



# Cisco TelePresence Conductor with Cisco TMS

## Deployment Guide

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# Introduction

This document describes how to configure Cisco TelePresence Management Suite to work with Cisco TelePresence Conductor. After completing these tasks, you will be able to use Cisco TMS to schedule conferences that include participants hosted on conference bridges managed by a TelePresence Conductor.

This document covers:

- Creating and reserving TelePresence Conductor aliases for scheduling. You can use conference bridges that are reserved for scheduled conferences to guarantee availability, or you can use conference bridges that are shared with non-scheduled conference calls for optimum bridge utilization.
- Booking and editing conferences hosted on a TelePresence Conductor.
- Limitations with this deployment.
- Migrating: If you have Cisco TMS and conference bridges already in place and are introducing a TelePresence Conductor to your environment, the document describes how to migrate so that future conferences are rebooked using the TelePresence Conductor.
- Example scheduling scenarios.

This document describes a SIP-only TelePresence Conductor scheduling deployment. If you have H.323-only endpoints, use interworking features on a call control device.

This document is intended to be used with one of the following documents depending on whether you use Unified CM or Cisco VCS for call control in your deployment:

- [Cisco TelePresence Conductor with Unified CM Deployment Guide \(XC3.0 with 10.x\)](#)
- [Cisco TelePresence Conductor with VCS \(B2BUA\) Deployment Guide \(XC3.0 with X8.2\)](#)

# Differences when scheduling TelePresence Conductor-managed bridges

Before moving to a TelePresence Conductor scheduling deployment, note the following differences between scheduling direct-managed bridges and bridges managed by a TelePresence Conductor:

Table 1: Differences when scheduling TelePresence Conductor-managed bridges

	Direct-managed	TelePresence Conductor-managed
<b>Booking</b>	<ul style="list-style-type: none"> <li>Conference configurations can be set per conference, over-riding default conference settings.</li> <li>Cisco TMS chooses the SIP URI to provide the dial-in number for the conference.</li> <li>Can be added to Cisco TMS participant and conference templates.</li> <li>No option to overbook bridge resources.</li> </ul>	<ul style="list-style-type: none"> <li>Some conference configurations are set on the TelePresence Conductor conference template, and cannot be changed during booking.</li> <li>Users can input the variable part of the alias during booking to create the dial-in number for the conference.</li> <li>Cannot be added to Cisco TMS participant and conference templates.</li> <li>Overbooking of bridge resources: Using the service preference capacity adjustment feature, you can configure Cisco TMS to allow overbooking of the actual resource available on the bridges in the pools associated with the service preference. By doing this, you allow for the case where users unnecessarily book more ports than they need for conferences, thereby freeing up unused resources for other users.</li> </ul>
<b>Cascading</b>	<ul style="list-style-type: none"> <li>Does not support cascaded TelePresence Servers.</li> <li>Cisco TMS decides whether to cascade MCUs when routing conferences.</li> <li>Cisco TMS cannot create a cascade after the conference has started if more participants join than the capacity on the hosting MCU(s).</li> <li>More functionality in <b>Conference Control Center</b> for example, moving participants from one cascaded MCU to another.</li> <li>Cascading is selected using the Distribution options when booking a conference.</li> <li>Cascading is not possible when booking using clients that use Cisco TMS Booking API (Cisco TMSBA) for example: Microsoft Outlook and Smart Scheduler.</li> </ul>	<ul style="list-style-type: none"> <li>Supports cascaded TelePresence Servers.</li> <li>TelePresence Conductor cascades the bridges.</li> <li>TelePresence Conductor can cascade on the fly if more participants join than the initial capacity of the hosting bridge(s).</li> <li>No functionality in <b>Conference Control Center</b> except visibility of which bridge a participant is connected to.</li> <li>You have to select an alias that supports cascading when booking the conference.</li> <li>Cascading is possible when booking using clients that use Cisco TMS Booking API (Cisco TMSBA) for example: Microsoft Outlook and Smart Scheduler.</li> </ul>

Table 1: Differences when scheduling TelePresence Conductor-managed bridges (continued)

	Direct-managed	TelePresence Conductor-managed
<b>Conference Control Center</b>	Full functionality dependent on the bridge type hosting the conference.	<p>The following functionality is not available for conferences hosted on a TelePresence Server managed by a TelePresence Conductor:</p> <ul style="list-style-type: none"> <li>■ Video protocol</li> <li>■ Audio protocol</li> <li>■ Encryption status</li> <li>■ Number</li> <li>■ Participant Audio Level</li> <li>■ Video Resolution</li> <li>■ Duo Video Status</li> <li>■ Snapshots</li> </ul>
<b>Reporting</b>	Full functionality.	<ul style="list-style-type: none"> <li>■ Call Detail Records (CDRs) from TelePresence Conductor-managed conference bridges will not contain any ConferenceIDs.</li> <li>■ TelePresence Conductor itself does not feed back any conference CDRs to Cisco TMS. The bridges themselves will however, if added to Cisco TMS.</li> <li>■ Depending on the call direction you might get incomplete CDR data, as dialing out can lead to incorrect data.</li> <li>■ Bridge utilization reporting is not supported for conferences hosted on a TelePresence Conductor.</li> </ul>
<b>Zones</b>	Cisco TMS uses IP zones to ensure that systems use bridges that are geographically closer.	Cisco TMS chooses which TelePresence Conductor to use based on IP zones but will disregard any IP zone information for the bridges themselves.

