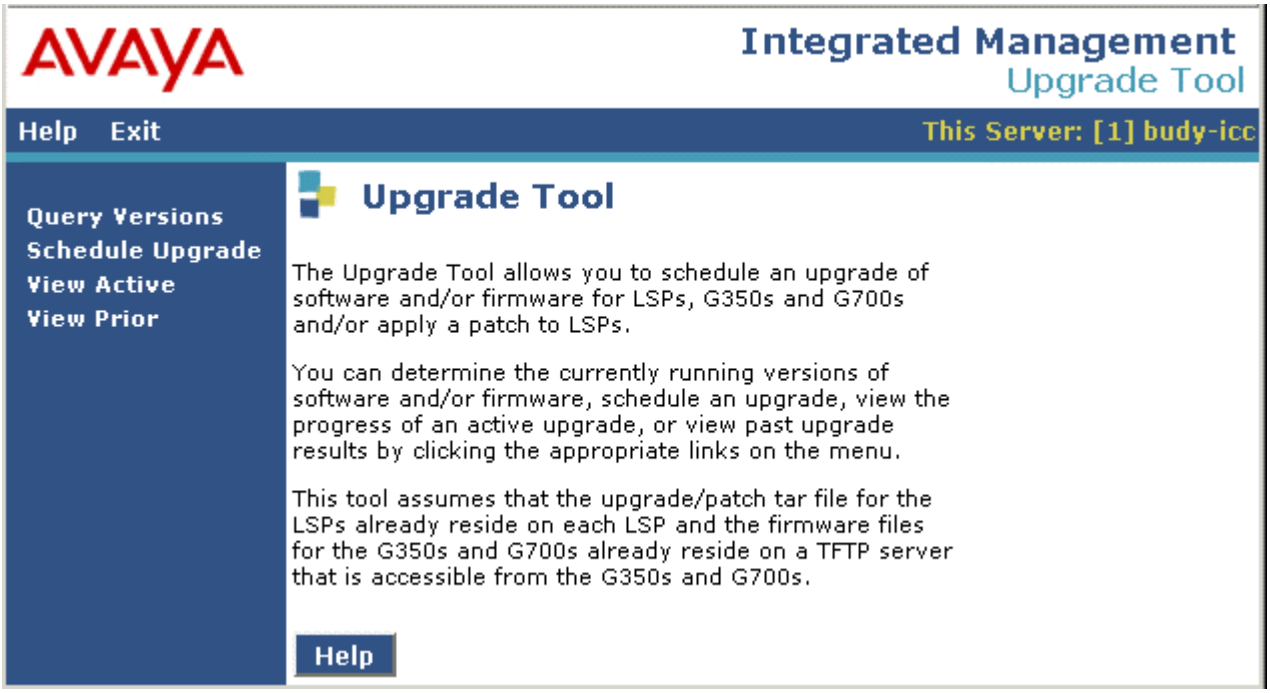
Run the Upgrade Tool at a time when voice and network traffic is low.

Note: If your primary controller is a duplicated S8700 Media Server, be sure to begin any upgrades from the active server. If there is an interchange such that the duplicated server becomes the newly-active server, any upgrades started on the originally-active server will and should continue to run and finish on that server assuming the interchange was not due to a failure of this server.

You can access the Upgrade Tool on the S8300, S8500, or S8700 Media Server with the following steps:

