



▶ Polycom® CMA™ System
Upgrade Guide

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Upgrading a Non-Redundant Polycom CMA System

This chapter provides instructions for upgrading a non-redundant Polycom CMA system. See [Chapter 2](#) for instructions on upgrading a redundant Polycom CMA system.

IMPORTANT See the *Polycom CMA System Release Notes* for the version to which you are upgrading for information about valid upgrade paths.

Note that the Polycom CMA system upgrade requires a console connection to the Polycom CMA system server serial port.

Pre-stage a Machine Account

To enable the **Use Single Signon** option, which allows endpoint users who are included in the Active Directory (AD) to securely log into their dynamically-managed endpoint without typing in credentials, an AD administrator must first pre-stage an AD machine account for the Polycom CMA system.

To pre-stage a machine account

- 1 On the AD system, use the Microsoft **Active Directory Users and Computers** MMC snap-in to create a machine account for the Polycom CMA system. Create the machine account in any desired organizational unit (OU). The machine account object must have **Reset Password** and **Write Account Restrictions** permissions.

For more information on the **Active Directory Users and Computers** MMC snap-in, see Microsoft Technet.

- 2 From a command window on the Domain Controller, type:
`net user <machine name>$ <Password> /domain`

Where *<machine name>* is the Polycom CMA system name, *<Password>* is the desired password, and */domain* is a literally */domain* (i.e., do not substitute with a domain name). For more information on the net user command, see the Microsoft Knowledge Base.

You have now created a machine account that you can use for integrated Windows authentication. .

- 3 Edit the **General** properties of the machine account and select **Trust computer for delegation**.

Request a Software Upgrade Key Code

To request a software upgrade key code

- 1 Locate and record the Polycom CMA system server serial number. To locate the serial number:
 - a Log in to the Polycom CMA system as an administrator.
 - b Choose **Admin > Server Settings > Licenses**.
The serial number appears at the top of the **Licenses** page.
- 2 Using a web browser, go to <http://www.polycom.com/activation>.
- 3 Log in **Register for An Account**.
- 4 Select **Product Activation**.
- 5 On the **Activate Your Product** page, click **Retrieve Software Key Code**.
- 6 On the **Single Upgrade Key Code** page, enter the system **Serial Number** recorded in step 1, the **Version** number for the software, and click **Retrieve**.

Note Strange as it may seem, to receive a software upgrade key code for a version 4.1.x Polycom CMA system, you must enter a version number of 4.01 into this **Version** field.

- 7 Record the U-Key code returned by the system.

Download the Software Upgrade File

To download the software required to update the system

- 1 On your local system, create a directory to which to save the software upgrade file if one does not already exist.
- 2 Using a web browser, go to www.polycom.com/support.
- 3 In the **Downloads** section, select the appropriate **Category** (Network) and **Product** (Polycom Converged Management Application) for the required download.
A list of the available downloads appears.
- 4 Select the file for the version of software to which you are upgrading.
- 5 When the **File Download** dialog box appears, click **Save**.
- 6 When the **Save As** dialog box appears, browse to the directory created in step 1 and click **Save**, to save the .cab file to your local system.
- 7 Record the location and name of the saved file.

Save a Back Up of the Polycom CMA System Databases

You must save a back up of your Polycom CMA system databases.

IMPORTANT

Integration with an external Microsoft SQL Server database is required for redundant Polycom CMA 5000 systems or for Polycom CMA 5000 systems supporting more than 400 concurrently registered endpoints and 240 concurrent calls. If you wish to upgrade your service pack, do so before performing this upgrade.

This section describes backing up the internal databases. If your system uses an external database, ask your database administrator to backup the external Polycom CMA system databases according to Microsoft SQL Server Management Studio procedures or your company's backup procedures.

To backup the internal Polycom CMA system databases

- 1 To use the last nightly database backups from the Polycom CMA system:
 - a Log into the Polycom CMA system.
 - b Click **Admin > Database Backup Files**.
 - c When the **Database Backup Files** list appears, left click on the latest **Readi Manager_db_<yyyymmddhhhh>.bak** file, click **Save**, and save the file to a location on your local system.

