accruent

EMS Cisco TMS Interface

Integration Guide

V44.1

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CHAPTER 1: Introduction to Integration to Cisco TMS

Videoconferencing (VC) system management software controls the delivery of audio and video content. The scheduling component within the software, however, is typically designed to be used by the person responsible for all technical aspects of the session; the problem is, technicians may be unavailable when video conferences need to be scheduled or changes need to be made. The solution to this problem is integration between your VC system management software and EMS. This simplifies the process and allows hosts to focus on other details of the meeting, and provides a cohesive and powerful way to book and manage video conferences. With this type of integration, you can coordinate all aspects of your organization's video conference efforts, from booking the room and reserving the equipment to ensuring that break services have been scheduled and attendees are aware of the event. Even if you are already using the standard functionality of EMS for video conference scheduling, this is another way to take your video conference scheduling to the next level.

This topic provides information on the following:

- Cisco Integration Diagram

- How It Works

- Technical Architecture

- Example Integrations

- How Do I Install It?

- System Requirements

- Cisco Integration Overview

Cisco Integration Diagram
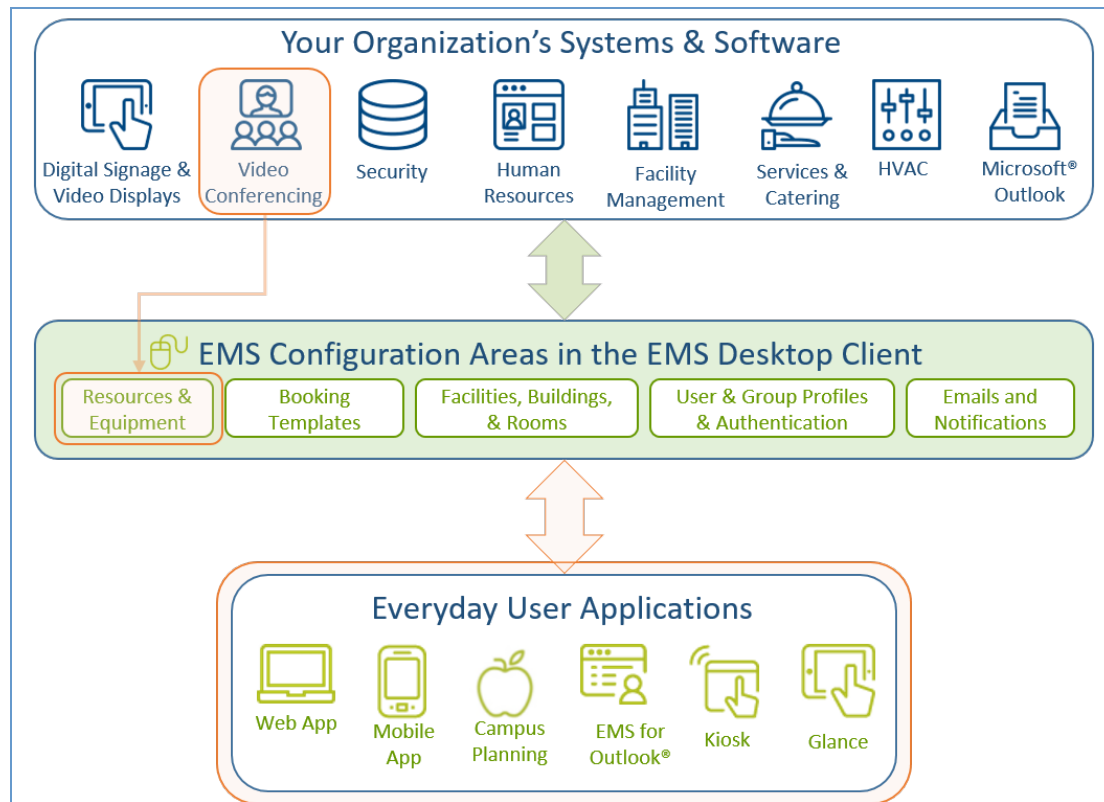
How It Works

Cisco's TelePresence Management Suite (TMS) provides a 3rd Party Booking API that exposes Cisco TMS booking functionality to the EMS Cisco TMS Interface, which enables your organization to manage VC equipment directly through EMS. Once the interface is implemented at your organization and an expert user has confirmed a VC reservation, EMS transmits the request details TMS. The department responsible for the equipment completes the reservation as specified, and then approves and adds locations and details (such as turn-on time).