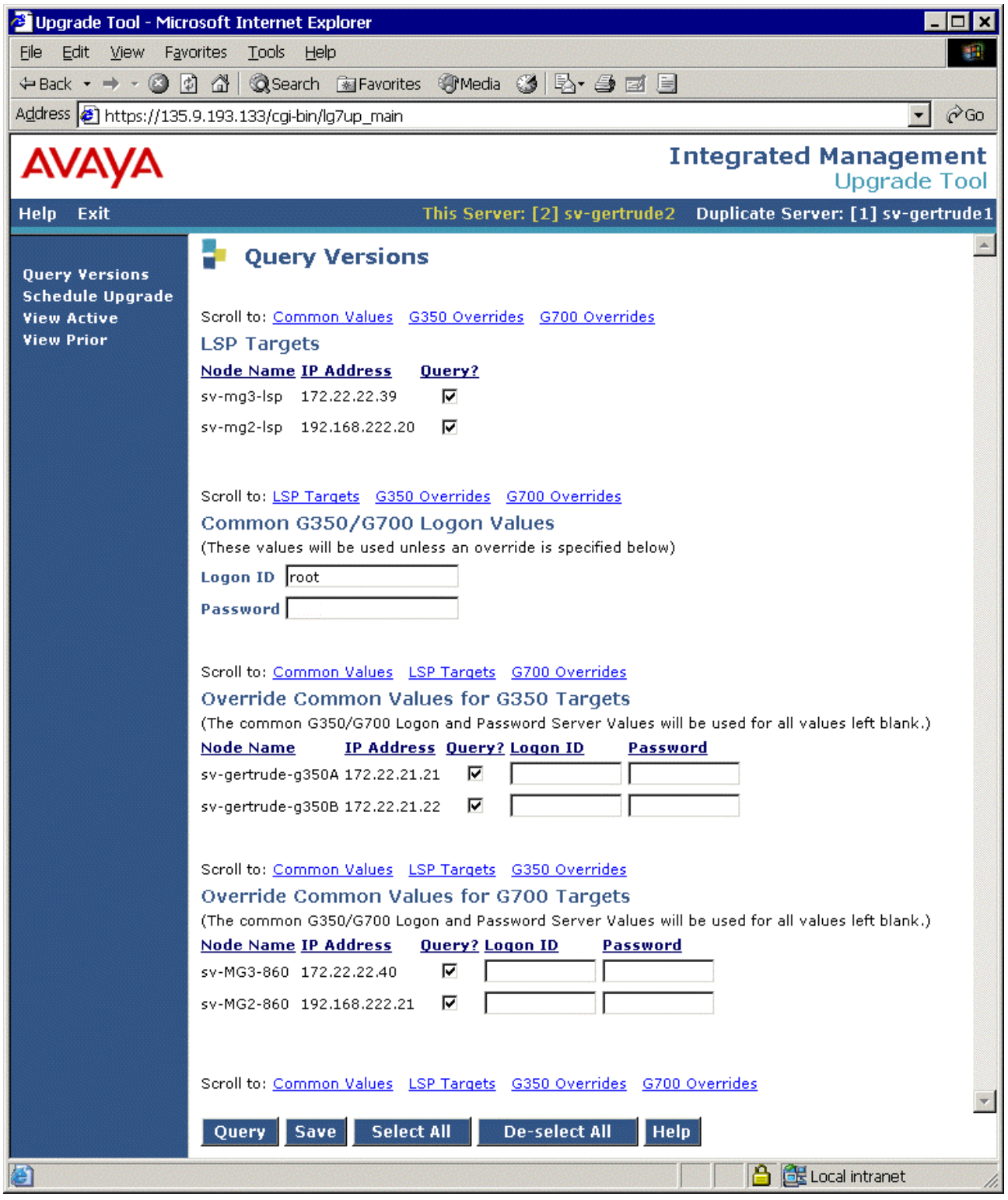
1. Access the media server by connecting a crossover cable to the Services port or by connecting over the LAN. Be sure you have appropriately configured your laptop settings for this connection (see *Installation and Upgrades for the Avaya G700 Media Gateway and Avaya S8300 Media Server*, 555-234-100).
2. Open a browser on your laptop and connect to the media server's IP address. For a direct connection through the Services port, the IP address is 192.11.13.6. For a LAN connection, use the server's IP address on the LAN.
3. Log in as craft. Or, if you are a customer, log in with a customer super user login
4. At the media server home page, click Launch Upgrade Tool.

The system displays the Upgrade Tool Home Page.



5. Click **Query Versions** to view the software and firmware versions for each LSP and gateway registered with the primary controller.

6. Select **Initiate New Query** and click Submit to set up a new query. This could take several minutes, depending on how many LSPs and gateways are in the configuration.



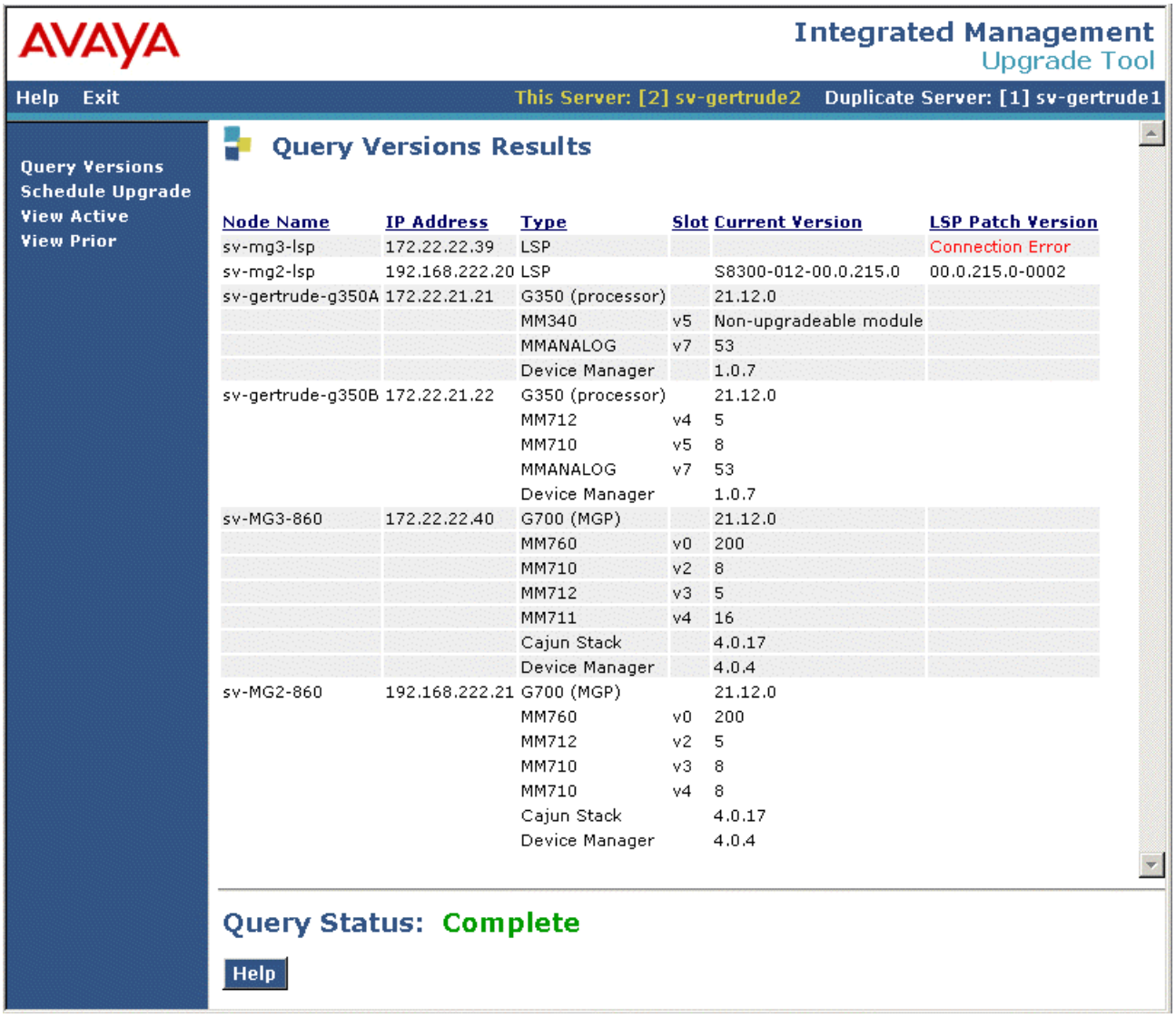
The system automatically finds and lists each LSP , G350, and G700 registered with the primary controller. You can select all or some of these devices to be queried. You can enter a common Login ID and Password that will be used to access all gateways for which you do not enter an override value.