Perform the Software Upgrade

IMPORTANT

- The system upgrade process may take up to 45 minutes, depending on the environment. At some steps you are instructed to wait. **MAKE SURE YOU WAIT UNTIL THE PROCESS IS COMPLETE.** Interrupting the upgrade can corrupt the system.
- During the upgrade, the Polycom CMA system is offline and all services are unavailable. In addition, the serial console appears inactive; nevertheless, do not power off the system unless instructed to do so.
- If you have an external database, make sure to close all external database connections before performing this upgrade.

To upgrade the Polycom CMA software

- 1 Log into the system using a local administrator **Username** and **Password**.

IMPORTANT

A new feature in this product changes the access of enterprise accounts, so you must use a Local administrator account to perform this upgrade.

- 2 Go to **Reports > System Log Files** and verify that the **Current Log Level** is set to **Warning, Error, Major, Fatal, or OFF**.
- 3 Go to **Admin > Server Settings > Database** and record your database information.
Database Server IP address: _____
Database Server Port: _____
Database Instance Name: _____
- 4 Go to **Admin > Server Settings > LDAP** and record your LDAP information.
LDAP Server IP Address or DNS Name: _____
Domain\LDAP User ID: _____
LDAP User Password: _____
LDAP Exclusion Filter (if applicable): _____
LDAP Search BaseDN (if applicable): _____
- 5 Go to **Admin > Management and Security > Server Software Upgrade**.
- 6 From the **Server Software Upgrade** page, click **Upload upgrade file to server** and browse to the location of the upgrade . cab file saved in [“Download the Software Upgrade File”](#) on page 3.
- 7 Select the . cab file and click **Open**.
The . cab file uploads to the system.
- 8 When the system indicates the **File Upload is Complete**, click **OK**.

9 Click Upgrade.

When the status messages on the upgrade screen start changing ("Stopping services", "applying upgrade", etc.), the upgrade process has started. When the upgrade process is complete, the system reboots.

Note As a result of the upgrade, the Polycom CMA system is directed to an internal database even if the system was originally directed to an external database.

10 After the system completely reboots, clear the browser cache to refresh the Polycom CMA system user interface.

11 Log back into the Polycom CMA system.

Perform the Database Upgrade

Perform this procedure only if you have an external database

To upgrade the external database

- 1** Open a browser window and in the **Address** field enter `http://<CMA_System_IP_Address>/pub/DBUpgrade.exe`

IMPORTANT Do not run the **Database Setup** program. It will overwrite your database.

- 2** When the **File Download** dialog box appears, click **Run**.
- 3** Click **OK** to begin the upgrade.
 - Make sure you know the path to the Microsoft SQL Server.
 - If you use Microsoft Windows authentication, be sure your login account has administrator privileges on the SQL server (i.e., is a member of the sysadmin group).
- 4** When the upgrade script is done, re-enable the external SQL Server database:
 - a** Go to **System Setup > Server Settings > Database**.

IMPORTANT Do not run the **Database Setup** program. It will overwrite your database.

- b** On the **Database** page, select the **Use an external SQL Server database** check box, re-enter the external database settings you recorded in step **3** on page 5, and click **Update**.
The system reboots.
- 5** After the system completely reboots, log into the Polycom CMA system.
- 6** Go to **Admin > Server Settings > Database** and verify that the external database is enabled.

Enter the Software Upgrade Key Code

To enter the Polycom CMA system software upgrade key code

- 1 Go to **Admin > Server Settings > Licenses**.
- 2 Enter the software upgrade key code for the primary server into the **Add New License > Activation Key** field and click **Add**.

The **Active License** section of the **Licenses** page is updated.

