Replacing MCU Software with TelePresence Server Software on Cisco TelePresence MCU 5300 Series

Last Updated: February 2016
Preface

Change History

<table>
<thead>
<tr>
<th>Date</th>
<th>Change</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 2016</td>
<td>Content refresh</td>
<td>Introduction of multiparty licensing mode.</td>
</tr>
<tr>
<td>August 2013</td>
<td>First published</td>
<td>First published</td>
</tr>
</tbody>
</table>

Table 1 Replacing MCU Software with TelePresence Server Software on Cisco TelePresence MCU 5300 Series Change History
Introduction

This document is a guide to replacing the MCU software on an Cisco TelePresence MCU 5300 Series model with Cisco TelePresence Server software.

The software replacement is possible because either of the MCU or the TelePresence Server applications can run on this hardware. You can replace MCU version 4.4 or later with TelePresence Server version 3.1 or later. If you wish to replace an earlier MCU version, you must upgrade the MCU software before you begin.

The software replacement procedure is only supported from MCU software to TelePresence Server software; you cannot replace TelePresence Server software with MCU software. However, in the case of the software replacement failing, you can revert to running the MCU software on the device.

This document refers to Cisco TelePresence products other than the MCU and the TelePresence Server, and links to related documentation where necessary.

Ordering, Software Support, and Hardware Returns

When preparing to replace the software on your MCU hardware, there are a few points to consider. Most importantly, which TelePresence Server licensing mode to run. The recommended deployment model is now Multiparty Licensing mode. You can still run in the traditional screen licensed mode and order more conferencing capacity, or utilize your MCU capacity for the TelePresence Server software.

You can migrate your MCU Port Licenses to Shared Multiparty Licenses (TP-SMP-SL2SMP), or TelePresence Screen licenses. Shared Multiparty (SMP) is the new licensing option where we change from a port-based licensing model to a per-conference based model.

For more information on the different ordering options see Licensing the TelePresence Server Software, page 7, or contact your supplier and quote your chassis serial number.

If you have an active Cisco service contract in place, your level of software support will remain unchanged during and after the software replacement. The procedures outlined in this document are officially supported and you will receive the same level of support for your TelePresence Server software as you did for the MCU software.

In the unlikely event that you need to return your Cisco TelePresence MCU 5300 Series appliance for replacement, you will receive like for like replacement hardware from your supplier. This model will have the MCU software installed, so you will need to repeat the software replacement process documented here before you can run the TelePresence Server software on the replacement MCU hardware.

Prerequisites

Before you attempt the software replacement procedure, ensure that you have the following:

- An MCU 5300 Series running software version 4.4 or later. If your MCU is running an earlier version, you will need the most recent version so that you can upgrade before changing the software. See the MCU documentation for details of the upgrade procedure.
- Cisco TelePresence Conductor running software version XC2.0 or later to manage the TelePresence Server when it is running on the MCU 5300 Series hardware. If you plan to run in Multiparty Licensing mode, TelePresence Conductor XC4.0 or later is required. On these platforms, the TelePresence Server cannot run in Locally managed mode and requires TelePresence Conductor to manage it.
- If you need to support H.323 endpoints, then you need Cisco TelePresence Video Communication Server version X7.2 or later to interwork calls between H.323 endpoints and the TelePresence Server. H.323 is not directly supported by the TelePresence Server running on MCU 5300 Series hardware.
- Version 3.1 (or later) of the Cisco TelePresence Server software package that is suitable for your hardware. If you plan to run in Multiparty Licensing mode, version 4.2 (or later) is required and TelePresence Conductor XC4.0.
Your current MCU software package (in case you need to reverse the install and revert to your current configuration).

Licenses to provide capacity for the TelePresence Server application. You can migrate your existing MCU capacity to SMP licenses if you plan to run in Multiparty Licensing mode. Alternatively, if you wish to run screen licensed mode you can use your existing MCU capacity instead of acquiring new TelePresence Server capacity. You will need a migration key that allows you to use MCU media port licenses as TelePresence Server screen licenses (see Licensing the TelePresence Server Software, page 7 for more details).

The administrator user name and password for the MCU.