Since this screen can be very long, hot links are provided in each section to jump to the other sections.
After you select the devices to query and enter the login information, you can save the screen for future queries. When finished, press **Query** to start the query.

While the query is running, the system displays an "In-Progress" screen that is updated every 10 seconds.

7. If you wish to stop the query before it completes, click the **Stop** button.

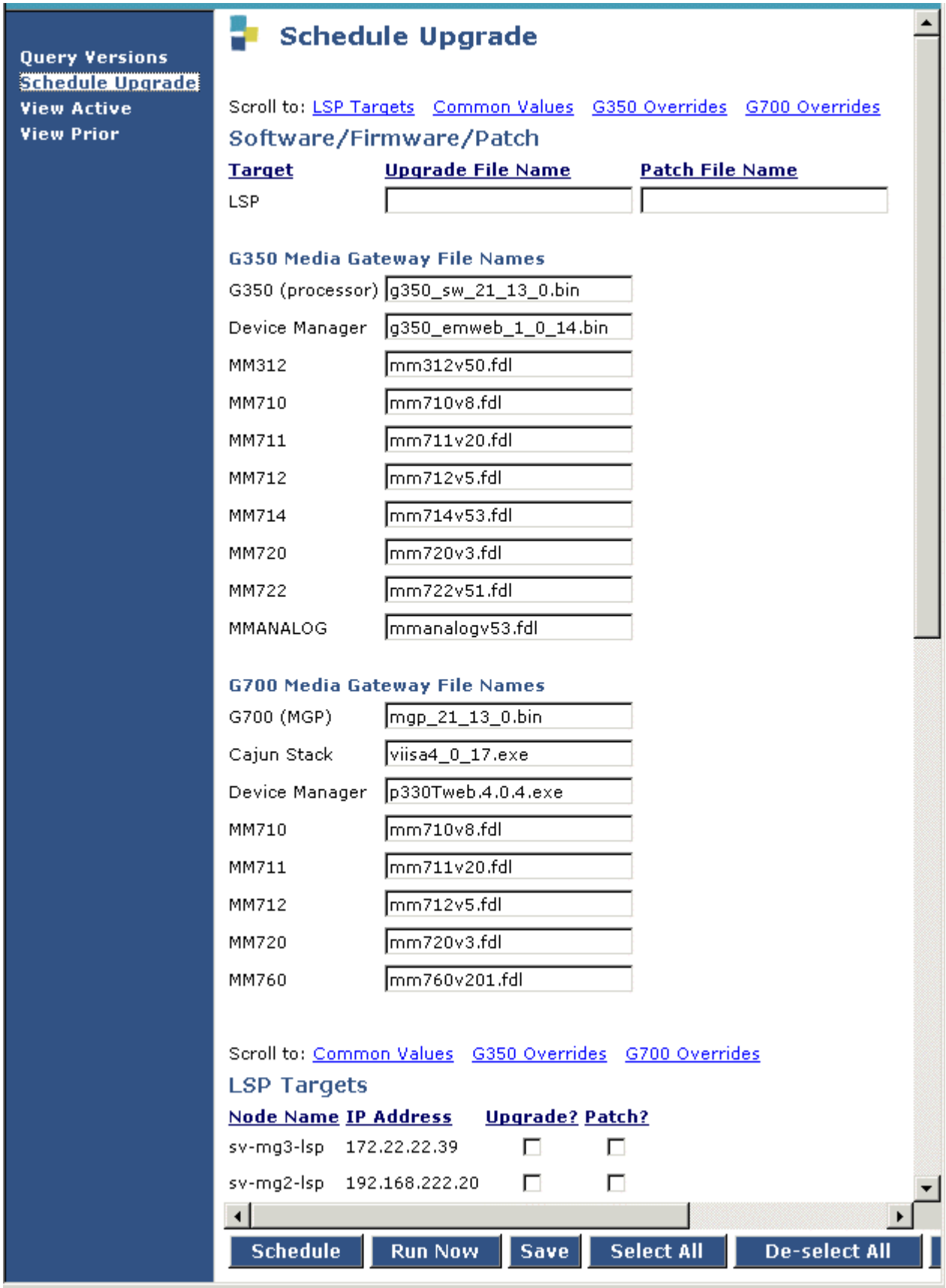
   When the query is finished, the system displays the complete Query Version Results screen and changes the Query Status from "In-Progress" to "Complete".