Complete the Upgrade

To complete the upgrade

- 1 Enter the newly required network information:
 - a Go to **Admin > Server Settings > Network**.
 - b On the **Network Settings** page, enter the **DNS Domain** name for the network in which the domain name server and Polycom CMA system server reside. This is the DNS domain name suffix, for example pol ycom. com, not the fully qualified path of <hostname>. pol ycom. com.
 - c Click **Update**.
- 2 Enter the required LDAP information:
 - a Go to **Admin > Server Settings > LDAP**.
 - b On the **LDAP** page, select **Integrate with LDAP server**.
 - c If your AD publishes its hostname and IP address to the network DNS, in the **Integrate with LDAP server** section, select **Auto-discover**. Otherwise, enter the **LDAP IP Address or DNS Name**.
 - d Re-enter the LDAP settings you recorded in step 4 on page 5, and click **Update**.
 - e Select the **Security Level** appropriate for your installation.
 - » **Plain**—No security on the connection
 - » **LDAPS**—To secure the connection over a specific port in a manner similar to https. If the “Domain Controller: LDAP Server signing requirements” setting on the AD server is set to “Require Signing”, then you must use LDAPS to secure the connection.

Perform steps 2 a-e to allow schedulers to select participants from an enterprise directory

Perform steps 3 a-c to allow endpoint users to log in without re-entering credentials

- » **StartTLS**—To secure the connection over the same port as **Plain**, but to have the system negotiate security once the socket is opened. Some LDAP servers reject any unsecured transactions, so the first command is the StartTLS negotiation command.

3 Enter required Windows authentication information:

- a** Go to **Admin > Server Settings > LDAP** and on the **LDAP** page, select **Use Single Sign-on (Integrated Windows Authentication)**.
- b** If your AD does not publish the domain controller's hostname and IP address to the network DNS, you must edit the DNS file to include it.
- c** If your AD publishes the domain controller's hostname and IP address to the network DNS, in the **Use Single Sign-on** section, select **Auto-discover**. Otherwise, enter the **Fully Qualified Host Name** for the AD domain controller (for example, dc1.mydomain.com).

If you created a pre-staged machine account, it must be within this domain as well.

- d** In the **Machine Account credentials** section, enter the **Domain\Machine Name** and **Password** created in step 1 on page 1 and click **Update**.

The system reboots.

Verify the Upgrade

To verify that the upgrade was successful:

- 1** On the login screen, verify that the system displays the version number of software to which you are upgrading.
- 2** Verify that your endpoints are registered to the Gatekeeper and Global Address Book, as required.
- 3** Verify that you can schedule and start a conference.
- 4** Verify that you can monitor a conference.
- 5** Verify that you can terminate a conference.
- 6** Review the CDR for the test conference and verify the record is accurate.

Upgrading a Redundant Polycom CMA System

This chapter provides instructions for upgrading a redundant Polycom CMA system. See [Chapter 1](#) for instructions on upgrading a non-redundant Polycom CMA system.

IMPORTANT

- See the *Polycom CMA System Release Notes* for the version to which you are upgrading for information about valid upgrade paths.
- A Polycom redundant CMA 5000 system requires an external Microsoft SQL Server 2005 database with SP 2 or SP 3. If you wish to upgrade your service pack, do so before performing this upgrade.
- A Polycom CMA 4000 system does not support redundancy.

About Redundancy and Upgrading a Redundant Polycom CMA system

A redundant Polycom CMA system configuration has two Polycom CMA system servers and three IP addresses on the same network—one physical IP address for each of the servers and one virtual IP address dedicated to endpoint registration.

Take note of the following terminology:

- In a redundant configuration, one server is licensed as the *primary server* and the other server is licensed as the *redundant server*. That means that the primary server is always the primary server and the redundant server is always the redundant server.
- In a redundant configuration, there is only one *active server*. The active server is the server managing the system. That means when the redundant server is managing the system, it is the active server. This distinction is important when performing this upgrade.
- In a redundant configuration, there is only one *standby server*. The standby server is the server that is not managing the system. If at anytime you receive a **Cannot find server** error when you try to log into a server, check to see if it is the standby server.

Also note that in a properly configured and fully operational redundant configuration, you can log into the virtual IP address for the redundant system. When you do so, the **Redundant Configuration** page shows:

- The **Virtual IP** field is populated.
- The primary server is identified as the active server and the redundant server is identified as the inactive server.