Caution: If you leave advanced account security enabled in the MCU application before you install the TelePresence Server application, and if you need to revert to the MCU application in the future, then the passwords on the MCU accounts may have expired by the time you try to log in. See the MCU documentation for details of the MCU security features.

Administrative access to the management products that are aware of the affected devices. For example, you may need access to Cisco TelePresence Management Suite and Cisco TelePresence Conductor if these products are installed in your TelePresence environment.

Administrative access to the hardware whose software you are going to replace, and a downtime window ("greenzone") in which to do the software replacement.

Caution: The new software installation process will enable dynamic IP address allocation, so the device will probably have a different IP address when it restarts. You will need the new IP address to access the web interface.

To read the new IP address of an MCU 5300 Series appliance, or to set a new static IP address, you must have physical access to the hardware so that you can issue commands at its serial port. If you cannot guarantee serial port access to the hardware, you must secure the assistance of someone who can before you begin the software replacement. Refer to the MCU 5300 Series documentation for details.

The model numbers and serial numbers of your devices in case you need to contact Cisco Technical Support.
Replacing the MCU Software with TelePresence Server Software

Isolating the Device from Management Tools

Cisco TelePresence Management Suite and Cisco TelePresence Conductor both have some visibility and control over MCU and TelePresence Server devices. However, these products will not automatically remove the MCU from their records when it no longer runs the MCU software, nor will they add a TelePresence Server in its place when the device is running the TelePresence Server software.

Isolating the MCU from Cisco TMS

You should isolate the MCU from Cisco TMS before you replace its software with TelePresence Server software. Refer to the Cisco TMS documentation for details of the following procedures:

1. Remove any bookings that are made on the MCU for the time when you are doing the software replacement, or for any time after that.
   You should keep a record of the bookings you remove so that you can recreate them after the software replacement.
2. When you are ready to replace the software, ensure that the MCU is not being used (at the start of the downtime window).
3. Back up your CDR data, and any additional data about this MCU that you wish to retain.
   MCU data will be unavailable in Cisco TMS after this task is complete.
4. Purge the MCU from the Cisco TMS database.
   **Note:** You must purge, rather than delete, the MCU from the Cisco TMS database. Deletion allows the database to retain information that may interfere with correct integration of the TelePresence Server after you replace the MCU software.

Isolating the MCU from TelePresence Conductor

You should isolate the MCU from TelePresence Conductor before you replace its software with TelePresence Server software. Refer to the Cisco TelePresence Conductor documentation for details of the following procedures:

1. When you are ready to replace the software, ensure that the MCU is not being used (at the start of the downtime window).
2. Remove the MCU from any MCU pools of which it is a member.

Backing Up the MCU Configuration

**Note:** Advanced account security mode on the MCU enforces expiry of passwords. We recommend that you disable this feature before backing up the MCU configuration. This reduces the risk of preventing administrative access if you need to revert to using the MCU software. Refer to the MCU online help for details.

Configuration.xml

1. In a web browser, navigate to the web interface of the device.
2. Sign in as an administrator.
3. Go to Settings > Upgrade.
4. In the Back up configuration area, click Save backup file.
   A popup dialog informs you that you may impair the performance of the device.
5. Click **OK**.
6. Copy the resulting `configuration.xml` file to a secure location.

**Feature Keys and License Keys**

1. In a web browser, navigate to the web interface of the device.
2. Sign in as an administrator.
3. Go to **Settings > Upgrade**.
4. Copy the names and serial numbers of the activated features and license keys from the **Feature management** area of the page.
   
   You’ll need some or all of these serial numbers to configure the device after you load the new software. Refer to **Feature Keys, page 15** for information on which MCU keys are valid for the TelePresence Server software.

   The feature activation codes and license keys are also stored in `configuration.xml`, without their names. For example:

   ```xml
   <features>
   <feature code="MT55-YQ8FN-TNWGA-F5HMA"/>
   </features>
   <licenses>
   <license key="LXFGCQW14T11J2CP9DDYA9828"/>
   </licenses>
   ```

**Saving MCU Data**

MCU configuration and logs are stored on non-volatile internal storage. The TelePresence Server does not use this stored MCU data and after you have installed the TelePresence Server software you will not be able to access this data via the web interface. We recommend that you retain this data in case you need to troubleshoot after software replacement.