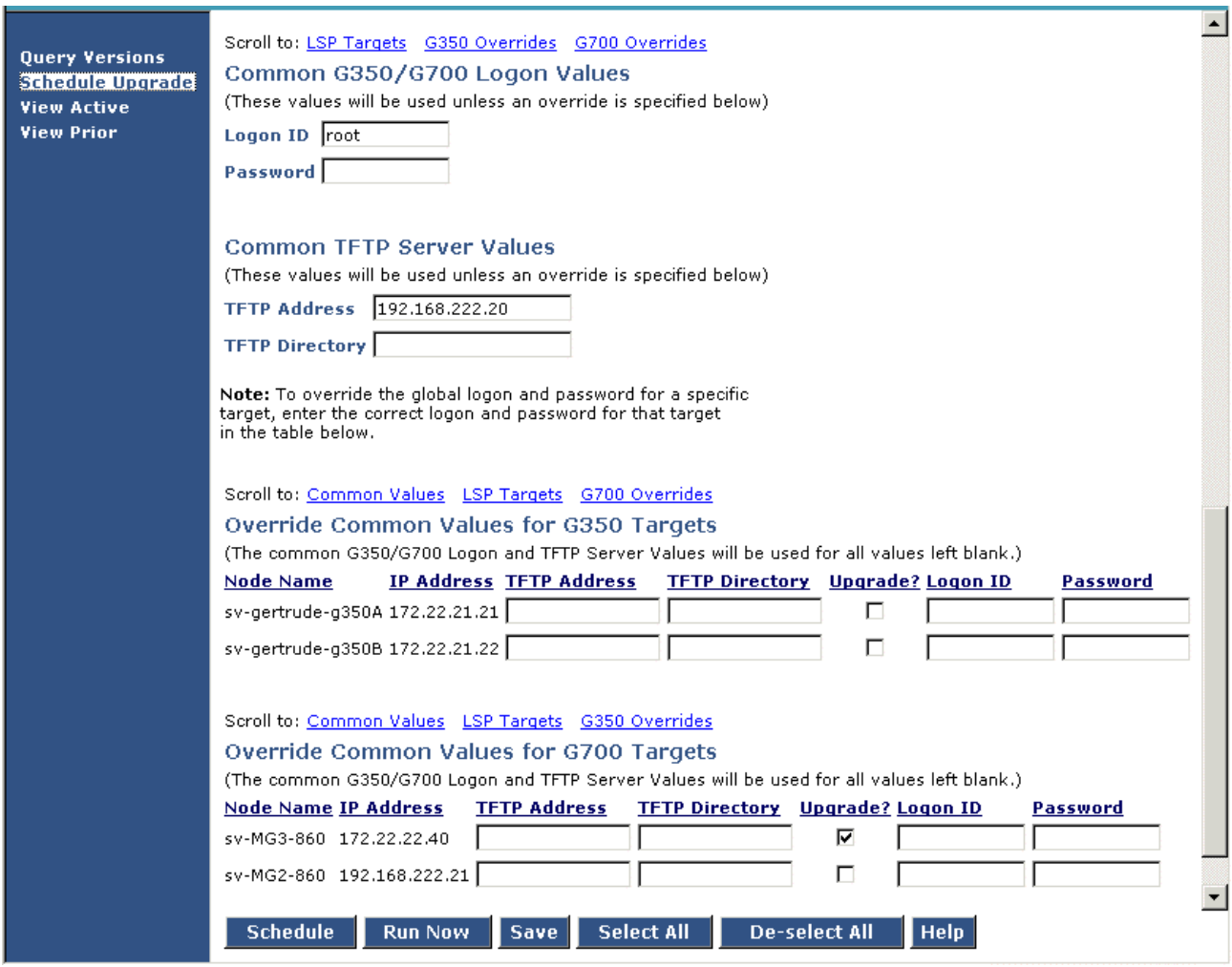
8. Click **Query Versions** to go back to the first Query Versions screen.

   To view the latest query result, select **View Last Query Result** and click **Submit**.

9. To set up and schedule upgrades, click **Schedule Upgrade**. The system displays all LSP and gateway targets that are administered.