## Prerequisites

If you are implementing TelePresence Conductor Scheduling with Cisco TMS, you must be familiar with all the infrastructure products included in the deployment.

### Software versions

Product	Required software version
Cisco TelePresence Management Suite	14.6
Cisco TelePresence Conductor	XC3.0
Cisco Unified Communications Manager	10.x
Cisco VCS	X8.x
Cisco TelePresence Server	<ul style="list-style-type: none"> <li>■ TelePresence Server 7010 version 3.0(2.46) or later</li> <li>■ TelePresence Server MSE 8710 version 3.0(2.46) or later</li> <li>■ TelePresence Server version 3.1 or later on Cisco Multiparty Media 310 platform</li> <li>■ TelePresence Server version 3.1 or later on Cisco Multiparty Media 320 platform</li> <li>■ TelePresence Server on Virtual Machine version 3.1 or later</li> </ul> <p>For all TelePresence Servers we recommend that you install the latest software version: otherwise some features will not be supported.</p> <p>TelePresence Server version 4.0(1.57) or later is required for cascading to work.</p>
Cisco TelePresence MCU	<ul style="list-style-type: none"> <li>■ MCU 4200 series version 4.2 or later</li> <li>■ MCU 4500 series version 4.2 or later</li> <li>■ MCU 5300 series version 4.3(2.17) or later</li> <li>■ MCU MSE 8420 version 4.2 or later</li> <li>■ MCU MSE 8510 version 4.2 or later</li> </ul> <p>For all TelePresence MCUs we recommend that you install the latest software version: otherwise some features will not be supported.</p>

### Preconfiguration of TelePresence Conductor, conference bridges and call control

If you are adding multiple TelePresence Conductors to Cisco TMS, complete the preconfiguration steps for all of them.

Depending on which call control solution you are using, configure your TelePresence Conductor deployment exactly as described in either of these guides:

- [Cisco TelePresence Conductor with Unified CM Deployment Guide \(XC3.0 with 10.x\)](#)
- [Cisco TelePresence Conductor with VCS \(B2BUA\) Deployment Guide \(XC3.0 with X8.x\)](#)

with the following exceptions:

1. For all TelePresence Conductor conference templates you want to use for scheduling with Cisco TMS, do the following on the TelePresence Conductor:
  - a. Go to **Conference configuration > Conference templates**.
  - b. Set **Scheduled conference** to Yes.
  - c. Dial a number that will match the template you just modified and verify that TelePresence Conductor rejects the call: templates reserved for scheduling must only be used in conferences created by Cisco TMS.
2. For all service preferences you want to use for scheduling with Cisco TMS, do the following on the TelePresence Conductor:
  - a. Go to **Conference configuration > Service Preferences**.
  - b. In **Pools**, click the radio button **Pools to use for scheduling** for each pool you want to use for scheduling from the highest priority pool at the top of the list downwards.  
Note that it is not possible to skip higher priority pools. When you change the priority order of a pool, the selected pools will adjust.

## Preconfiguration of Cisco TMS

Your Cisco TMS must be installed and working according to [Cisco TelePresence Management Suite Installation and Upgrade Guide \(14.6\)](#).

## Collaboration Meeting Room Hybrid deployments

If you want to use CMR Hybrid so that WebEx participants can be scheduled in conferences hosted on TelePresence Conductor, this document assumes that this has already been configured according to [Cisco Collaboration Meeting Rooms \(CMR\) Hybrid Configuration Guide](#) and works correctly.

## Limitations

- On TelePresence Conductor, templates can have related auto-dialed participants. Every time a conference is created based on that template, one those participants are dialed automatically and join the conference. Note that if there are auto-dialed participants configured for templates, more resources will be used than are visible in Cisco TMS.
- If TelePresence Conductor is clustered, Cisco TMS will not take advantage of multiple peers and will only use a single TelePresence Conductor. For this reason, in a clustered TelePresence Conductor environment, add only one of the TelePresence Conductor peers to Cisco TMS.
- Call Detail Records (CDRs) from TelePresence Conductor-managed conference bridges will not contain any ConferenceIDs.
- TelePresence Conductor itself does not feed back any conference CDRs to Cisco TMS.