If the unit is ever reverted to run the MCU software, then the data may become accessible again. You may wish to clear the retained information from internal storage before you replace the software.

Refer to the MCU online help for details of the following recommended procedures:

- Go to **Logs > Audit log** to download and then optionally delete your audit logs.
- Go to **Logs > CDR log** to download and then optionally delete your CDR logs (call detail records).

**Installing the Cisco TelePresence Server Software**

**Note:** The software replacement may take some time to complete. You can monitor progress through the serial port.

1. Unzip the TelePresence Server image file locally.
2. In a web browser, navigate to the web interface of the MCU.
3. Log in as an administrator.
4. Go to **Settings > Upgrade**.
5. In the **Main software image** section, locate the **New image file** field. Browse to and select the unzipped TelePresence Server image file.
6. Click **Upload software image**.
   The web browser uploads the file to the device, which may take a few minutes.

   **Note:** Do not browse away from the **Upgrade** page, or refresh the page, during the upload process – this will cause the upload to fail. If the upload does fail, refresh the **Upgrade** page and try again.

   A pop-up window displays to show upload progress. When complete, close the message. The web browser refreshes automatically and displays the message *Main image upload completed successfully*.

7. Click **Close Status window**.

8. In the changed **Upgrade** page, click **Shut down MCU**.

9. Click **Confirm MCU shutdown**.

10. When shutdown has completed, click **Restart MCU and upgrade**.

   The unit will restart itself and load the TelePresence Server software – this may take up to 25 minutes to complete.

   **Note:** When the hardware restarts with the TelePresence Server software loaded, it will be configured for dynamic IP address allocation. You can read the newly allocated address from the serial console. Refer to the TelePresence Server installation guide for details of configuring a static IP address.

### Activating the TelePresence Server Software

1. In a web browser, navigate to the web interface of the TelePresence Server.

2. Log in as **admin**.

   There is no password on the **admin** account in the new application. After login, there is a banner on the interface that reads "PRODUCT NOT ACTIVATED".

3. Go to **Configuration > Upgrade** and locate the **Feature management** section.

4. Enter the product activation code, then click **Update features**. Use the same activation code that was applied when the unit was activated as an MCU. For example, use the **MCU 5320 activation code** on the TelePresence Server.

5. [Optional] Enter the **Encryption** and **Cluster support** activation codes in the same way, if you were using these features on the MCU and wish to continue using them with the TelePresence Server software.

   See **Feature Keys, page 15** for details of feature key support between MCU and TelePresence Server applications.

6. Go to **Users** to change the password for the **admin** account.

### Backing up the TelePresence Server Configuration

Now that you have successfully replaced the MCU software with TelePresence Server software, you should back up the TelePresence Server configuration so that you can revert to this initial state if necessary.

1. In a web browser, navigate to the web interface of the TelePresence Server application.

2. Log in as **admin**.

3. Go to **Configuration > Upgrade** and locate the **Back up and restore** section.

4. Click **Save backup file**.

5. Store **configuration.xml** in a safe location.

### Licensing the TelePresence Server Software

The licensing scheme for the Cisco TelePresence MCU Series is different to the licensing scheme for the Cisco TelePresence Server. The MCU licenses media ports while the TelePresence Server licenses conferences or screens based on the licensing mode. The license key you buy contains shared Multiparty licenses or a certain number of "screen licenses".
If you want to add Shared Multiparty licenses you must migrate your MCU media port licenses and apply them to a TelePresence Conductor managing the TelePresence Server. The TelePresence Server will run at maximum capacity while the TelePresence Conductor is controlling the licensing.

Alternatively, you can migrate and/or add screen licenses for Cisco TelePresence MCU 5300 and Cisco TelePresence Server 3x0 series appliances directly to the unit via its web interface.

The hardware will be ready to use with the TelePresence Server software after you have enabled Multiparty licensing or applied screen licenses.

Refer to the TelePresence Server documentation and TelePresence Server online help for configuration details.