A redundant system is also fully operational when the redundant server is the active server and the primary server is the inactive server. However, for licensing purposes, the primary server should be the active server when both servers are functional.

- Both servers have a **Machine Status** of ON.

When upgrading a redundant Polycom CMA system, you will be instructed when to disable redundancy between the primary and redundant servers and when to re-enable redundancy. During these procedure only one of the two Polycom CMA system servers is powered on at any given time. Be sure to follow these procedures carefully.

Pre-stage a Machine Account

To enable the **Use Single Sign On (Integrated Windows Authentication)** option, which allows endpoint users who are included in the Active Directory (AD) to securely log into their dynamically-managed endpoint without typing in credentials, an AD administrator must first pre-stage an AD machine account for the Polycom CMA system.

To pre-stage a machine account

- 1 On the AD system, use the Microsoft **Active Directory Users and Computers** MMC snap-in to create a machine account for the Polycom CMA system. Create the machine account in any desired organizational unit (OU). The machine account object must have **Reset Password** and **Write Account Restrictions** permissions.

For more information on the **Active Directory Users and Computers** MMC snap-in, see Microsoft Technet.

- 2 From a command window on the Domain Controller, type:
`net user <machine name>$ <Password> /domain`

Where *<machine name>* is the Polycom CMA system name, *<Password>* is the desired password, and */domain* is a literally */domain* (i.e., do not substitute with a domain name). For more information on the net user command, see the Microsoft Knowledge Base.

You have now created a machine account that you can use for integrated Windows authentication.

- 3 Edit the **General** properties of the machine account and select **Trust computer for delegation**.

Request Software Upgrade Key Codes

You will need a software upgrade key code for both servers in a redundant Polycom CMA system configuration.

To request a software upgrade key code

- 1 On the primary server, locate and record the Polycom CMA system server serial number. To locate the serial number:
 - a Log in to the Polycom CMA system as an administrator.
 - b Choose **Admin > Server Settings > Licenses**.
The serial number appears at the top of the **Licenses** page.
- 2 Using a web browser, go to <http://www.polycom.com/activation>.
- 3 Log in or create a **New User Account**.
- 4 Select **Product Activation**.
- 5 On the **Activate Your Product** page, click **Retrieve Software Key Code**.
- 6 On the **Single Upgrade Key Code** page, enter the system **Serial Number** recorded in step 1, the **Version** number for the software, and click **Retrieve**.

Note Strange as it may seem, to receive a software upgrade key code for a version 4.1 Polycom CMA system, you must enter a version number of 4.01 into this **Version** field.

- 7 Record the U-Key code returned by the system.
- 8 Repeat this procedure on the redundant server.

Download the Software Upgrade File

To download the software required to update the system

- 1 On your local system, create a directory to which to save the software upgrade file (if one does not already exist).
- 2 Using a web browser, go to www.polycom.com/support.

- 3 In the **Downloads** section, select the appropriate **Category** (Network) and **Product** (Polycom Converged Management Application) for the required download.
A list appears of the available downloads.
- 4 Select the file for the version of software to which you are upgrading.
- 5 When the **File Download** dialog box appears, click **Save**.
- 6 When the **Save As** dialog box appears, browse to the directory created in step 1 and click **Save** to save the .zip file to your local system.
- 7 Navigate to the location of the .zip file and double-click it to extract the files.
- 8 Read the ReadMeFirst.txt file.
- 9 Record the location and name of the .cab file.


Save a Back Up of the Polycom CMA System Databases

You must save a back up of your Polycom CMA system external databases. Ask your database administrator to backup the external Polycom CMA system databases according to Microsoft SQL Server Management Studio procedures or your company's backup procedures.

