



▶ Polycom<sup>®</sup> CMA<sup>™</sup> 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.



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.

## 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**.
- 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](http://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.



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.

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 Polycom CMA system user interface to download 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.
  - d Left click on the latest **Logger\_db\_<yyyymmddhhhh>. bak** and select **Save**, and save the file to a location on your local system.
  - e Left click on the latest **XMPP\_db\_<yyyymmddhhhh>. bak** and select **Save**, and save the file to a location on your local system.
  - f Attach a USB memory drive to a port on your local system and copy the three database files to the drive.
- 2 To use the Polycom CMA system serial port to create up to the minute database backups:
  - a Attach a USB memory drive to a port on the Polycom CMA system.
  - b Connect to the RS232 port or the Polycom CMA system server and activate the console:
    - » **Bits per second:** 19200
    - » **Data bits:** 8
    - » **Parity:** None
    - » **Stop bits:** 1
    - » **Flow control:** None
  - c In the **Polycom CMA Administrative Console** window, press **Enter** to display the **Root Menu**.
  - d From the **Root** menu, select **4. Database Operations**.
  - e From the **Database Operations** menu, select **1. Backup Local Databases**.

If you have a previous backup that you created earlier, a warning appears stating: "The following backup database files will be deleted. To keep these files, enter 'N' to exit and then use the Copy Database operation to copy them to an external location. Do You Wish to Continue?"

- » To avoid overwriting the previous backup, select **N** and then select **4. Copy Database files FROM CMA** to copy these files to an external location.
- » To overwrite the previous backup database files, select **Y**.

- f** When prompted, enter the administrator **Username** and **Password**.

The system backs up the database. When the backup is done, a success message is displayed on the console screen.

## Prepare the External Database

Before upgrading a Polycom CMA system with an external database to version 5.0, you must create the PlcmDbo user in the database. This user's credentials will be used in future upgrades so that the Polycom CMA system no longer requires system administration credentials. This change will also allow the Polycom CMA system to maintain connection with the external database (rather than reverting to the internal database) after a system upgrade. However, this procedure may be complex depending on whether you have permission to access the Microsoft SQL Server system, or the database is enforcing a password policy, or the database has the minimum password age policy set.

### To create the PlcmDbo user

- 1** If you do not have permission to access the Microsoft SQL Server system and the database is enforcing a password policy or it has the minimum password age set, skip to [“Perform the Software Upgrade”](#).
- 2** Otherwise, if you can access the Microsoft SQL Server system:
  - a** Using SQL Server Management Studio, signon to external as system administrator (usually sa)
  - b** Run the CreatePl cmDbo. sql script, which is included in the Polycom CMA system upgrade package, against your external database. This will create the Pl cmDbo user that the Polycom CMA system requires with a temporary password.
  - c** If the database is enforcing a password policy or it has the minimum password age set, disable **Enforce password policy** for the Pl cmDbo user.
  - d** Go to [“Perform the Software Upgrade”](#).



## Perform the Software Upgrade



- 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**.



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 > Management and Security > Server Software Upgrade**.
- 5 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 2.
- 6 Select the . cab file and click **Open**.  
The . cab file uploads to the system.



The system cannot be upgraded while in HTTPS mode if using Mozilla Firefox. You must either switch the Polycom CMA system to HTTP or do the upgrade using Microsoft Internet Explorer.

- 7 When the system indicates the **File Upload is Complete**, click **OK**.
- 8 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.



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.

- 9 After the system completely reboots, clear the browser cache to refresh the Polycom CMA system user interface.
- 10 Log back into the Polycom CMA system.
- 11 If you ran the CreatePI cmDbo. sql script in [“Prepare the External Database”](#) on page 4, then re-enable **Enforce password policy** for the PlcmDbo user.
- 12 If you did not run the CreatePI cmDbo. sql script in [“Prepare the External Database”](#) on page 4 because you did not have permission to access the Microsoft SQL Server system, the system will be pointed at the internal database. A system alert will be posted indicating this. In this case
  - a Go to **System Setup > Server Settings > 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.
  - c The system will prompt you to upgrade the database. Next the system will prompt you for system administration credentials so it can create the PI cmDbo user with a the temporary password. Finally, the system will prompt you to change the password. However, changing the password will fail because of the minimum password age policy.
  - d Disable **Enforce password policy** for the PI cmDbo user.
  - e Point the Polycom CMA system back to the external database.
  - f Re-enable **Enforce password policy** for the PI cmDbo user.

## 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.

## 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.



- 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.

## 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**.
- 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](http://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.

## Prepare the External Database

Before upgrading a Polycom CMA system with an external database to version 5.0, you must create the PlcmDbo user in the database. This user's credentials will be used in future upgrades so that the Polycom CMA system no longer requires system administration credentials. This change will also allow the Polycom CMA system to maintain connection with the external database (rather than reverting to the internal database) after a system upgrade. However, this procedure may be complex depending on whether you have permission to access the Microsoft SQL Server system, or the database is enforcing a password policy, or the database has the minimum password age policy set.

### To create the PlcmDbo user

- 1 If you do not have permission to access the Microsoft SQL Server system and the database is enforcing a password policy or it has the minimum password age set, skip to [“Perform the Upgrade”](#) on page 12.
- 2 Otherwise, if you can access the Microsoft SQL Server system:
  - a Using SQL Server Management Studio, signon to external as system administrator (usually sa)
  - b Run the CreatePI cmDbo. sql script, which is included in the Polycom CMA system upgrade package, against your external database. This will create the PI cmDbo user that the Polycom CMA system requires with a temporary password.
  - c If the database is enforcing a password policy or it has the minimum password age set, disable **Enforce password policy** for the PI cmDbo user.
  - d Go to [“Perform the Upgrade”](#).

## Perform the Upgrade



- 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 > Redundant Configuration** and verify that the primary server is the active server.
  - d 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: \_\_\_\_\_
  - e Go to **Admin > Server Settings > Redundant Configuration** and click **Switch Server Role**.
- 2 When the redundant server becomes the active server, disable the external database connection:



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.
- 3 Upgrade the primary server:
- a Use a web browser to log into the *physical IP address* of the primary server.
  - b Go to **Reports > System Log Files** and verify that the **Current Log Level** is set to **Warning, Error, Major, Fatal, or OFF**.
  - c Go to **Admin > Management and Security > Server Software Upgrade**.
  - d 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.
  - e Select the .cab file and click **Open**.  
The .cab file uploads to the system.



The system cannot be upgraded while in HTTPS mode if using Mozilla Firefox. You must either switch the Polycom CMA system to HTTP or do the upgrade using Microsoft Internet Explorer.

- f** When the system indicates the **File Upload is Complete**, click **OK**.
- g** Click **Upgrade**.  
The system reboots, then it begins the upgrade progress and posting status messages, and then the system reboots again.
- h** After the system reboots, use a web browser to log into the *physical IP address* of the primary server.

#### To upgrade the Polycom CMA system software on the redundant server

- 1** To upgrade the Polycom CMA system software on the redundant server
  - a** Use a web browser to log into the *physical IP address* of the redundant server.
  - b** Go to **Reports > System Log Files** and verify that the **Current Log Level** is set to **Warning, Error, Major, Fatal, or OFF**.
  - c** Go to **Admin > Management and Security > Server Software Upgrade**.
  - d** 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.
  - e** Select the . cab file and click **Open**.  
The . cab file uploads to the server.
  - f** When the system indicates the **File Upload is Complete**, click **OK**.
  - g** 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.
  - h** Use a web browser to log into the *physical IP address* of the redundant server.
  - i** Go to **Admin > Server Settings > Database**.
  - j** 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 12, and click **Update**.
  - k** Click **Yes** to confirm the change and reboot the system.

- l After the system completely reboots, use a web browser to log into the *physical IP address* of the primary server.
- m Go to **Admin > Server Settings > Database** and verify that the external database is enabled.
- n Go to **Admin > Server Settings > Redundant Configuration** and verify that the system redundancy is properly configured and the primary server is the active server.

## 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**.
  - f Verify that 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**.
  - f Verify that the primary server becomes the active server.

## 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.