Query Versions
Schedule Upgrade
View Active
View Prior
Schedule Upgrade
Scroll to: LSP Targets Common Values G350 Overrides G700 Overrides
Software/Firmware/Patch
Target
Upgrade File Name
Patch File Name
LSP
G350 Media Gateway File Names
G350 (processor) g350_sw_21_13_0.bin
Device Manager g350_emweb_1_0_14.bin
MM312 mm312v50.fdl
MM710 mm710v8.fdl
MM711 mm711v20.fdl
MM712 mm712v5.fdl
MM714 mm714v53.fdl
MM720 mm720v3.fdl
MM722 mm722v51.fdl
MMANALOG mmanalogv53.fdl
G700 Media Gateway File Names
G700 (MGP) mgp_21_13_0.bin
Cajun Stack viisa4_0_17.exe
Device Manager p330Tweb.4.0.4.exe
MM710 mm710v8.fdl
MM711 mm711v20.fdl
MM712 mm712v5.fdl
MM720 mm720v3.fdl
MM760 mm760v201.fdl
Scroll to: Common Values G350 Overrides G700 Overrides
LSP Targets
Node Name IP Address Upgrade? Patch?
sv-mg3-lsp 172.22.22.39
sv-mg2-lsp 192.168.222.20
Schedule
Run Now
Save
Select All
De-select All

Schedule Upgrade screen, continued.



10. Fill in all appropriate fields. Click the Help button for information about the fields on the screen. NOTE: The filenames must be entered in the format shown. You cannot change the names of the firmware files on the TFTP server and use those names here.

    Use the information from the Release Letter and Upgrade Worksheets to complete Software/Firmware fields.

    If the customer uses a common Login ID and Password for multiple gateways, complete the Common G350/G700 Login Values fields

    If the customer has a centralized TFTP server for multiple gateways to use, complete the Common TFTP Server Values fields.

    If any gateways require unique login values or unique TFTP servers, complete the Override Common Values for G350 and G700 Targets fields. You can enter override values for the IP address of the unique TFTP server, the directory on the TFTP server that contains the firmware files, and the login information for the gateway. If any override fields are left blank, the values entered in the Common fields are used.

What you enter in the TFTP Directory field depends on the type of TFTP server you are using.

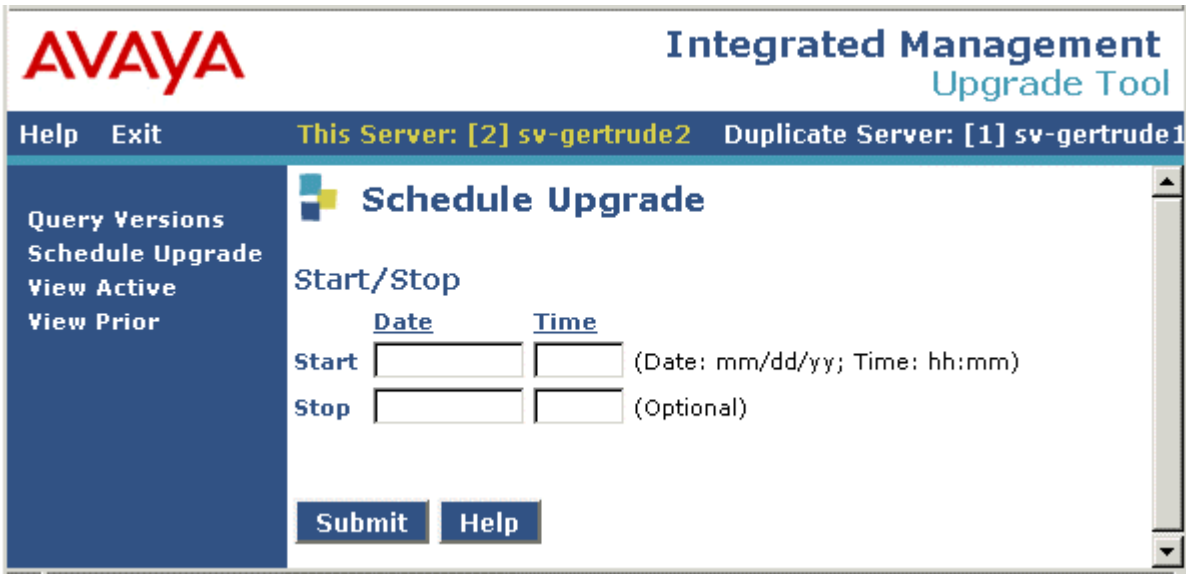
- If the TFTP server is an S8300 LSP, enter the path to the firmware files relative to the /tftpboot directory. For example, if the firmware files are in /tftpboot/cm2.0/218.0, enter cm2.0/218.0. If the files are in /tftpboot/, leave the TFTP Directory field blank.

- If the TFTP server is an Avaya Windows server, enter the path to the firmware files relative to the C:\tftpboot directory. For example, if the firmware files are in C:\tftpboot\cm2.0\218.0, enter cm2.0\218.0. If the files are in C:\tftpboot, leave the TFTP Directory field blank.

- If the TFTP server is a customer server, ask the customer how their TFTP server is set up.

Note: A TFTP server must be accessible over the LAN from the gateway you are upgrading.