Ordering and Adding Shared Multiparty Licenses

To migrate from MCU port licenses (MCU PL) to Shared Multiparty (SMP) licenses, in summary, you need to order the SMP licenses through choosing how many of your existing MCU port licenses you want to migrate.

Ordering TelePresence Server Migration Option and SMP Licenses

1. Create an order in CCW for receiving licenses.
2. Verify that a valid email address is on Sales Order to receive e-delivery licenses once the order is approved.
3. Add top level SKU, TP-SMP-SL2SMP.
4. Choose how many MCU PL covered by existing support contract to migrate. The conversion ratio is 1 SMP for every 4 MCU port licenses.
5. CCW will now inform that the order will be placed on compliance hold and an A2Q process will need to be completed for the order to be released.
6. To release the order, make sure the Sales Order details, customer name and SWSS contract number are collected. Then go to A2Q: http://tools.cisco.com/atoq
7. Login with your cisco.com account and choose Personal Multiparty (PMP). (We use the same process for both SMP and PMP.)
8. Create a new A2Q and fill in all the fields marked mandatory.
9. Submit the A2Q.

The A2Q team will review the sales order and entitlement check by lookup of Service Contract in the CSCC Tool. Any questions or changes to the order will be through A2Q notification.

Once approved, Manufacturing will be notified to release the order. This usually takes 24-48 hours.

When the order is released, the email designate on the Sales Order will receive Cisco eDelivery notification, (usually within 24 hours after order shipment). To collect PAK Code, login to eDelivery mailbox.

After receiving the PAK code go to http://www.cisco.com/og/licensing to register the PAK to device serial numbers and receive option keys to enable conferencing.

See the Reference chapter at the end of this document for details on capacity and bridge platforms.

When enabling the Shared Multiparty licenses they will be added to the TelePresence Conductor. The migrated 5300 Series appliance will always run as fully licensed when in Multiparty license mode.

Adding Option Keys on the Cisco TelePresence Conductor

1. Received licenses are added to the TelePresence Conductor.
2. TelePresence Conductor is switched to Multiparty Licensing mode.
3. TelePresence Servers are automatically set to fully licensed state.
Adding Conferencing Capacity

Multiple SMP licenses increase your device’s conferencing capacity. You can order and add multiple SMP licenses on TelePresence Conductor. The combined total number of SMP licenses added to a Conductor will be the conferencing capacity.

Migrating MCU Port Licenses to TelePresence Screen Licenses

If you don’t want to run Multiparty licensing you can still migrate your MCU port licenses (MCU PL) to TelePresence Server screen licenses (SL). You need a license migration key before you can reuse your existing licenses as TelePresence Server screen licenses.

To reuse your existing MCU media port licenses for the TelePresence Server software, you must first apply the Port license conversion option to the MCU 5300 series appliance.

The migration option L-MCU5300-UPG-PAK and L-300-PLC, one per appliance, is ordered as a $0 key through CCW.

Reusing Media Port Licenses as Screen Licenses on the Cisco TelePresence MCU 5300 Series Appliance

1. In a web browser, navigate to the web interface of the TelePresence Server application.
2. Log in as admin.
3. In the Feature management section, locate the Activation code field.
4. Enter the Port license conversion activation code, then click Update features. The TelePresence Server application can now accept the previously used MCU license key.
5. Enter your saved MCU 5300 Series media port license key, then click Update features. The application reads the port licenses and reports the number of screen licenses that are derived from them. See Capacity Reuse, page 14 for conversion ratios.

The summary shows the number of licenses that are available from Media port licenses. This is the number of screen licenses that have been derived from the existing media port licences. The migration ratio from MCU port licenses to TelePresence Server screen licenses is 4:1.

See Capacity Reuse, page 14 for more details on conversion ratios.

Using your Existing Conferencing Capacity

You need a license migration key before you can reuse your existing MCU media port licenses as TelePresence Server screen licenses, because media port licenses are not valid for the TelePresence Server software.

To reuse your existing MCU 5300 Series media port licenses for the TelePresence Server software, you must first apply the Port license conversion key via its web interface.