Note that the following scheduling options are not supported for TelePresence Conductor in Cisco TMS:

- Media port reservation—do not enable this on the MCUs.
- Cisco TMS Conference templates
- Participant templates
- Distribution
- TelePresence Conductor conference type Lecture. Only conference templates using the Meeting conference type are supported.

## MCU Failover

If you are using direct-managed bridges, and MCU Failover is enabled, Cisco TMS moves participants to another bridge if the one hosting the conference fails.

When using a TelePresence Conductor to manage conference bridges, the following must be noted:

- Cisco TMS will poll the TelePresence Conductor, not the bridges, and will have no knowledge of whether a bridge has failed. MCU failover as described above is not supported when a TelePresence Conductor is used. Instead, if the Cisco TMS connection to the TelePresence Conductor fails, Cisco TMS will move the conference to another TelePresence Conductor or available bridge.
- If you choose the option: **Cisco TMS > Administrative Tools > Configuration > Conference Settings > Automatic MCU Failover**: *If conference start or MCU polling fails*, conferences including a TelePresence Conductor will only failover if conference start fails (Cisco TMS cannot contact the TelePresence Conductor). Failover will not occur if polling the TelePresence Conductor fails: this is to avoid disconnection of conferences that are successfully taking place despite Cisco TMS having lost connection with the TelePresence Conductor.



## How to use this document

After completing the preconfiguration steps described in [Prerequisites \[p.6\]](#), follow this document to add Cisco TMS and scheduling capabilities to your TelePresence Conductor deployment.

## Examples in this document

The examples used throughout this document presume that the conference aliases you use for scheduled calls are configured as follows:

### Unified CM

4 digits and start with a 5. On the TelePresence Conductor this would be configured as:

```
(5... )@.*
```

### Cisco VCS

Any dial string that starts with 'meet.' and then a variable, before the domain suffix:

```
meet\...*@example.org
```

Substitute the values as appropriate for your own deployment.

## Migrating from direct-managed bridges

If you have direct-managed bridges with scheduled future conferences, and are moving to a TelePresence Conductor deployment, the section [Migrating from direct-managed conference bridges \[p.23\]](#) describes how to use Cisco TMS's **Conference Diagnostics** feature to identify those future conferences and move them onto a TelePresence Conductor.

# Adding TelePresence Conductor to Cisco TMS

TelePresence Conductor must be added to Cisco TMS. You can choose whether to add the conference bridges that are managed by TelePresence Conductor:

- For **Conference Control Center** snapshots (MCU only) and call detail records (CDRs) in Cisco TMS to work, conference bridges must be added to both TelePresence Conductor and Cisco TMS, in that order.
- If snapshots and CDRs are not required, you do not need to add the bridges to Cisco TMS.

## Task 1: Adding the TelePresence Conductor to Cisco TMS

To add the TelePresence Conductor to Cisco TMS:

1. Go to **Systems > Navigator**. Select a folder for the system.
2. Click **Add Systems**.

3. Enter either the IP address, the DNS name, an IP range, or a comma-separated list of IP addresses and/or DNS names.
4. Select **ISDN Zone**, **IP Zone** and **Time Zone** for the system from the drop-down lists.
5. Click the **Advanced Settings** section heading to expand it to add authentication details, configuration template, or SNMP discovery options.
6. Click **Next** to start adding the system.  
A progress window will be shown as Cisco TMS connects to the address and determines the type of system being added, and the system's configuration.
7. You will now be prompted if a password is needed to access the system. Enter the password and click **Next**.
  - When adding a TelePresence Conductor you will see a number of errors. This is expected, just click on **Add System Despite Warnings**.
8. Click **Finish Adding Systems** to return to the main **Navigator** view.  
Your new system will now be in the designated folder.

## Task 2: Adding conference bridges to Cisco TMS

Optionally, add each conference bridge to Cisco TMS following the instructions in [Task 1: Adding the TelePresence Conductor to Cisco TMS \[p. 10\]](#) above. Note the following:

- If you specified an IP address for the conference bridge in **Conference configuration > Conference bridges >** Edit the conference bridge > **IP address or FQDN** field on TelePresence Conductor, add the conference bridges by IP address.
- If you specified an FQDN in the **IP address or FQDN** field on TelePresence Conductor, add the conference bridges by host name.
- When adding a TelePresence Server you will get an error stating that it is in remotely managed mode—ignore this error.

When you have finished adding systems to Cisco TMS, perform a force refresh on TelePresence Conductor and all added bridges.

## Creating a conference alias for scheduled calls

The alias pattern specifies a range of conference addresses that Cisco TMS can assign to conferences. The alias is linked to a template on the TelePresence Conductor.

Here we describe creating the alias on Cisco TMS first, then using the generated regex to create the alias on TelePresence Conductor. If you prefer you can do it the other way round, and create the regex for the alias pattern yourself on TelePresence Conductor. The order here is not important.