Technical Architecture

The EMS – Cisco TMS Interface is comprised of two components:

- **EMS – Cisco TMS Service:** Windows service responsible for pushing video conference bookings from EMS to the Cisco TMS Booking API at timed intervals.

- **Cisco TMS Activity DLL:** Custom Cisco TMS DLL provided by EMS that will display all EMS – Cisco TMS Interface activity within the EMS application including errors and successfully scheduled

video conferences. The Cisco TMS Activity DLL also contains an area that allows EMS Administrators to configure various EMS – Cisco TMS Interface settings.

New video conferences booked in EMS are pushed to the Cisco TMS Booking API based on various settings defined within EMS. Subsequent critical booking changes (i.e. date, time or location changes) and/or cancellations are also relayed to the API.
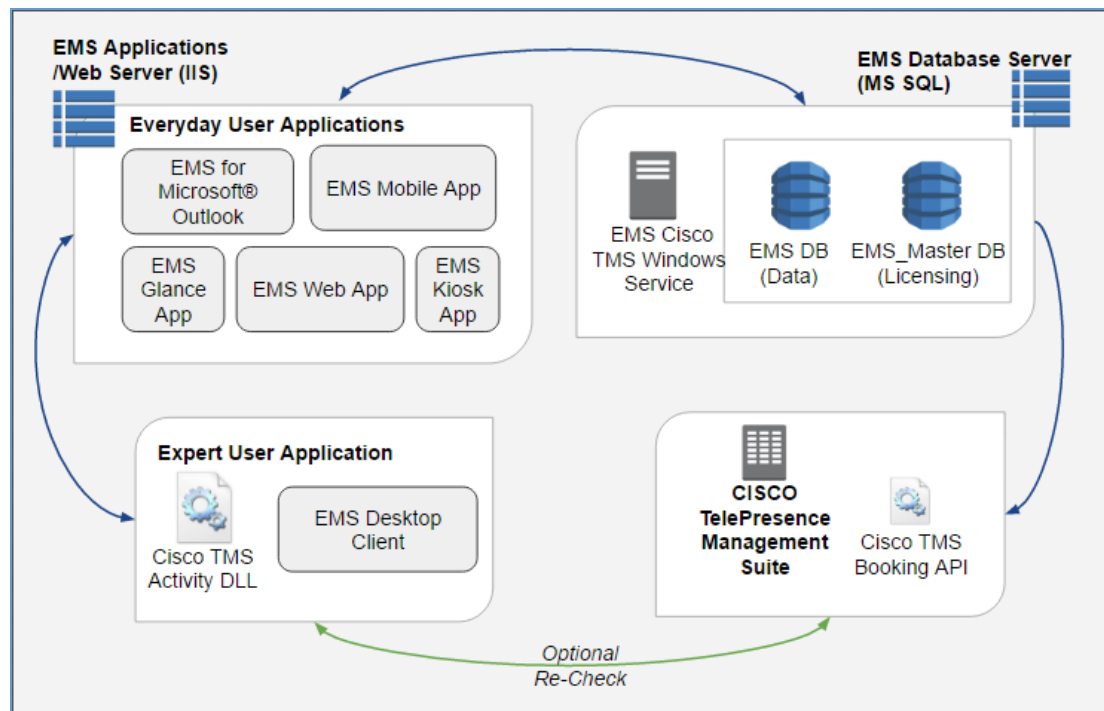
> **Note:**
>
> The EMS – Cisco TMS Interface is a one-way interface and changes made in Cisco TMS will not be reflected in EMS. For instructions on configuring the interface, see Configure the EMS - Cisco TMS Interface.