Reusing MCU 5300 Series Media Port Licenses as TelePresence Server Screen Licenses

1. In a web browser, navigate to the web interface of the TelePresence Server application.
2. Log in as admin.
3. In the Feature management section, locate the Activation code field.

4. Enter the Port license conversion activation code, then click Update features. The TelePresence Server application can now accept the previously used MCU license key.

5. Enter your saved MCU 5300 Series media port license key, then click Update features. The application reads the port licenses and reports the number of screen licenses that are derived from them. See Capacity Reuse, page 14 for conversion ratios.

Adding Conferencing Capacity

Multiple license keys of the same type do not give greater capacity. If you wish to increase your device’s conferencing capacity, you must apply for a replacement license key that contains more licenses of the appropriate type.

If you apply a second license key to the TelePresence Server application on MCU 5300 Series, the application uses the license that allows for more capacity and ignores the other.

Adding Capacity to an MCU 5300 Series Appliance Running TelePresence Server Software

After having applied the Port license conversion key, so that you could reuse your MCU conferencing capacity, if you want to add capacity you must order a new MCU license key; the ordering system will not produce the right keys if you try to order TelePresence Server screen licenses with an MCU serial number.

Clustering MCU 5300 Series Appliances Running the TelePresence Server Software

You can cluster the appliances once they have the TelePresence Server application on them, whether or not they were clustered before you replaced the software. The Cluster support key is not required for clustering these appliances.

The maximum supported cluster size with the appliance type hardware is two, including the master, irrespective of whether it is running the MCU or TelePresence Server application.

Note: If you only want to replace the software on one unit from a cluster, you must disconnect the stacking cable and change the cluster behavior of the other MCU to Unclustered.

1. Log in to the TelePresence Server application on the unit that will be the master.
   A cluster of appliance type units is often referred to as a "stack".

2. Go to Configuration > Cluster configuration.

3. In the Cluster mode field, select Master.

4. Click Apply changes.

5. Log in to the TelePresence Server application on the unit that will be the slave.

6. Go to Configuration > Cluster configuration.

7. In the Cluster mode field, select Slave.

8. Click Apply changes.

Note: You must restart the MCU 5300 Series appliances after changing their cluster configuration.

Reintegrating the Device with Management Tools

Cisco TelePresence Management Suite and Cisco TelePresence Conductor both have some visibility and control over MCU and TelePresence Server devices. However, these products will not automatically remove the MCU from their records when it no longer runs the MCU software, nor will they add a TelePresence Server in its place when the device is running the TelePresence Server software.
You will need to reintegrate the device running the TelePresence Server application with any management products that were previously aware of it as an MCU.

Reintegrating the Device with TelePresence Conductor

After you have replaced the MCU software with the TelePresence Server software, you must add the device as a TelePresence Server to any TelePresence Server pools of which it should be a member.

Refer to the Cisco TelePresence Conductor documentation for details of the procedure.

Reintegrating the Device with Cisco TMS

Refer to the Cisco TMS documentation for details of the following procedures:

1. Add the device as a TelePresence Server to the Cisco TMS database.
2. Create new bookings to replace any you needed to remove from the MCU before its software was replaced with TelePresence Server software.
Reverting to the MCU Software

To revert your hardware from running the TelePresence Server application back to running the MCU application, you will need the MCU software package, your former administrative credentials, and any activation codes you previously used. All other Prerequisites, page 3 also apply to the reversion procedure.

You will need to repeat the reversion procedures on each unit in a cluster if you are reverting a cluster.