### Task 3: Creating the alias in Cisco TMS

To create an alias:

1. Go to **Systems > Navigator** and select the newly added TelePresence Conductor.
2. Open the **TelePresence Conductor** tab and click **New**.
3. Fill in the following fields.

For an alias that will support multiscreen systems check **Prefer for Multiscreen**.

Note that you must click **Save** to display the lower read-only settings, and that some of these settings will be blank if you have not yet configured a corresponding alias on the TelePresence Conductor:

Table 2: Alias configuration settings

<b>Name</b>	Give the alias a name, for example: <b>Scheduled meeting</b> .
<b>Alias Pattern</b>	<p>The pattern can be fixed or can contain a variable, which is denoted by %.</p> <p>For Cisco VCS deployments, we strongly recommend that the alias pattern contains a domain. The alias pattern must match one of the following:</p> <ul style="list-style-type: none"> <li>• The route pattern on the Unified CM.</li> <li>• The pattern string of the search rule targeting the neighbor zone to the TelePresence Conductor on the Cisco VCS.</li> </ul> <p>Examples:</p> <ul style="list-style-type: none"> <li>• Variable for Unified CM deployments: 5%</li> <li>• Variable for Cisco VCS deployments: <b>meet. %@example.org</b></li> <li>• Fixed: <b>allhands@example.org, 1234@example.org</b></li> </ul> <p>Note that the variable part of the alias will be generated by Cisco TMS from the <b>Numeric ID Base</b> configured for the TelePresence Conductor in <b>Systems &gt; Navigator &gt; select the TelePresence Conductor &gt; Extended Settings</b>.</p>
<b>Priority</b>	<p>Give the alias a priority. The alias with the lowest number has the highest priority, and will be used first when Cisco TMS creates a conference. If that alias is already in use, the alias with the next highest number will be used, and so on.</p> <p>The priority can be any number between 0 and 65535.</p>
<b>Description</b>	Enter a description of this alias.

Table 2: Alias configuration settings (continued)

<b>Prefer for Multiscreen</b>	<p>Cisco TMS uses aliases with this field checked when selecting aliases for conferences including immersive TelePresence systems. The alias with the highest priority will be chosen first.</p> <p>If all the immersive aliases are in use, a non-immersive alias will be used for the conference.</p> <p>When this field is checked, immersive participants using this alias will connect using the <b>Default Immersive Bandwidth</b> set in <a href="#">Administrative Tools &gt; Configuration &gt; Conference Settings</a>.</p> <p>If checked, ensure that the TelePresence Conductor conference template that this alias is configured to use has <b>Allow multiscreen</b> set to <b>Yes</b>.</p>
<b>Allow Booking</b>	<p>If <i>No</i> is selected, this alias will not be used by Cisco TMS in any bookings.</p> <p>This setting could be used if you want to stop using a particular alias, but it has a number of future bookings and therefore cannot be deleted. Disabling booking using this setting will enable the alias to be deleted once the final booking has taken place.</p>
<b>Allow Booking with WebEx</b>	<p>Set to <b>Yes</b> to allow this alias to be used in bookings including Cisco Collaboration Meeting Rooms Hybrid.</p>
<b>Max Participants per Conference</b>	<p>This number is read from the TelePresence Conductor.</p> <p>When booking a conference with this alias, if more than this number of participants is selected it will not be possible to save the conference.</p> <p>The number is a theoretical maximum: the actual number of possible participants in a conference could be much lower depending on how the associated TelePresence Conductor conference templates are set up.</p> <p>This field is only populated if there is a corresponding alias on the TelePresence Conductor.</p>
<b>Max Screens per Participant</b>	<p>The maximum number of screens per participant for this alias.</p> <p>This field is only populated if there is a corresponding alias on the TelePresence Conductor.</p>
<b>Regular Expression</b>	<p>The regular expression of the alias.</p>
<b>Service Preference</b>	<p>The Service Preference that this alias is linked to.</p> <p>This field will display <i>None</i> if there is no corresponding alias on the TelePresence Conductor.</p>

#### Future Conferences for this Alias

This section displays a list of all current and future conferences this alias is booked in, with a link to the [View Conference](#) page for each conference.

An alias that is in use in a current or future conference cannot be deleted or have its pattern modified.

## Task 4: Creating the alias on the TelePresence Conductor

### Copying the regular expression of the alias pattern

1. In Cisco TMS, go to [Systems > Navigator >](#) select the TelePresence Conductor > [TelePresence Conductor](#) tab.

The **Regular Expression** field displays the alias pattern you have created as a regular expression. The regular expression can be copied and used when configuring both the Cisco VCS search rules and the TelePresence Conductor aliases.

2. Copy the regular expression and go to the web interface of the TelePresence Conductor.

## Using the regex to create a conference alias for scheduling

The following steps create a conference alias that can be used for scheduled conferences.

1. On the TelePresence Conductor, go to **Conference configuration > Conference aliases**.
2. Click **New**.
3. Enter the following in the relevant fields, leave other fields as their default values:

Table 3: Alias Configuration

<b>Name</b>	Enter a name for the alias, for example: <code>Scheduled meeting</code> .
<b>Incoming alias</b>	Paste the regular expression you copied from Cisco TMS, for example: <code>(meet\. [^\@] *@example\.org) .*</code> . This pattern will match <code>meet.%@example.org</code> .
<b>Conference name</b>	Enter a regular expression (regex) replace string that defines how the incoming alias will be modified to result in the conference name, for example: <code>\1</code> .  Entering a static value here will not allow concurrent use of the same alias. Make sure that if your alias pattern has a dynamic part, the regex string you enter here reflects that.  Note that the TelePresence Conductor <b>Conference name</b> as defined by this field is unrelated to the <b>Conference Title</b> in Cisco TMS.
<b>Priority</b>	Enter the priority for this conference alias. The priority is used when the alias that has been dialed matches more than one conference alias. In such cases, the conference alias with the highest priority (closest to 0) will be used. Enter for example: <code>25</code> .
<b>Conference template</b>	Select one of the conference templates that you assigned for scheduling in <a href="#">Preconfiguration of TelePresence Conductor, conference bridges and call control [p.6]</a> .
<b>Role type</b>	Select <i>Participant</i> .
<b>Allow conference to be created</b>	Select <i>No</i> .

4. Click **Create conference alias**.

## Task 5: Configuring the Service Preference in Cisco TMS

1. In **Systems > Navigator >** select the newly added TelePresence Conductor > **Settings**, and click **Force Refresh**.
2. Click the **TelePresence Conductor tab > Service Preferences** to display a list of the Service Preferences on this TelePresence Conductor that contain pools of bridges that are reserved for scheduling.  
(You reserved the bridge pools for scheduling in Step 2 of: [Preconfiguration of TelePresence Conductor, conference bridges and call control \[p.6\]](#).)

The list displays the **Bridge Type**, **Capacity Adjustment** and **Aliases** that are connected to each service preference.

Click the Service Preference name to display the **Service Preference Configuration** and the **Resource Cost Calculator**.

## Service Preference Configuration

### Capacity Adjustment

TelePresence Conductor reports the total capacity of a service preference to Cisco TMS. This setting allows you to specify what percentage of the total capacity will be available for scheduling conferences with this Service Preference.

We recommend using conference bridge pools that are reserved only for scheduling, in which case, do not change this setting. If, however, ad hoc and rendezvous conferences share the conference bridge pools being used for scheduling, setting the percentage to less than 100% reserves capacity for non-scheduled conferences.

It is also possible to set the percentage higher than 100%. If users regularly book more capacity than they use, for example 10 dial-ins for a conference where only 5 are ever used, you could set the Capacity Adjustment to 120% or higher.

# Configuring TelePresence Conductor in Cisco TMS

## Task 6: Configuring TMS Scheduling Settings on TelePresence Conductor

Select the booking and dialing options for the TelePresence Conductor:

1. In **Systems > Navigator >** select the TelePresence Conductor > **Settings > Edit Settings**.
2. In **TMS Scheduling Settings**, select the booking and dialing options you want to use for the TelePresence Conductor, and:
  - Do not enable H.323 dialing in either direction.
  - If you select **Allow Outgoing SIP URI Dialing**, ensure that you have correctly configured the rendezvous location on the TelePresence Conductor here: **Conference configuration > Locations > SIP trunk setting for out-dial calls**.

## Task 7: Configuring numeric IDs and additional settings

This is where you define the numeric ID sequence that will be used as the TMS-generated variable part of the conference alias.

1. In **Systems > Navigator >** select the TelePresence Conductor > **Settings > Extended Settings**.
2. Configure the following Numeric ID fields according to your dial plan and fill out the additional extended settings:  
The following values are set at the TelePresence Conductor level and apply to all aliases configured for the TelePresence Conductor in Cisco TMS:

Table 4: Numeric ID settings

Field	Description
<b>Numeric ID Base</b>	The first number Cisco TMS uses when creating the variable part of the alias. The combination of the non-variable part of the alias and this number will give the dial string that participants use to join the conference.
<b>Numeric ID Step</b>	Cisco TMS will add this number to the <b>Numeric ID Base</b> to avoid duplicated aliases. As conferences finish, the alias will be made available to new conferences.
<b>Numeric ID Quantity</b>	The number of times Cisco TMS will increase the number from the Numeric ID Base, using the Numeric ID Step increment. The default is: <i>Unlimited</i> .

Table 5: Additional Extended Settings for TelePresence Conductor

Field	Description
<b>Conference Layout</b>	Set the default layout for all conferences. For more information about conference layouts, see <a href="#">Cisco TelePresence Conductor Administrator Guide</a> .
<b>Limit Ports to Number of Scheduled Participants</b>	Limit ports to the number of scheduled audio and video participants for all conferences. No additional participants will be able to join conferences.



## Examples of aliases generated from Numeric ID values

The following tables show examples of aliases generated from example Numeric ID values for both Unified CM and Cisco VCS deployments:

Table 6: Numeric ID example

Field	Example value
Numeric ID Base	000
Numeric ID Step	1
Numeric ID Quantity	999

Table 7: Examples of aliases generated from example Numeric ID values

	Unified CM	Cisco VCS
Alias Pattern	5%	meet.%@example.org
First generated alias	5000	meet.000@example.org
Second generated alias	5001	meet.001@example.org
Last possible alias	5999	meet.999@example.org

## Task 8: Setting TelePresence Conductor as the preferred MCU

When TelePresence Conductor has been added to Cisco TMS, we recommend setting it as the preferred MCU in booking. This ensures that Cisco TMS will route all conferences through the TelePresence Conductor if an external bridge is needed.

1. Go to **Administrative Tools > Configuration > Conference Settings**.
2. Under **Advanced**, set **Preferred MCU Type in Routing** to Cisco TelePresence Conductor.
3. If you want all scheduled conferences to go through TelePresence Conductor, also set **External MCU Usage in Routing** to *Always*.
4. Click **Save**.

# Testing system configuration

This section describes booking and editing conferences with Cisco TMS and Cisco TelePresence Conductor. We recommend that you carry out these tasks to test that your deployment is working correctly.

## Task 1: Booking a conference

1. Book a conference as normal in Cisco TMS using **Booking > New Conference**.  
You do not need to add the TelePresence Conductor to the conference manually if it is set as the preferred MCU in **Conference Settings**.  
If you have multiple TelePresence Conductors in Cisco TMS, the one in the IP zone matching the majority of endpoints will be selected automatically.
2. Once you have added the participants to the conference, click the **Connection Settings** tab to display the **TelePresence Conductor Settings** tab and fill in the fields as appropriate:

Table 8: Alias configuration settings

Field	Description
<b>Alias</b>	Select the alias you want to use as your conference dial-in address.  The aliases displayed in the drop-down have been configured in <b>Systems &gt; Navigator &gt; select a TelePresence Conductor &gt; TelePresence Conductor tab &gt; Aliases</b> .
<b>Variable</b>	If the alias is not fixed, you can change the variable part to contain something appropriate for your conference.  As you type in the <b>Variable</b> field, you will see the preview change to reflect what you are typing. The variable can contain any alphanumeric characters. An example of a variable might be the name of the person who is hosting the conference.  The <b>Variable</b> field is pre-populated by Cisco TMS with the first available Numeric ID set in the <b>Extended Settings</b> for the TelePresence Conductor in <b>Systems &gt; Navigator</b> . If you do not change the variable, the auto-generated address which you can see in the <b>Preview</b> field will be used for the conference.  Click <b>Check Address Availability</b> to see whether your chosen variable alias is available at the time chosen.  If you change the variable, but want to go back to a Cisco TMS-generated variable, click <b>Regenerate Address</b> .
<b>Address Preview</b>	A preview of the address that participants will use to dial into the conference. As you change the variable, the blue part of the address in this field will change.
<b>Description</b>	This field contains the description added for the alias here: <b>Systems &gt; Navigator &gt; select a TelePresence Conductor &gt; Aliases tab &gt; Edit Aliases</b>  This field is not displayed if there is no description for the alias you have selected.
<b>Conference Layout</b>	Set the layout for the conference.
<b>Limit Ports to Number of Scheduled Participants</b>	Limit ports to the number of scheduled audio and video participants. No additional participants will be able to join the conference.

3. To check that your chosen alias is available, click **Check Address Availability**.
4. Click **Save Conference**.

## Task 2: Editing a conference

Edit the conference in Cisco TMS using **Booking > List Conferences**.

In addition, you can change the conference address from the **TelePresence Conductor Settings** tab.

---

**Note:** Cisco TMS will auto-select an alias when first calculating the route after a conference has been booked. Any subsequent changes to the participant list will not affect the selection of alias.

---

## Example scheduling scenarios

Here are examples of some common scheduling scenarios and descriptions of how to set up your pools and service preferences accordingly. There are advantages and disadvantages to every scenario, which are also mentioned below.

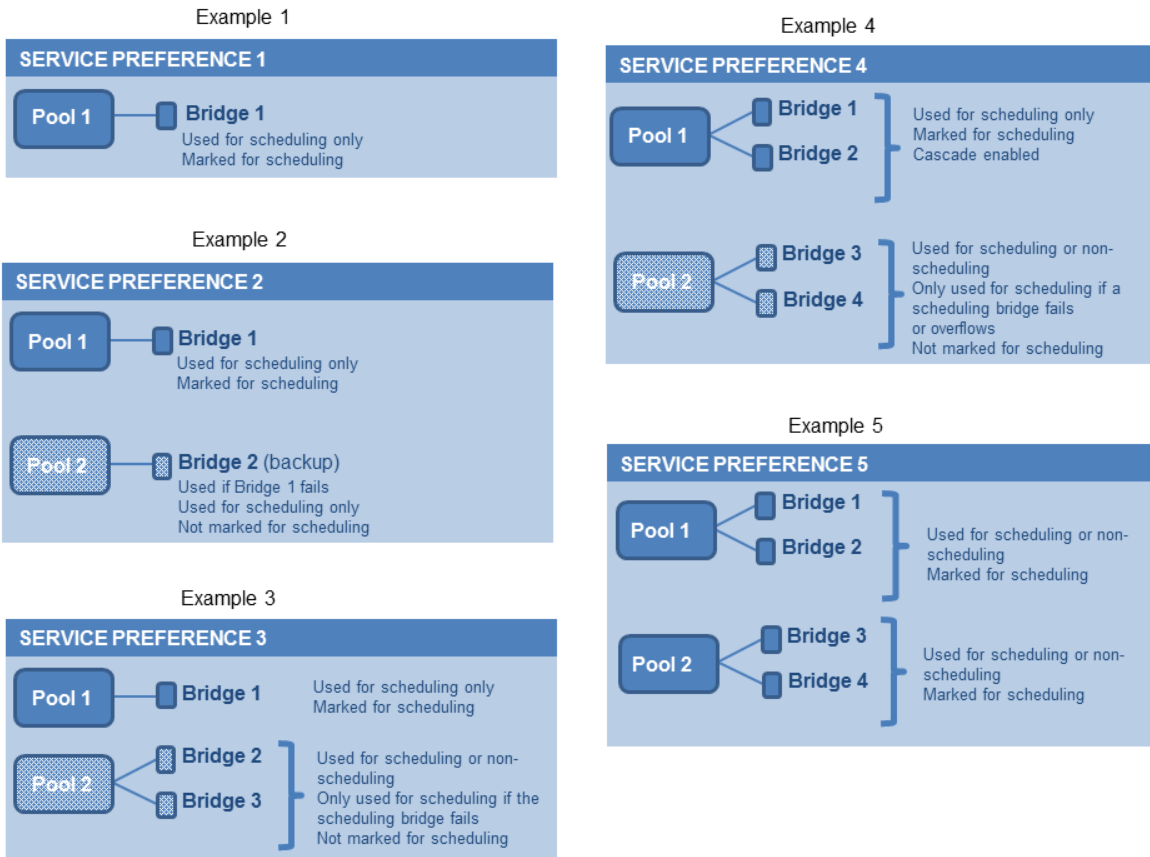
Table 9: Comparison of scheduling scenarios

	Service Preference contains ...	Configuration	Advantages	Disadvantages
<b>Example 1</b>	Dedicated bridge for scheduled conferences.	Single pool, with a single conference bridge. Pool marked to be used for scheduling in the TelePresence Conductor Service Preference. Pool is reported to Cisco TMS in capacity information requests.	Conference availability is guaranteed, subject to bridge failure (or full capacity). Maximizes use of resources, as Cisco TMS will book ports until the bridge is full.	Uses one conference bridge exclusively for scheduling. Cascaded conferencing does not occur: to avoid wasting resources, cascading should be disabled.
<b>Example 2</b>	<ul style="list-style-type: none"> <li>■ Dedicated bridge for scheduled conferences</li> <li>■ Dedicated backup bridge</li> </ul>	Two pools. Both pools contain a single conference bridge. The second pool is used as a backup if the bridge in the highest priority pool fails. Only the first pool is marked for scheduling in the TelePresence Conductor Service Preference and reported to Cisco TMS.	As for Example 1, with added benefit of fallback in case of bridge failure.	Uses two conference bridges exclusively for scheduling. Consumes backup resources. To avoid wasting resources, cascading should be disabled.
<b>Example 3</b>	<ul style="list-style-type: none"> <li>■ Dedicated bridge for scheduled conferences</li> <li>■ Shared-use backup bridges for both scheduled and non-scheduled conferences</li> </ul>	Two or more pools. Highest priority pool with one bridge only, used for scheduled conferences. Other pools contain bridges for both scheduled (as backup) and non-scheduled conferences. Only the first pool is marked for scheduling in the TelePresence Conductor Service Preference and reported to Cisco TMS.	As for Example 1, with possible benefit of fallback in case of bridge failure if the other pools have spare capacity.	Uses one conference bridge exclusively for scheduling. To avoid wasting resources on the dedicated bridge, cascading should be disabled.

Table 9: Comparison of scheduling scenarios (continued)

	<b>Service Preference contains ...</b>	<b>Configuration</b>	<b>Advantages</b>	<b>Disadvantages</b>
<b>Example 4</b>	<ul style="list-style-type: none"> <li>■ Dedicated bridges for scheduled conferences</li> <li>■ Shared-use backup bridges for both scheduled and non-scheduled conferences</li> </ul>	<p>Two or more pools.</p> <p>Highest priority pool with two or more bridges, used for scheduled conferences. Cascading enabled on the associated conference template.</p> <p>Other pools contain bridges for both scheduled (as backup and overflow) and non-scheduled conferences. For planned overflow you need to set Capacity Adjustment for the service preference to more than 100% in Cisco TMS.</p> <p>Only the first pool is marked for scheduling in the TelePresence Conductor Service Preference and reported to Cisco TMS.</p>	<p>As for Example 1, with possible benefit of fallback in case of bridge failure and overflow resource when cascading is used in a scheduled conference.</p> <p>Bridges in the backup pools are used for scheduling if:</p> <ul style="list-style-type: none"> <li>■ A bridge in Pool 1 fails.</li> <li>■ Cascading in Pool 1 uses up bridge resources that Cisco TMS expected to be available for scheduling.</li> </ul>	<p>Uses conference bridges exclusively for scheduling.</p> <p>If scheduled conferences are cascaded, they may need resources from a shared-use pool.</p>
<b>Example 5</b>	Shared-use bridges for scheduled and non-scheduled conferences	<p>One or more pools, shared for scheduled and non-scheduled conferences.</p> <p>All pools are marked for scheduling in the TelePresence Conductor Service Preference and reported to Cisco TMS.</p>	<p>Cascaded conferencing available (if enabled).</p> <p>Targeted management of bridge resources. Over time, monitoring of use patterns can identify the most appropriate pool configuration.</p>	<p>Resource availability for scheduled conferences not guaranteed (could be used up by non-scheduled conferences). This risk can be reduced by under-subscribing resources for the service preference in Cisco TMS using the Capacity Adjustment feature.</p>

Figure 1: Illustration of scheduling scenarios



# Migrating from direct-managed conference bridges

If you have direct-managed conference bridges in Cisco TMS and you transition to TelePresence Conductor scheduling, future conferences on the bridges will need to be migrated. Otherwise, Cisco TMS and TelePresence Conductor will have no knowledge of the resources which have already been booked on these conference bridges, which will lead to double-bookings, failed calls, and erroneous monitoring data. To avoid these issues, follow the migration steps below. Complete the necessary steps for all TelePresence Conductors in your deployment.

---

**Note:** All exceptions to recurrent series will be reset if conferences are rerouted during **Conference Diagnostics** Autocorrection, and will need to be manually recreated.

---

## Task 1: Configuring TelePresence Conductor and conference bridges in Cisco TMS

1. Set up TelePresence Conductor and conference bridges as described in [Preconfiguration of TelePresence Conductor, conference bridges and call control \[p.6\]](#) .
2. Add the TelePresence Conductor to Cisco TMS.
3. Go to **Systems > Navigator** and select the TelePresence Conductor.
  - a. Open the **Settings** tab.
  - b. Click **Force Refresh**.

Cisco TMS will now know that the conference bridges are part of the TelePresence Conductor's Conference bridge pools. Check this by clicking the **Conference Bridges** tab to view the bridges associated with this TelePresence Conductor. Any bridges that are shown in red can now be added into Cisco TMS.
4. For each conference bridge:
  - a. Go to **Systems > Navigator** and select the conference bridge.
  - b. Open the **Settings** tab.
  - c. Click **Force Refresh**.

This will stop the conference bridge from being directly bookable.
5. Complete the following sections of this document in this order:
  - a. [Creating a conference alias for scheduled calls \[p.12\]](#)
  - b. [Configuring TelePresence Conductor in Cisco TMS \[p.16\]](#)
  - c. [Testing system configuration \[p.18\]](#)

## Task 2: Running Conference Diagnostics to move future conferences onto TelePresence Conductor

1. Go to **Administrative Tools > Diagnostics > Conference Diagnostics** and click **Run Diagnostics**. This will identify conferences that need to be re-routed as a result of moving the bridges behind TelePresence Conductor.
2. Select the conferences you want to fix in the list, and click **Autocorrect**. This will reroute the conferences to use TelePresence Conductor. The Autocorrect will take longer for deployments with a large number of future conferences.

3. For any remaining conferences that Cisco TMS was unable to Autocorrect:
  - a. Open the conference by clicking on the conference title link.
  - b. Click the **Connection Settings** tab to recalculate the route.
  - c. Note any resulting error messages and manually resolve any routing issues if possible.

If, during Step 3, Cisco TMS reports that there is not enough capacity for the conference after moving it to the TelePresence Conductor, try one of the following:

- Using the Capacity Adjustment feature to increase the capacity Cisco TMS will schedule on the TelePresence Conductor.
- Increasing the TelePresence Conductor's bridge capacity.
- Reducing the number of participants in the conference.
- Moving the conference to a different time.



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