Example Integrations

Below is a sample of booking information transferred from EMS to the Cisco TMS Booking API.

| Field Description	EMS Table.Column	Cisco TMS Conference Object Property	Direction
Reservation Event Name	tblReservation. EventName	Title	EMS > Cisco TMS
Booking Event Start Time	tblBooking. GMTTimeEventStart	StartTimeUTC	EMS > Cisco TMS
Booking Event End Time	tblBooking. GMTTimeEventEnd	EndTimeUTC	EMS > Cisco TMS
Room(s) and/or Resource(s)	tblRoom. ExternalReference and/or tblResource.ExternalReference	ParticipantID(s)	EMS > Cisco TMS
Room Phone(s)	tblRoomPhone. NA for resource.	NameOrNumber	EMS > Cisco TMS
Cisco TMS Conference ID	tblTMSActivity. ConferenceID	ConferenceID	Cisco TMS > EMS
TMS Error Information	tblTMSActivity.Error	FaultCode + FaultString	Cisco TMS > EMS

Shown below is a sample of a TMS Manager interface showing the relationship between the VC equipment and the room assignment.
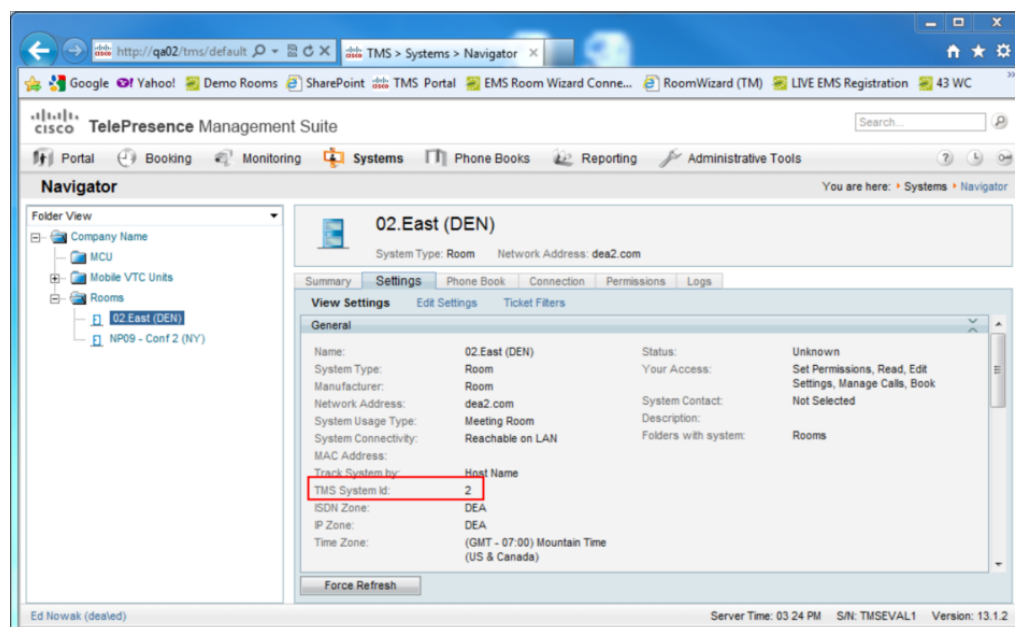
How Do I Install It?

To integrate EMS with your Cisco - TMS system, you will:

- Obtain the Installation Files (from EMS Professional Services)

- Install the Database

- Install the EMS - Cisco TMS Service

- Install the Cisco TMS Activity DLL

- Configure the EMS - Cisco TMS Interface

System Requirements

The latest versions of the following software must be installed before you begin installing the EMS CISCO TMS component:

- EMS V44.1

- Cisco TelePresence Management Suite 12.0 or higher (available from Cisco)

- Cisco TMS Booking API (available from Cisco)

- .NET Framework 3.5 (available from Microsoft)

> **Note:**
> Cisco may charge for the TMS Booking API. See Cisco's TMS Booking API Reference Guide.

Cisco Integration Overview

To integrate EMS with your Cisco - TMS system, you will:

- Obtain the Installation Files (from EMS Professional Services)

- Install the Database

- Install the EMS - Cisco TMS Service

- Install the Cisco TMS Activity DLL

- Configure the EMS - Cisco TMS Interface

See Also: System Requirements and Example Integrations

CHAPTER 2: Obtain the Installation Files

Obtain the following components from your EMS Professional Services contact:

1. **EMS License Key**—The EMS – Cisco TMS Interface is an optional module that requires the appropriate EMS license to activate.

2. **CiscoTMSOverlay.sql**—SQL script that will need to be executed against your EMS database. This will create EMS – Cisco TMS Interface specific objects (tables and stored procedures).

3. **UpdateBookingVCHostFlagFromCiscoTMSSettings.sql (UPGRADES ONLY)**—SQL script that will need to be executed against your EMS database. This will upgrade your EMS - Cisco TMS Interface specific objects (tables and stored procedures) to the current release.

4. **CiscoTMSServiceSetup.msi**—Service responsible for pushing video conference (VC) bookings from EMS to the Cisco TMS Booking API at timed intervals.

5. **EMS.CiscoTMSActivity.dll**—Custom Cisco TMS DLL that will display all EMS – Cisco TMS Interface activity within the EMS application including errors and successfully scheduled video conferences. The Cisco TMS Activity DLL also contains an area that allows EMS Administrators to configure various EMS – Cisco TMS Interface settings.

CHAPTER 3: Install the Database

Upgrades

1. Obtain the **UpdateBookingVCHostFlagFromCiscoTMSSettings.sql** file.

2. Open Microsoft® SQL Server Management Studio.

3. Within Microsoft SQL Server Management Studio, select **File** > **Open** > **File…** and locate **UpdateBookingVCHostFlagFromCiscoTMSSettings.sql**.

4. Select your EMS database and execute the query (**Query** > **Execute**). When query execution has completed, a 'Command(s) completed successfully' message will display in the Results section.

5. Follow the steps outlined in the New Installations section below.

New Installations

1. Obtain the **CiscoTMSOverlay.sql** file.

2. Open Microsoft® SQL Server Management Studio.

3. Within Microsoft SQL Server Management Studio, select **File** > **Open** > **File…** and locate **CiscoTMSOverlay.sql**.

4. Select your EMS database and execute the query (**Query** > **Execute**). When query execution has completed, a 'Command(s) completed successfully' message will display in the Results section.

CHAPTER 4: Install the EMS – Cisco TMS Service

This topic provides information about the following:

- Pre-Installation Requirements

- Install or Upgrade the EMS – Cisco TMS Service

- Configure the EMS – Cisco TMS Service

## Pre-Installation Requirements

> ⚠ **Important!**
>
> Existing versions of the EMS – Cisco TMS Service must be manually uninstalled.

> ⚠ **Important!**
>
> Install the EMS – Cisco TMS Service on **one computer/server only**.

Install or Upgrade the EMS – Cisco TMS Service

1. Manually uninstall any existing versions of the EMS – Cisco TMS Service.

2. Download the **CiscoTMSServiceSetup.msi** file onto the server that will be running the service. This can be your existing EMS database server or web server.

3. Run **CiscoTMSServiceSetup.msi**.

4. The first screen welcomes you to the EMS Cisco TMS Service Setup Wizard. Click **Next** to begin the installation process. The Select Installation Folder screen will appear.
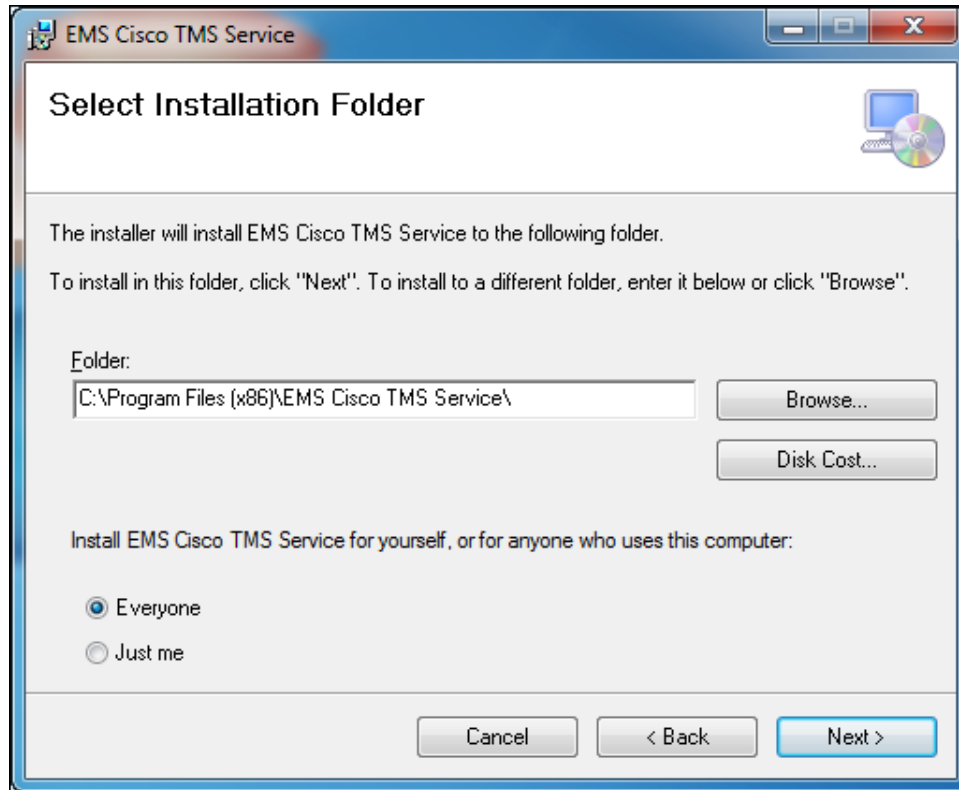
5. Select the installation Folder and context (Everyone or Just Me). It is recommended that you keep the default settings. Click **Next**.

6. The Confirm Installation screen will appear. Click **Next**.

7. The Installation Complete screen appears. Click **Close**.

Configure the EMS – Cisco TMS Service

1. Within the Windows Start menu, locate **EMS Cisco TMS Settings**. The EMS Cisco TMS Settings screen will appear.
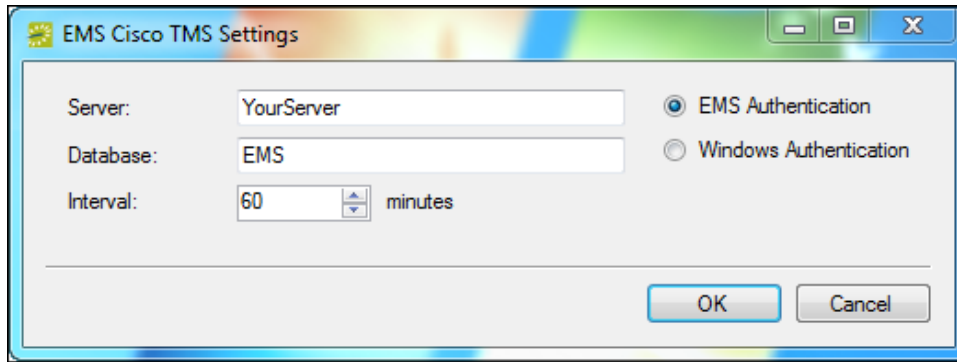
2. Enter your EMS MS SQL Server name.

3. Enter your EMS Database name.

4. Specify the service execution Interval.

5. Specify the Authentication mode (EMS or Windows).

6. Click **OK**.

> **Note:**
>
> For more information regarding EMS – Cisco TMS Interface settings, see Configure the EMS - Cisco TMS Interface.

CHAPTER 5: Install the Cisco TMS Activity DLL

1. On each client machine that needs to access the Cisco TMS Activity area, paste a copy of the EMS.CiscoTMSActivity.dll file into the folder that contains your EMS application files (typically C:\Program Files\EMS).
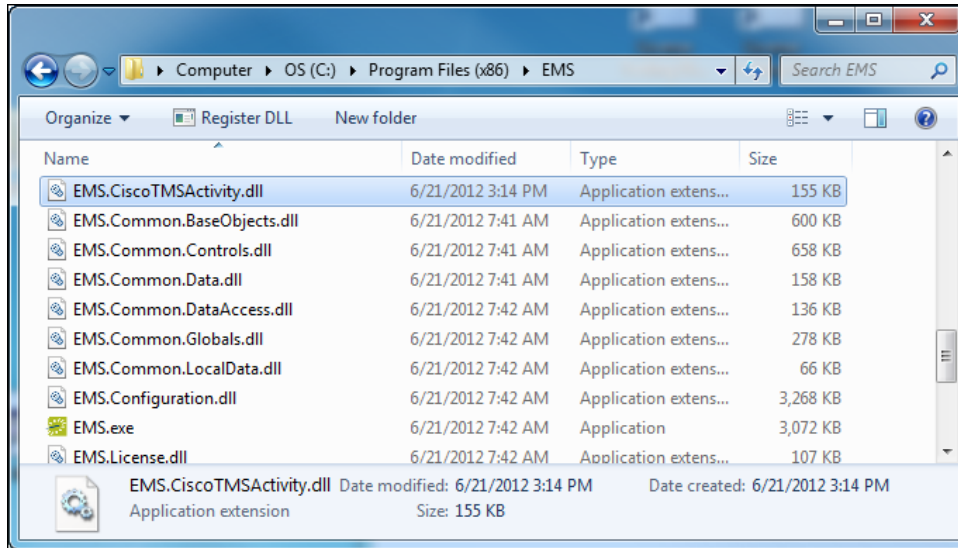
2. Once the EMS.CiscoTMSActivity.dll is placed in the correct folder on the client machine, the EMS user will see the Cisco TMS Activity button on the tool bar within the EMS application (assuming that you have updated your EMS Registration with the appropriate licensing information).
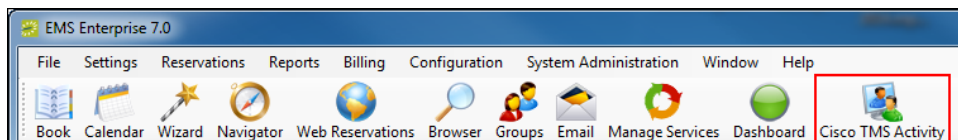
CHAPTER 6: Configure the EMS - Cisco TMS Interface

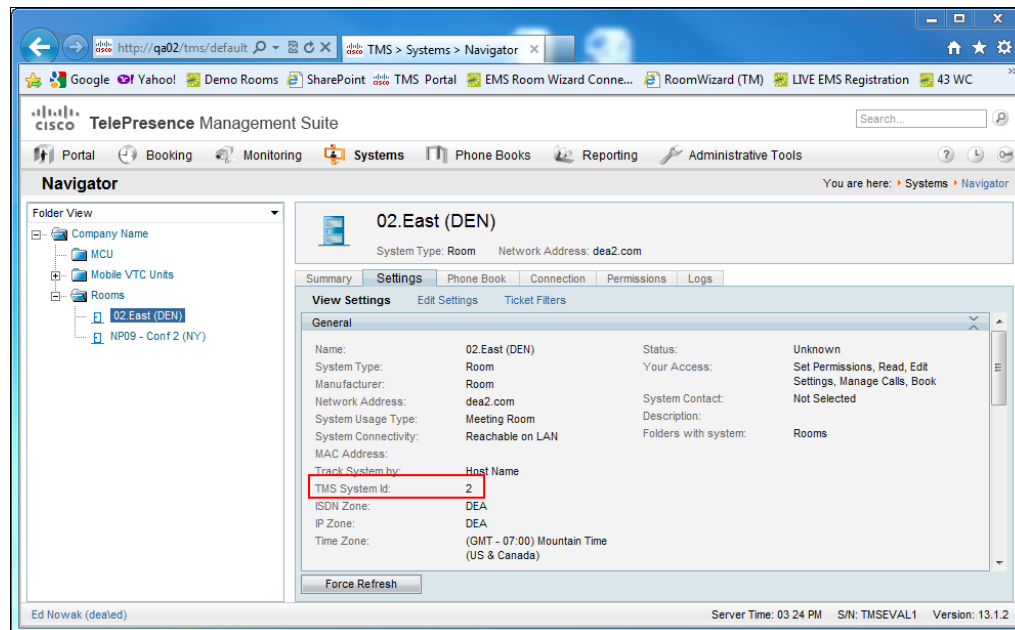## Configure Rooms and Resources

Before activating the EMS – Cisco TMS Interface, the EMS video conference-room and/or resource list must be synchronized with a Cisco TMS video-conference system (e.g. room or resource). Systems are linked via the EMS Room/Resource **External Reference** field and the **System ID** in Cisco TMS.

Rooms can be accessed in EMS within **Configuration** > **Facilities** > **Rooms**. Resources can be accessed in EMS within **Configuration** > **Resources**.

1. Verify that the Cisco TMS Booking API Web Service is installed and running by opening a browser and entering the web service URL (typically **http:// [ServerName]/TMS/external/booking/bookingservice.asmx**). The following screen should appear:
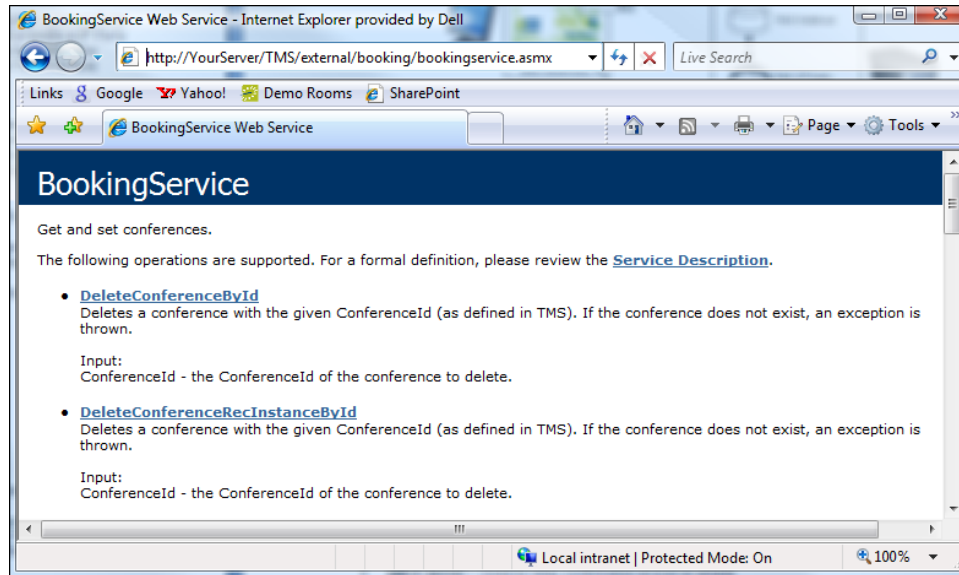
2. Log into the EMS desktop application using an EMS user account with Administrator-level access.

3. Click the **Cisco TMS Activity** button on the tool bar. The Cisco TMS Activity screen will appear.

4. Click the **Settings** menu option in the upper right-hand corner of the Cisco TMS Activity screen. The Cisco TMS Settings screen will appear.
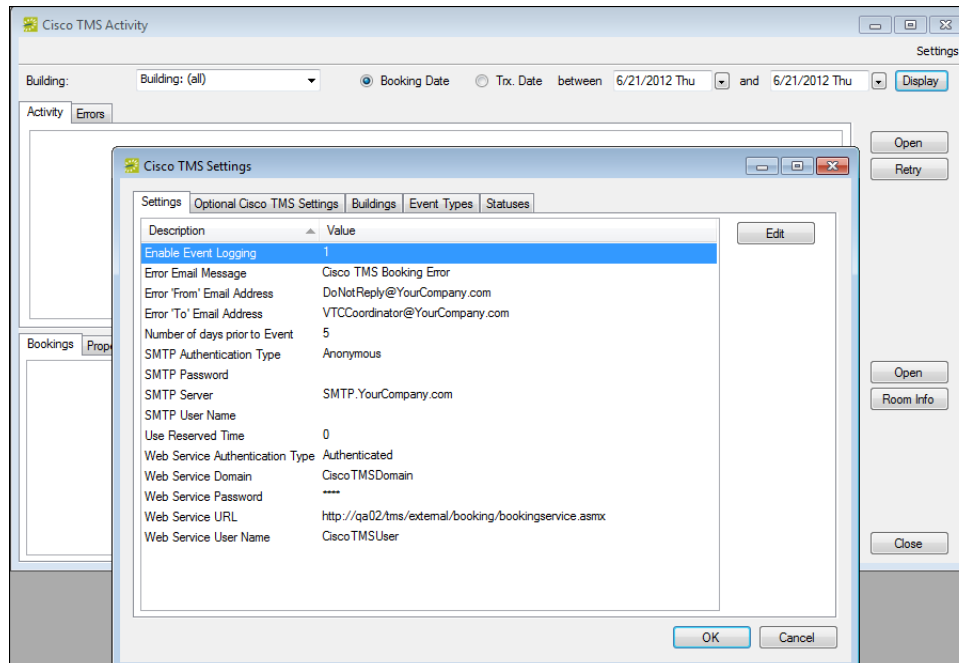
5. On the **Settings** tab, specify values for the items listed by highlighting the record and clicking

the Edit button. Once you configure a setting, click the **OK** button to save your value.

- **Enable Event Logging** – Enables EMS – Cisco TMS Windows Service event logging.

- **Error Email Message** – Subject line of error email notifications.

- **Error "From" Email Address** – Email address (individual or distribution group) that error email notifications will be sent from.

- **Error "To" Email Address** – Email address (individual or distribution group) that error email notifications will be sent to.

- **Number of days prior to Event** – Specifies how far in advance of a video-conference date the EMS – Cisco TMS Interface should push the EMS booking(s) to Cisco TMS.

- **SMTP Authentication Type** – Anonymous or Authenticated.

- **SMTP Password** – Specify if SMTP Authentication Type = Authenticated.

- **SMTP Server** – Used to relay error notification emails.

- **SMTP User Name** – Specify if SMTP Authentication Type = Authenticated.

- **Use Reserved Time** – If set to Yes, the booking reserved time will be passed to the Cisco TMS Booking API. Otherwise, the event time will be passed.

- **Web Service Authentication Type** – Anonymous or Authenticated.

- **Web Service Domain** – Cisco TMS Booking API Web Service Domain.

- **Web Service Password** – Specify if Web Service Authentication Type = Authenticated.

- **Web Service URL** – URL to Cisco TMS Booking API Web Service verified in Step 1.

- **Web Service User Name** – Specify if Web Service Authentication Type = Authenticated.

6. Go to the **Buildings** tab. This tab is used to include/exclude EMS bookings scheduled in specific Buildings, Areas, or Views during processing. To select an item, highlight the record and click the **>** button.

7. Go to the **Event Types** tab. This tab is used to include/exclude EMS bookings scheduled in specific Event Types during processing.

8. Go to the **Status** tab. This tab is used to include/exclude EMS bookings scheduled in specific Statuses during processing.

9. Click the **OK** button to save your settings.

Advanced Configuration

By default, the following booking information is transferred from EMS to the Cisco TMS Booking API:

Field Description	EMS Table.Column	Cisco TMS Conference Object Property	Direction
Reservation Event Name	tblReservation. EventName	Title	EMS > Cisco TMS
Booking Event Start Time	tblBooking. GMTTimeEventStart	StartTimeUTC	EMS > Cisco TMS
Booking Event End Time	tblBooking. GMTTimeEventEnd	EndTimeUTC	EMS > Cisco TMS
Room(s) and/or Resource(s)	tblRoom. ExternalReference and/or tblResource.ExternalReference	ParticipantID(s)	EMS > Cisco TMS
Room Phone(s)	tblRoomPhone. NA for resource.	NameOrNumber	EMS > Cisco TMS
Cisco TMS Conference ID	tblTMSActivity. ConferenceID	ConferenceID	Cisco TMS > EMS
TMS Error Information	tblTMSActivity.Error	FaultCode + FaultString	Cisco TMS > EMS

Cisco TMS default values (defined within Cisco TMS) will be used for any properties not explicitly specified in the table above. Functionality is available to send additional Cisco TMS Conference Object properties using EMS reservation-level User Defined Fields (UDFs). This would allow you, for example, to create an EMS UDF named "Conference Type" and map that to the *ConferenceType* Cisco TMS Conference Object property. To map an EMS UDF to a Cisco TMS Conference Object property, do the following:

1. Create a reservation-level UDF in EMS within **Configuration** > **Other** > **User Defined Fields**. For information on how to configure an EMS UDF, please refer to the EMS Desktop Client Configuration Guide.

2. Go to the **Optional Cisco TMS Settings** tab within the Cisco TMS Settings area (outlined in the section above).

3. Click the **New** button. The Optional Cisco TMS Setting screen will appear.

4. Select your Cisco TMS Conference Object property in the Cisco TMS Setting dropdown. Please refer to your Cisco TMS Booking API documentation for a listing/explanation of Cisco TMS Conference Object properties.

5. Select your EMS UDF in the **User Defined Field** dropdown.

6. Click the **OK** button to close the Optional Cisco TMS Setting screen.

7. Click the **OK** button to close the Cisco TMS Settings screen and save your configuration settings.

Additional Cisco TMS Conference Object Properties

Conference Type	Password	Participant Call Type
Bandwidth	Billing Code	Numeric ID
Picture Mode	ISDN Restrict	External Primary Key
Encrypted	User Message Text	Show Extend Option
Data Conference	External Source ID	

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