Installing the Cisco TelePresence MCU Series Software

1. Unzip the MCU image file locally.
2. In a web browser, navigate to the web interface of the TelePresence Server application.
3. Log in as an administrator.
4. Go to Logs > Event log to download the TelePresence Servers event log.
   You need to save this log for troubleshooting a failed software replacement because it is lost when the device restarts.
5. Go to Configuration > Upgrade.
6. In the Main software image section, locate the New image file field. Browse to and select the unzipped MCU image file.
7. Click Upload software image.
   The web browser uploads the file to the device, which may take a few minutes.
   **Note:** Do not browse away from the Upgrade page, or refresh the page, during the upload process – this will cause the upload to fail.
   A pop-up window displays to show upload progress. When complete, close the message. The web browser refreshes automatically and displays the message Main image upload completed successfully.
8. Click Shut down TelePresence Server.
9. Click Confirm TelePresence Server shutdown.
10. When shutdown has completed, click Restart TelePresence Server and upgrade.
11. Confirm the restart when prompted.
   The unit will restart itself and load the MCU software – this may take up to 25 minutes to complete.
Reference

Compare TelePresence Server Platform Capacity

The TelePresence Server is currently available both as dedicated hardware through appliance or MSE 8000 blade and as a Cisco TelePresence Server on Virtual Machine supported on both spec-based and dedicated hardware.

Table 2  TelePresence Server maximum capacity on various platforms

<table>
<thead>
<tr>
<th>Screen Licenses</th>
<th>8 vCPU</th>
<th>MM310 or 5310</th>
<th>30 vCPU HD</th>
<th>MM320 or 5320</th>
<th>MSE 8510 or 8710</th>
<th>MM400v</th>
<th>MM410v</th>
<th>MSE 820</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen Licenses</td>
<td>5</td>
<td>6</td>
<td>10</td>
<td>12</td>
<td>12</td>
<td>18</td>
<td>27</td>
<td>30</td>
</tr>
<tr>
<td>HD (720p30)</td>
<td>10</td>
<td>12</td>
<td>20</td>
<td>24</td>
<td>24</td>
<td>36</td>
<td>54</td>
<td>60</td>
</tr>
</tbody>
</table>

The Cisco TelePresence Server on Virtual Machine running on the Cisco Multiparty Media 410v platform is the most efficient platform in our current portfolio. It’s a future-proof platform designed to support enhanced features in the future.

With the new licensing model, based on concurrent conferences through TelePresence Conductor, all TelePresence Server resources automatically run at their maximum capacity. The ability to quickly increase and deploy extra Media 410v servers gives greater flexibility.

If you want to add Cisco TelePresence Server on Virtual Machine by purchasing Media 410v servers, you can order zero dollar activation key and encryption key using top level PID R-VTS-K9 with L-AES-VTS-K9.

Overview TelePresence Server Platform Migration and Upgrade Options

For customers looking to upgrade their existing hardware and/or migrate from MCU port licenses to either TelePresence Server screen licenses or Shared Multiparty licenses this is an overview of the current options and offerings.

Table 3  TelePresence Server platforms migration matrix for Unified CM centric deployments

<table>
<thead>
<tr>
<th>Device</th>
<th>Call Control</th>
<th>TMP</th>
<th>Migrate to SL</th>
<th>Load TS Software</th>
<th>SMP</th>
<th>PMP</th>
<th>RecommendedUpgrade</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCU 4200</td>
<td>CUCM</td>
<td>Yes</td>
<td>NA</td>
<td>NA</td>
<td>No</td>
<td>No</td>
<td>TMP to 410v</td>
</tr>
<tr>
<td>MCU 45xx</td>
<td>CUCM</td>
<td>Yes</td>
<td>NA</td>
<td>NA</td>
<td>No</td>
<td>No</td>
<td>TMP to 410v</td>
</tr>
<tr>
<td>&gt;MSE 8420</td>
<td>CUCM</td>
<td>Yes</td>
<td>NA</td>
<td>NA</td>
<td>No</td>
<td>No</td>
<td>TMP to 410v</td>
</tr>
<tr>
<td>MCU 53xx</td>
<td>CUCM</td>
<td>Optional</td>
<td>4:1 (4PL=1SL)</td>
<td>Yes</td>
<td>Yes (4PL=1SMP)</td>
<td>Yes</td>
<td>Migrate to TS and SMP</td>
</tr>
<tr>
<td>MSE 8510</td>
<td>CUCM</td>
<td>Optional</td>
<td>5:1 (5PL=1SL)</td>
<td>Yes</td>
<td>Yes (4PL=1SMP)</td>
<td>Yes</td>
<td>Migrate to TS and SMP</td>
</tr>
<tr>
<td>TS 7010</td>
<td>CUCM</td>
<td>Optional</td>
<td>NA (default SL)</td>
<td>TS only</td>
<td>Yes (1SL=1SMP)</td>
<td>Yes</td>
<td>SL to SMP (or TMP to 410v)</td>
</tr>
<tr>
<td>MSE 8710</td>
<td>CUCM</td>
<td>Optional</td>
<td>NA (default SL)</td>
<td>TS only</td>
<td>Yes (1SL=1SMP)</td>
<td>Yes</td>
<td>SL to SMP</td>
</tr>
</tbody>
</table>
Table 3  TelePresence Server platforms migration matrix for Unified CM centric deployments (continued)