Perform the Upgrade

- IMPORTANT**
- The upgrade script may take up to 45 minutes, depending on the environment. At some steps you are instructed to wait. **MAKE SURE YOU WAIT UNTIL THE PROCESS IS COMPLETE.** Interrupting the upgrade can corrupt the system.
 - During the upgrade, the Polycom CMA system is offline and all services are unavailable. In addition, the serial console appears inactive; nevertheless, do not power off the system unless instructed to do so.
 - Close all external database connections before performing this upgrade.
 - During these procedure only one of the two Polycom CMA system servers is powered on at any given time. Be sure to follow these procedures carefully and refer to the IP addresses you recorded in step 1 if you need help determining which is your primary or redundant server.

To upgrade the Polycom CMA system software on the primary server


- 1 Record your current system information:
 - a Use a web browser to log into the system's *virtual IP address*.
 - b Go to **Admin > Server Settings > Database** and record your database information.
 Database Server IP address: _____
 Database Server Port: _____
 Database Instance Name: _____
 - c Go to **Admin > Server Settings > LDAP** and record your LDAP information.
 LDAP Server IP Address or DNS Name: _____
 Domain\LDAP User ID: _____
 LDAP User Password: _____
 LDAP Exclusion Filter (if applicable): _____
 LDAP Search BaseDN (if applicable): _____
 - d Go to **Admin > Server Settings > Redundant Configuration** and verify that the primary server is the active server.
 - e Record the IP address of the virtual, primary, and redundant servers. You'll need this information throughout the upgrade.
 Virtual IP address: _____
 Primary server IP address: _____
 Redundant server IP address: _____
 - f Go to **Admin > Dashboard** and click **Shutdown**  to shut down the primary server.
- 2 When the redundant server becomes the active server, disable the external database connection:

Note It may take up to 5 minutes for the redundant server to become the active server.

- a Use a web browser to log into the system's *virtual IP address*.
- b Go to **Admin > Server Settings > Redundant Configuration** and verify that the redundant server is the active server.
- c Go to **Admin > Server Settings > Database**.
- d On the **Database** screen, deselect the **Use an external SQL Server database** check box to disable the external SQL Server database.
- e Click **Update**.
- f Click **Yes** to confirm the change and reboot the system.

The system reboots.

g After the system reboots, use a web browser to log into the *physical IP address* of the redundant server.

h Go to **Admin > Dashboard** and click **Shutdown**  to shut it down.

At this point in the procedure, both servers are off and redundancy is completely disabled.

3 Upgrade the primary server:

a Power ON the primary server.

b Use a web browser to log into the *physical IP address* of the redundant server.

c Go to **Reports > System Log Files** and verify that the **Current Log Level** is set to **Warning, Error, Major, Fatal, or OFF**.

d Go to **Admin > Management and Security > Server Software Upgrade**.

e From the **Server Software Upgrade** page, click **Upload upgrade file to server** and browse to the location of the upgrade .cab file saved in [“Download the Software Upgrade File”](#) on page 11.

f Select the .cab file and click **Open**.

The .cab file uploads to the system.

g When the system indicates the **File Upload is Complete**, click **OK**.

h Click **Upgrade**.

When the status messages on the upgrade screen start changing ("Stopping services", "applying upgrade", etc.), the upgrade process has started. When the upgrade process is complete, the primary server reboots.

Note As a result of the software upgrade, the server is pointed at its internal database. Leave it pointed to the internal database until instructed to re-enable the external database.


i After the system reboots, use a web browser to log into the *physical IP address* of the primary server.

To upgrade the external database


1 To upgrade the external database:

a Open a browser window and in the **Address** field enter
`http://<Primary_Server_IP_Address>/pub/DBUpgrade.exe`

IMPORTANT Do not run the **Database Setup** program. It will overwrite your database.

- b** When the **File Download** dialog box appears, click **Run**.
- c** Click **OK** to begin the upgrade.
 - » Make sure you know the path to the Microsoft SQL Server.
 - » If you use Microsoft Windows authentication, be sure your login account has administrator privileges on the SQL server (i.e., is a member of the sysadmin group).
- d** When the upgrade script is done, log into the *physical IP address* of the primary server.
- e** Go to **Admin > Dashboard** and click **Shutdown**  to shut it down.

To upgrade the Polycom CMA system software on the redundant server

- 1** To upgrade the Polycom CMA system software on the redundant server
 - a** When the primary server has completely shutdown, power ON the redundant server.
 - b** Use a web browser to log into the *physical IP address* of the redundant server.
 - c** Go to **Reports > System Log Files** and verify that the **Current Log Level** is set to **Warning, Error, Major, Fatal, or OFF**.
 - d** Go to **Admin > Management and Security > Server Software Upgrade**.
 - e** From the **Server Software Upgrade** page, click **Upload upgrade file to server** and browse to the location of the upgrade .cab file saved in ["Download the Software Upgrade File"](#) on page 11.
 - f** Select the .cab file and click **Open**.
The .cab file uploads to the server.
 - g** When the system indicates the **File Upload is Complete**, click **OK**.
 - h** Click **Upgrade**.
When the status messages on the upgrade screen start changing ("Stopping services", "applying upgrade", etc.), the upgrade process has started. When the upgrade process is complete, the system reboots.
 - i** Use a web browser to log into the *physical IP address* of the redundant server.
 - j** Go to **Admin > Dashboard** and click **Shutdown**  to shut down the redundant server.

To finish the upgrade and re-enable redundancy

- 1 When the redundant server has completely shutdown, to finish the upgrade and re-enable redundancy:
 - a Power ON the primary server.
 - b Use a web browser to log into the *physical IP address* of the primary server.
 - c Clear the browser cache to refresh the Polycom CMA system user interface.
 - d Go to **Admin > Server Settings > Database**.

IMPORTANT

Do not run the **Database Setup** program. It will overwrite your database.

- e On the **Database** screen, select the **Use an external SQL Server database** check box, re-enter the external database settings you recorded in step 3b on page 13, and click **Update**.
 - f Click **Yes** to confirm the change and reboot the system.
 - g After the system completely reboots, use a web browser to log into the *physical IP address* of the primary server.
 - h Go to **Admin > Server Settings > Database** and verify that the external database is enabled.
 - i Go to **Admin > Server Settings > Redundant Configuration** and verify that the system redundancy is properly configured and the primary server is the active server.
- 2 To finish the upgrade and re-enable redundancy on the redundant server:
 - a Power ON the redundant server.
 - b Use a web browser to log into the *physical IP address* of the redundant server.
 - c Go to **Admin > Server Settings > Database**.

IMPORTANT

Do not run the **Database Setup** program. It will overwrite your database.

- d On the **Database** screen, select the **Use an external SQL Server database** check box, re-enter the external database settings you recorded in step 3b on page 13, and click **Update**.
- e Click **Yes** to confirm the change and reboot the system.
The system reboots.
- f After the system completely reboots, use a web browser to log into the system's *virtual IP address*.
- g Go to **Admin > Server Settings > Database** and verify that the external database is enabled.

- h** Go to **Admin > Server Settings > Redundant Configuration** and verify that redundancy is enabled.

The **Virtual IP** field is populated. The primary server is identified as the active (primary) server. The redundant server is identified as the inactive (non-primary) server. Both servers have a **Machine Status** of **ON**.

Note It may take up to 5 minutes for the redundant server to have a Machine Status of ON.

Enter the Software Upgrade Key Codes

To enter the Polycom CMA system software upgrade key codes

- 1** To enter the Polycom CMA system software upgrade key code for the primary server:
 - a** Use a web browser to log into the system's *virtual IP address*.
 - b** Go to **Admin > Server Settings > Redundant Configuration** and verify that the primary server is the active server.
 - c** Go to **Admin > Server Settings > Licenses**.
 - d** Enter the software upgrade key code for the primary server into the **Add New License > Activation Key** field and click **Add**.
The **Active License** section of the **Licenses** page is updated.
 - e** Go to **Admin > Server Settings > Redundant Configuration** and click **Switch Server Role**.
The redundant server becomes the active server.
- 2** To enter the Polycom CMA system software upgrade key code for the redundant server:
 - a** Use a web browser to log into the system's *virtual IP address*.
 - b** Go to **Admin > Server Settings > Redundant Configuration** and verify that the redundant server is the active server.
 - c** Go to **Admin > Server Settings > Licenses**.
 - d** Enter the software upgrade key code for the redundant server into the **Add New License > Activation Key** field and click **Add**.
The **Active License** section of the **Licenses** page is updated.
 - e** Go to **Admin > Server Settings > Redundant Configuration** and click **Switch Server Role**.
The primary server becomes the active server.