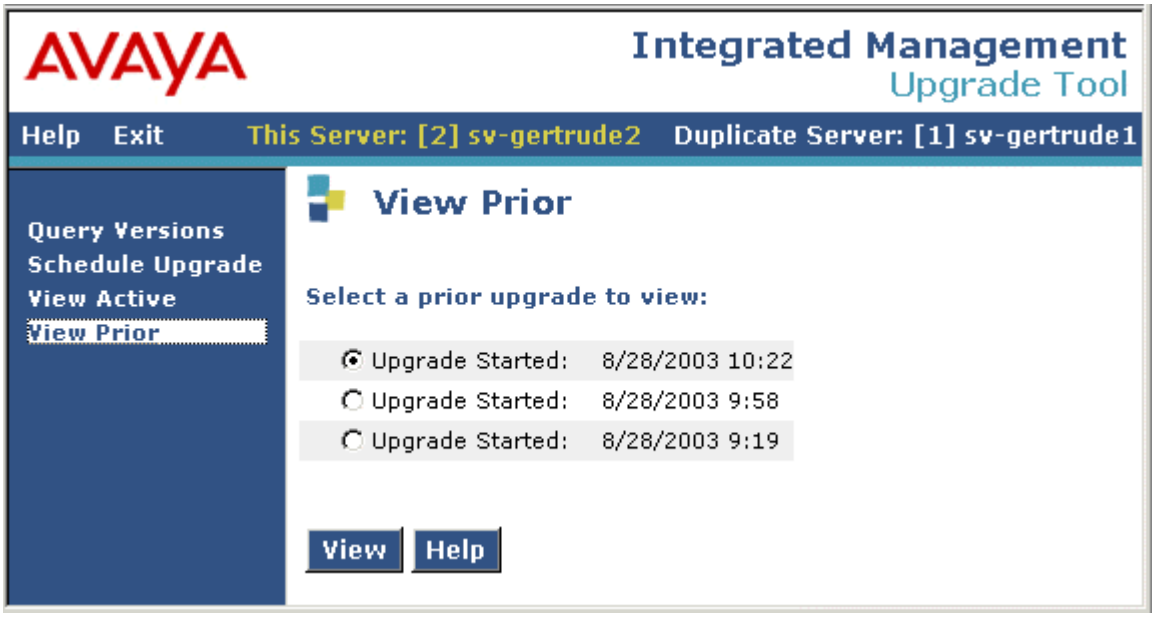
11. Click **Schedule** to set up the upgrade schedule or **Run Now** run the upgrades immediately.



The Start Date and Time fields are required, but the Stop Date and Time fields are not. Use the Stop Date and Time to ensure that no upgrades occur during peak traffic time. No new upgrades will be started after the stop time, but upgrades in progress at that time will continue to completion.

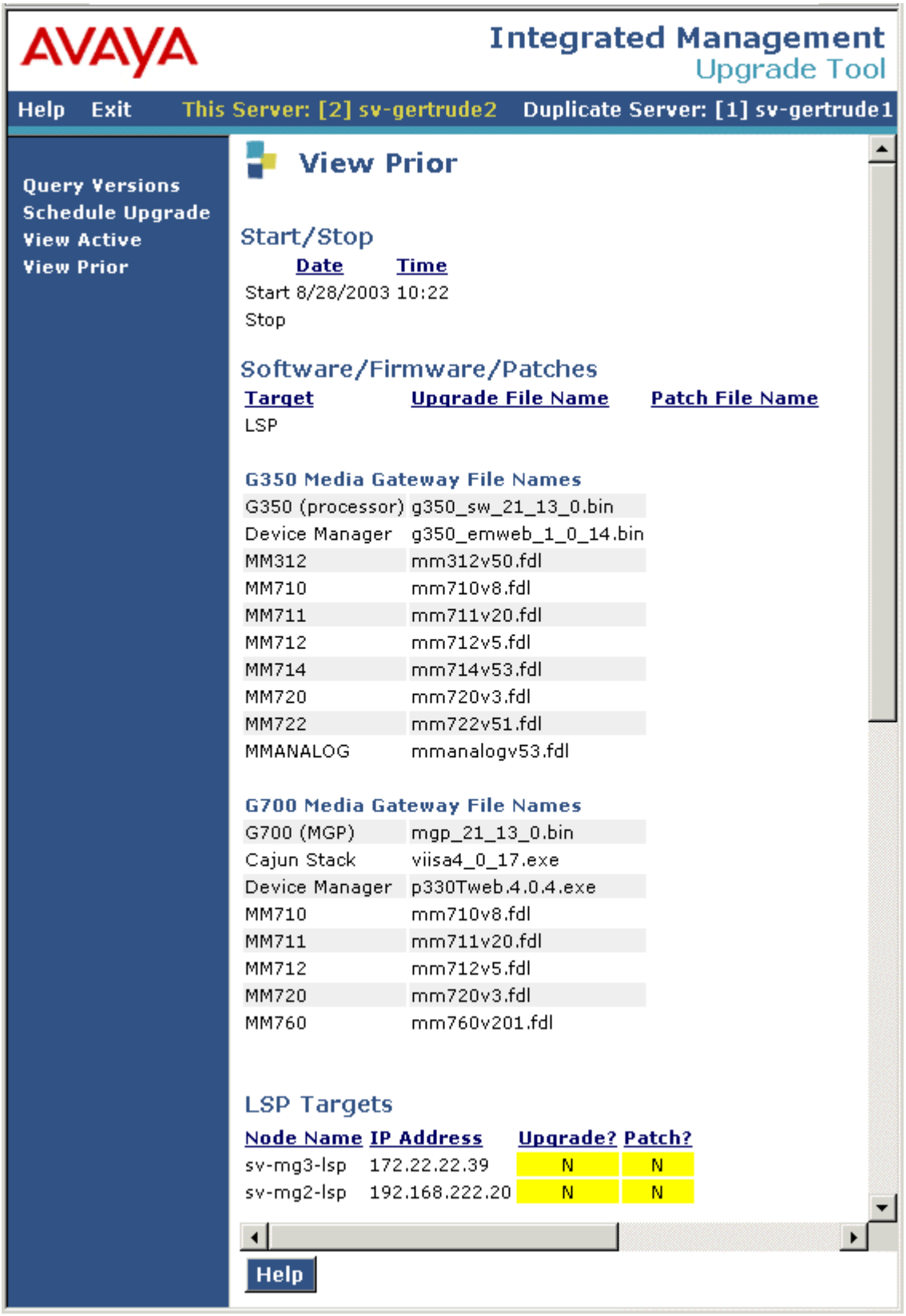
12. Click **Submit** to complete the upgrade schedule.