<table>
<thead>
<tr>
<th>Device</th>
<th>Call Control</th>
<th>TMP</th>
<th>Migrate to SL</th>
<th>Load TS Software</th>
<th>SMP</th>
<th>PMP</th>
<th>Recommended Upgrade</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM3xx</td>
<td>CUCM</td>
<td>Optional</td>
<td>NA (default SL)</td>
<td>TS only</td>
<td>Yes</td>
<td>Yes</td>
<td>SL to SMP</td>
</tr>
<tr>
<td>MM400v</td>
<td>CUCM</td>
<td>Optional</td>
<td>NA (default SL)</td>
<td>TS only</td>
<td>Yes</td>
<td>Yes</td>
<td>SL to SMP</td>
</tr>
<tr>
<td>MM410v</td>
<td>CUCM</td>
<td>No</td>
<td>NA (default SL)</td>
<td>TS only</td>
<td>Yes</td>
<td>Yes</td>
<td>Recommended platform</td>
</tr>
<tr>
<td>MM820</td>
<td>CUCM</td>
<td>No</td>
<td>NA (default SL)</td>
<td>TS only</td>
<td>Yes</td>
<td>Yes</td>
<td>Recommended platform</td>
</tr>
</tbody>
</table>

*one L-5300-4PL converts to one SL (TS Screen License) or one SMP (Shared Multiparty License)

**two L-8420-2PL converts to one SMP

Table 4  TelePresence Server platforms migration matrix for VCS centric deployments:

<table>
<thead>
<tr>
<th>Device</th>
<th>Call Control</th>
<th>TMP</th>
<th>Migrate to SL</th>
<th>Load TS Software</th>
<th>SMP</th>
<th>PMP</th>
<th>Recommended Upgrade</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCU 4200</td>
<td>VCS</td>
<td>Yes</td>
<td>NA</td>
<td>NA</td>
<td>No</td>
<td>No</td>
<td>TMP to 410v</td>
</tr>
<tr>
<td>MCU 45xx</td>
<td>VCS</td>
<td>Yes</td>
<td>NA</td>
<td>NA</td>
<td>No</td>
<td>No</td>
<td>TMP to 410v</td>
</tr>
<tr>
<td>MSE 8420</td>
<td>VCS</td>
<td>Yes</td>
<td>NA</td>
<td>NA</td>
<td>No</td>
<td>No</td>
<td>TMP to 410v</td>
</tr>
<tr>
<td>MCU 53xx</td>
<td>VCS</td>
<td>Optional</td>
<td>4:1 (4PL=1SL)</td>
<td>Yes</td>
<td>Yes (4PL=1SMP)</td>
<td>No</td>
<td>Migrate to TS and SMP</td>
</tr>
<tr>
<td>MSE 8510</td>
<td>VCS</td>
<td>Optional</td>
<td>5:1 (4PL=1SL)</td>
<td>Yes</td>
<td>Yes (4PL=1SMP)</td>
<td>No</td>
<td>Migrate to TS and SMP</td>
</tr>
<tr>
<td>TS 7010</td>
<td>VCS</td>
<td>Optional</td>
<td>NA (default SL)</td>
<td>TS only</td>
<td>Yes (1SL=1SMP)</td>
<td>No</td>
<td>SL to SMP (or TMP to 410v)</td>
</tr>
<tr>
<td>MSE 8710</td>
<td>VCS</td>
<td>Optional</td>
<td>NA (default SL)</td>
<td>TS only</td>
<td>Yes (1SL=1SMP)</td>
<td>No</td>
<td>SL to SMP</td>
</tr>
<tr>
<td>MM3xx</td>
<td>VCS</td>
<td>Optional</td>
<td>NA (default SL)</td>
<td>TS only</td>
<td>Yes</td>
<td>No</td>
<td>SL to SMP</td>
</tr>
<tr>
<td>MM400v</td>
<td>VCS</td>
<td>Optional</td>
<td>NA (default SL)</td>
<td>TS only</td>
<td>Yes</td>
<td>No</td>
<td>SL to SMP</td>
</tr>
<tr>
<td>MM410v</td>
<td>VCS</td>
<td>No</td>
<td>NA (default SL)</td>
<td>TS only</td>
<td>Yes</td>
<td>No</td>
<td>Recommended platform</td>
</tr>
<tr>
<td>MM820</td>
<td>VCS</td>
<td>No</td>
<td>NA (default SL)</td>
<td>TS only</td>
<td>Yes</td>
<td>No</td>
<td>Recommended platform</td>
</tr>
</tbody>
</table>

*one L-5300-4PL converts to one SL (TS Screen License) or one SMP (Shared Multiparty License)

**two L-8420-2PL converts to one SMP

**Capacity Reuse**

For details of how media port licenses or screen licenses translate into conferencing capacity, that is, number and type of connections, refer to the appropriate [MCU release notes](#) or [TelePresence Server release notes](#) for your software. This information is also available in the applications’ online help.
Model and software with these licenses can be reused as these licenses

<table>
<thead>
<tr>
<th>Model and software</th>
<th>with these licenses</th>
<th>can be reused as these licenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cisco TelePresence MCU 5300 Series, with Port license conversion option.</td>
<td>4 media port licenses</td>
<td>= 1 TS screen license on Cisco TelePresence Server software</td>
</tr>
</tbody>
</table>

**Note:** If the number of media ports is not an exact multiple of the conversion ratio, the remaining media port licenses are not reused. For example, if you have 23 media port licenses available on the MCU 5300 Series, you can use them to allocate 5 screen licenses to the TelePresence Server application, not 6.

**Feature Keys**

<table>
<thead>
<tr>
<th>Feature name</th>
<th>Valid for MCU software?</th>
<th>Valid for TelePresence Server software?</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCU 5310 activation</td>
<td>Yes, on MCU 5310</td>
<td>Yes, when TelePresence Server application on same hardware. The key is identical but the name appears as &quot;Media 310 activation&quot;.</td>
</tr>
<tr>
<td>MCU 5320 activation</td>
<td>Yes, on MCU 5320</td>
<td>Yes, when TelePresence Server application on same hardware. The key is identical but the name appears as &quot;Media 320 activation&quot;.</td>
</tr>
<tr>
<td>Port license conversion</td>
<td>Not for MCU software on MCU 5300 Series</td>
<td>Yes, for TelePresence Server application on MCU 5300 Series hardware</td>
</tr>
<tr>
<td>Video firewall</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Encryption</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cluster support (‘Backplane cluster key’)</td>
<td>Yes</td>
<td>Not required</td>
</tr>
<tr>
<td>Third party interop</td>
<td>No</td>
<td>Yes (not required for Version 4.0 software or later)</td>
</tr>
</tbody>
</table>

**License keys**

Licenses are generated using the serial number of the device to which they will be applied, and are only ever valid on the device with that serial number. When purchasing replacement licenses for additional capacity, make sure to use the serial number from your product of the type listed in the 'Valid on this product' column of the following table.

<table>
<thead>
<tr>
<th>Key name (license types)</th>
<th>Valid on this product</th>
<th>Provides capacity for these products</th>
</tr>
</thead>
</table>
| 5300-PL (5300 Media port licenses) | Cisco TelePresence MCU 5300 Series | - Cisco TelePresence MCU 5300 Series  
  - With Port license conversion key:  
  - MCU 5300 Series running TelePresence Server application  
  - TelePresence Server on Multiparty Media 310  
  - TelePresence Server on Multiparty Media 320 |
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