Complete the Upgrade

To complete the upgrade

- 1 To complete the upgrade on the primary server:
 - a Use a web browser to log into the system's *virtual IP address*.
 - b Go to **Admin > Server Settings > Redundant Configuration** and verify that the primary server is the active server.
 - c Go to **Admin > Server Settings > Network**.
 - d Enter the **DNS Domain** name for the network in which the domain name server and Polycom CMA system server reside-on the Network Settings page. This is the DNS domain name suffix, for example pol ycom. com, not the fully qualified path of *<hostname>. pol ycom. com*.
 - e Click **Update**.
The system reboots and the redundant server becomes the active server.
- 2 To complete the upgrade on the redundant server:
 - a Use a web browser to log into the system's *virtual IP address*.
 - b Go to **Admin > Server Settings > Redundant Configuration** and verify that the redundant server is the active server.
 - c Go to **Admin > Server Settings > Network**.
 - d Enter the **DNS Domain** name for the network in which the domain name server and Polycom CMA system server reside-on the Network Settings page. This is the DNS domain name suffix, for example pol ycom. com, not the fully qualified path of *<hostname>. pol ycom. com*.
 - e Click **Update**.
The system reboots and the primary server becomes the active server.
- 3 Enter the required LDAP information:
 - a Go to **Admin > Server Settings > LDAP**.
 - b On the **LDAP** page, enable **Integrate with LDAP server**
 - c If your AD publishes its hostname and IP address to the network DNS, enable **Auto-discover**; otherwise, enter the **LDAP IP Address or DNS Name**.
 - d Re-enter the LDAP settings you recorded in step c on page 13, and click **Update**.
 - e Select the **Security Level** appropriate for your installation.
 - » **Plain**—No security on the connection

Perform steps 3 a-e to allow schedulers to select participants from an enterprise directory

Perform steps 4 a-c to allow endpoint users to log in without re-entering credentials

- » **LDAPS**—To secure the connection over a specific port in a manner similar to `https`.
If the “Domain Controller: LDAP Server signing requirements” setting on the AD server is set to “Require Signing”, then you must use LDAPS to secure the connection.
- » **StartTLS**—To secure the connection over the same port as **Plain**, but to have the system negotiate security once the socket is opened. Some LDAP servers reject any unsecured transactions, so the first command is the StartTLS negotiation command.

- 4 Enter required Windows authentication information:
 - a Go to **Admin > Server Settings > LDAP** and on the **LDAP** page, select **Use Single Sign-on (Integrated Windows Authentication)**.
 - b If your AD publishes the domain controller’s hostname and IP address to the network DNS, enable **Auto-discover**; otherwise, enter **Fully Qualified Host Name** for the AD domain controller (for example, `dc1.mydomain.com`). If you created a pre-staged machine account, it must be within this domain as well.
 - c In the **Machine Account credentials** section, enter the **Domain\Machine Name** and **Password** created in step 1 on page 10 and click **Update**.

The system reboots.

Verify the Upgrade

To verify that the upgrade was successful:

- 1 On the **Login** screen, verify that the system displays the version number of software to which you are upgrading.
- 2 Go to **Admin > Server Settings > Redundant Configuration** and verify that redundancy is enabled.

The **Virtual IP** field is populated. The primary server is identified as the active (primary) server. The redundant server is identified as the inactive (non-primary) server. Both servers have a **Machine Status** of **ON**.
- 3 Verify that your endpoints are registered to the Gatekeeper and Global Address Book, as required.
- 4 Verify that you can schedule and start a conference.
- 5 Verify that you can monitor a conference.
- 6 Verify that you can terminate a conference.
- 7 Review the CDR for the test conference and verify the record is accurate.