13. To review the status of an upgrade in progress, click **View Active** to view upgrades currently in progress or click **View Prior** to view completed upgrades. For example, the View Prior screen enables you to view the status of the last four upgrades.

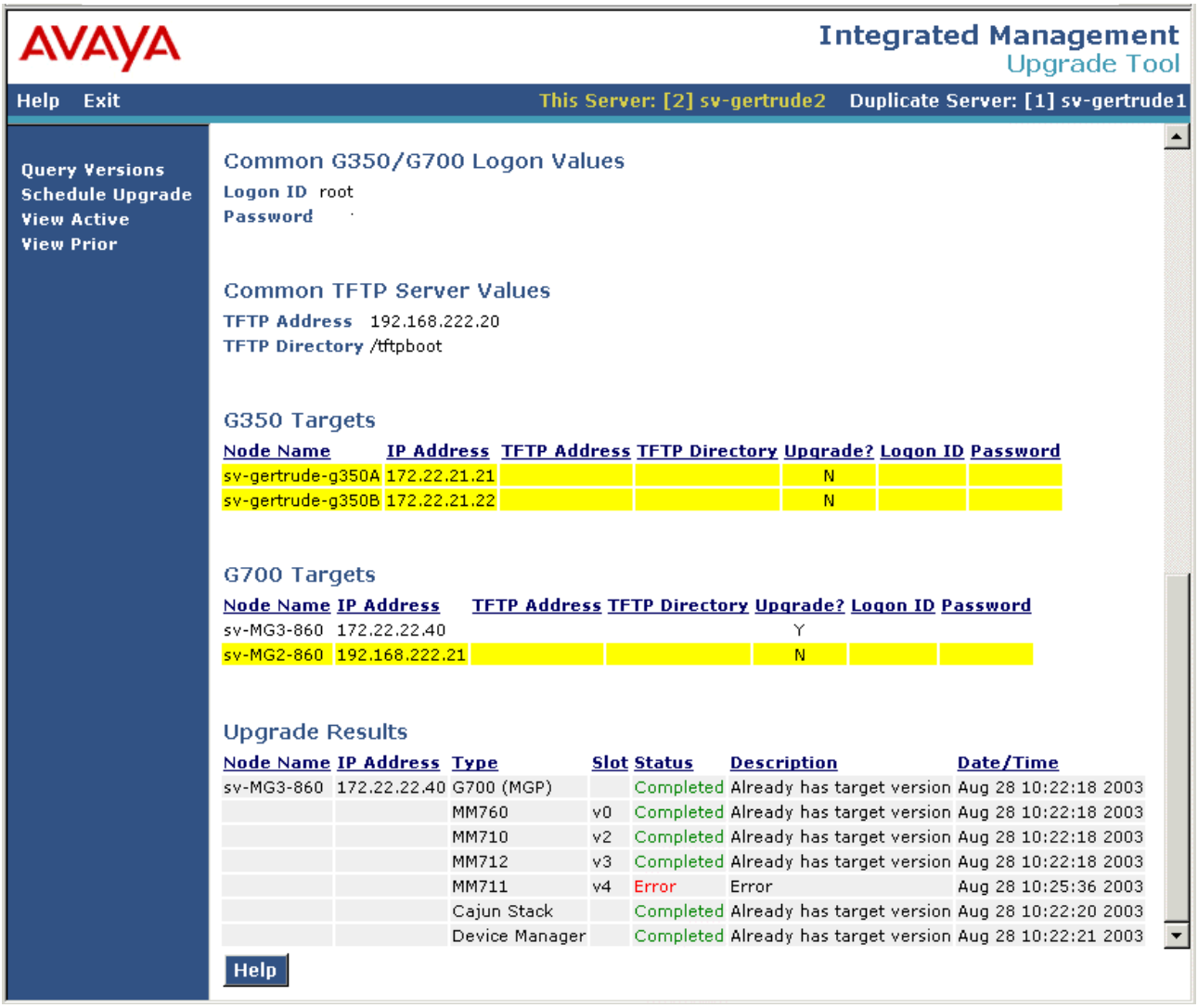


14. Select the upgrade that you wish to view and click **View.** The View Prior screen shows the upgrade status of each component for the upgrade selected.

This screen shows up to four selections, depending on how many upgrades have been started from this server. Upgrades started from another server, such as the other server in an S8700 pair, are not shown here.


AVAYA
Integrated Management
Upgrade Tool
Help Exit This Server: [2] sv-gertrude2 Duplicate Server: [1] sv-gertrude1
Query Versions
Schedule Upgrade
View Active
View Prior
View Prior
Start/Stop
Date Time
Start 8/28/2003 10:22
Stop
Software/Firmware/Patches
Target Upgrade File Name Patch File Name
LSP
G350 Media Gateway File Names
G350 (processor) g350_sw_21_13_0.bin
Device Manager g350_emweb_1_0_14.bin
MM312 mm312v50.fdl
MM710 mm710v8.fdl
MM711 mm711v20.fdl
MM712 mm712v5.fdl
MM714 mm714v53.fdl
MM720 mm720v3.fdl
MM722 mm722v51.fdl
MMANALOG mmanalogv53.fdl
G700 Media Gateway File Names
G700 (MGP) mgp_21_13_0.bin
Cajun Stack viisa4_0_17.exe
Device Manager p330Tweb.4.0.4.exe
MM710 mm710v8.fdl
MM711 mm711v20.fdl
MM712 mm712v5.fdl
MM720 mm720v3.fdl
MM760 mm760v201.fdl
LSP Targets
Node Name IP Address Upgrade? Patch?
sv-mg3-lsp 172.22.22.39 N N
sv-mg2-lsp 192.168.222.20 N N
Help

View Prior screen, continued



When an upgrade is complete, **Completed** appears in the Status column for each target component. If an upgrade fails, **Error** is reported in the Status column. For a description of other status messages, click the Help button to view the online help.

15. Perform the following tasks to complete the upgrades.

Target	Description
Upgrade the S8300, S8500, or S700 Primary Controller	Follow normal upgrade procedures as documented in one of the documents listed previously.
Install the Communication Manager patch on the Primary Controller, if necessary	For more information, see the installation document for your primary controller.
Complete the Upgrade Process on the Primary Controller	Enable Scheduled Maintenance
	Busy Out Trunks recorded earlier
	Resolve Alarms
	Check for Translation Corruption
	Back up the System

Upgrade Tool Worksheets

Software and Firmware Upgrade File Names

Complete the following worksheet to record software and firmware upgrade file names. These names should also be available from the Release Letter. See **Software and Firmware You Can Upgrade with the Upgrade Tool** on page 3 for sample filenames.

Items for Upgrading	New file name for target
Patch file for LSP	
.tar file for LSP	
G350 Only	
G350 Processor	
G350 Device Manager	
MM312 24-port DCP Media Module	
MM714 Global Analog Media Module	
MM722 BRI Trunk Media Module	
MMANALOG (Integrated Analog)	
G700 Only	
Media Gateway Processor (MGP)	
P330 Stack Processor	
P330 Device Manager	
MM760 VoIP Media Module and Motherboard VoIP	
G350 and G700	
MM710 E1/T1 Media Module	
MM711 Analog Port/Trunk Media Module	
MM712 DCP Media Module	
M720 BRI Media Module	

Upgrade Targets

Complete the following worksheets to record upgrade targets and the upgrade software they require.

LSPs to Upgrade

Complete the following table only if you are **not upgrading every LSP** administered on the primary controller. This table lists each LSP that should be upgraded. To obtain a list of possible LSPs, you can use the Query Version feature of the Upgrade Tool. (You could also use the **display lsp** SAT command in Communication Manager on the primary controller.)

Make additional copies of this table if necessary.

Table 2: LSP Upgrade Targets

LSP Node Name	LSP IP Address	Name or Description

Common G350/G700 Gateway Values

Multiple media gateways may have the same login and password values. In this case, enter the login information in the following table:

Table 3: Global Settings for G350/G700 Gateway

G350/G700 Root Login ID	G350/G700 Password

Common TFTP Server Values

Multiple media gateways might receive firmware updates from the same TFTP server. In this case, enter the TFTP server information in the following table:

Table 4: Global Settings for TFTP Server

TFTP Server IP Address	TFTP Server Directory

G350 and G700 Media Gateways to Upgrade

Complete the following table **only** if you cannot use the global settings for all gateways. This table lists each gateway that should be upgraded and its TFTP server information. To obtain a list of possible gateways, you can use the Query Version feature of the Upgrade Tool. (You could also use the **list media-gateway** SAT command in Communication Manager on the primary controller.)

To obtain a list of possible gateways, you can use the **list media-gateway** SAT command in Communication Manager on the primary controller.

Make additional copies of this table if necessary.

Table 5: Media Gateways to Be Upgraded

Media Gateway Node Name	Media Gateway IP Address	TFTP Server IP Address (If not global)	TFTP Server Directory (If not global)	Upgrade This Gateway ?	Gateway Root Login (If not global)	Gateway Password (If not global)

NOTES: