



EMS EXCHANGE ROOM INTEGRATION Installation and Configuration Guide

V44.1

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CHAPTER 1: Introduction to Exchange Room Integration (ERI)

WHAT IS ERI?

Exchange Room Integration (ERI) is a simplified integration tool that allows clients to utilize their EMS software to its fullest potential. ERI allows enhanced integration of resources and technology during the EMS booking process for managed spaces. Exchange Room Integration simplifies the booking process and provides a cohesive and powerful way to book and manage resources. EMS Exchange Room Integration will take your resource scheduling to the next level.

FEATURES:

- » Allows integration of third-party technology (e.g., videoconference device or display panels) to a booking in EMS by linking to a Microsoft® Exchange resource mailbox
- » Automatically includes fixed-room resources in the room booking (e.g., collaboration devices) through the Microsoft® Exchange resource mailboxes
- » Allows integration of non-fixed resources (e.g., Mobile Microsoft Surface Hubs) during the booking process

HOW ERI WORKS

Once an everyday user adds a technology/resource to a booking using EMS for Outlook, EMS Web App, or the EMS Mobile App, ERI will seamlessly integrate the resource to the booking through the Microsoft® Exchange resource (room/equipment) mailbox. With EMS Exchange Room Integration (ERI), allows users to book in-room resource technologies seamlessly.

CHAPTER 2: System Requirements of ERI

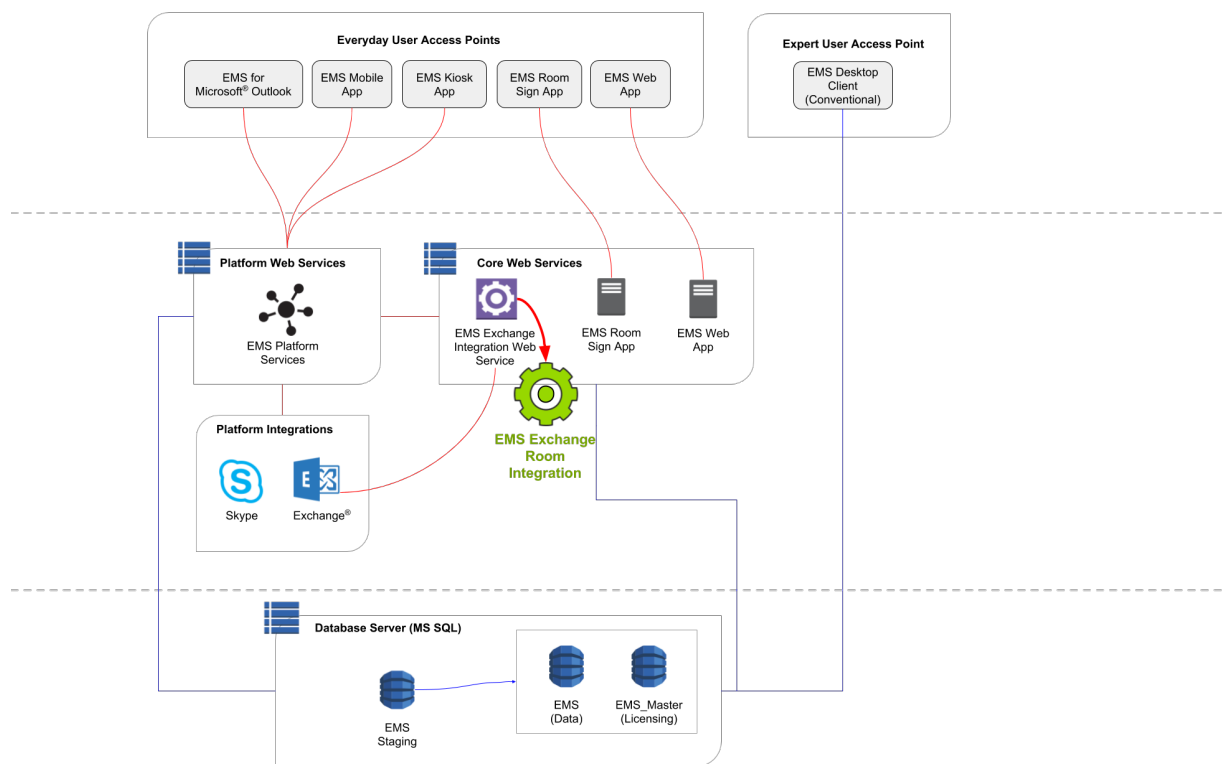
Warning: The latest version of EMS software (V44.1) must be installed before you begin [Install Exchange Room Integration](#).

MICROSOFT® EXCHANGE SUPPORT

Microsoft® Exchange 2016; 2013; 2010, SP3

Microsoft® Office 365

CHAPTER 3: Architecture of ERI



CHAPTER 4: Install Exchange Room Integration

To install Exchange Room Integration:

1. Verify that [System Requirements of ERI](#) have been met.
2. Ensure [EMS Platform Services](#) have been installed.
3. Ensure the [Exchange Integration Web Service](#) Exchange Integration Web Service is installed.
4. Install the new License file for ERI. Update your existing license with the license for ERI that has been supplied to you.

CHAPTER 5: Exchange Sync Utility

This topic will provide an overview and detail the benefits of Exchange Sync Utility, as well as outline its installation.

- » [Overview](#)
- » [Install Exchange Sync Utility](#)
 - » [Commands](#)
 - » [Syntax](#)
 - » [Parameters](#)

OVERVIEW

WHAT IS EXCHANGE SYNC UTILITY?

Exchange Sync Utility allows existing bookings in EMS to be synchronized with configured Exchange resource mailboxes. Exchange Room Integration (ERI) will automatically synchronize new bookings once rooms and resources are configured, but existing bookings will not automatically be synchronized. Exchange Sync Utility is a tool to push those existing bookings to the corresponding Exchange resource mailbox.

Note: Existing customers already utilizing Exchange resource mailboxes will need to resolve conflicting Exchange appointments prior to synchronization. Synchronization issues should be resolved in Exchange, and conflicts checked again until all issues are resolved.

INSTALL EXCHANGE SYNC UTILITY

The Exchange Sync Utility is installed in the Platform API directory. The utility does not need to be accessed from the directory running Platform Services. The Platform API can be installed locally to utilize Exchange Sync Utility. Users must have write permission to the directory where installed for the creation of reports.

1. Open a Command Prompt and navigate to **Platform API** directory.
2. Type **exchangesync** to see a list of commands.

COMMANDS

-List	Use this command to list the bookings Exchange Sync Utility will send to Exchange before synchronization. This can be written to a .csv file to reference all bookings and potential conflicts.
-------	---

COMMANDS

-Sync	Use this command to synchronize EMS bookings to Exchange.
-SyncOne	Use this command to synchronize a single booking to Exchange.
-Import	Use this command to import room and resource mailboxes into EMS. The format utilizes the ID of the room or resource and the SMTP mail address in exchange.
-Rooms	Use this command to view a list of rooms and their configured mailboxes. This can be written to a .csv file to reference the configurations.
-Resources	Use this command to view a list of resources and their configured mailboxes. This can be written to a .csv file to reference the configurations.

SYNTAX

List	<code>exchangesync.exe -exec=list -url=<platform url> -user- r=<username> \ -pass=<password> [-csv=<out.csv>]</code>
Sync	<code>exchangesync.exe -exec=sync -url=<platform url> -user- r=<username> \ -pass=<password> [-csv=<out.csv>] [-bookings=<1,2,3...>]</code>
Import	<code>exchangesync.exe -exec=import -url=<platform url> -user- r=<username> \ -pass=<password> -rooms=<rooms.csv> -resources=<resources.csv></code>
Rooms	<code>exchangesync.exe -exec=rooms -url=<platform url> -user- r=<username> \ -pass=<password> [-csv=<out.csv>]</code>
Resources	<code>exchangesync.exe -exec=resources -url=<platform url> -user- r=<username> \ -pass=<password> [-csv=<out.csv>]</code>

PARAMETERS

-exec=<command>	The command to run
-url=<platform url>	The EMS Platform API url
-user=<username>	Username for authentication
	Note: Must have web admin privileges.
-pass=<password>	The password for authentication
-bookings=<booking ids>	Comma separated list of booking IDs to sync
-start=<datetime>	Limit sync items to after this date and time. Requires -end
	Example: - format 2008-09-08T22:47:31-07:00
-end=<datetime>	Limit sync items to before this date and time. Requires -start

PARAMETERS

Example: - format 2008-09-08T22:47:31-07:00

-rooms=<rooms.csv>	CSV input file for room import
-	CSV input file for resource import
resources=<resources.csv>	CSV output file
-csv=<output.csv>	

Note: CSV output is generated in the directory where the Exchange Sync Utility is located. **Write access is required.** CSV input file should be in the directory where the Exchange Sync Utility is located. **Read access is required.**

```
Command Prompt
C:\Program Files\EMS Software\EmsPlatformApi>exchangesync
Unknown command:
exchangesync: Sync EMS Bookings to Microsoft Exchange
Version 44.1.12000.2033

Commands
- List      list bookings Sync will send to Exchange and exit
- Sync      sync EMS bookings to Exchange
- SyncOne   sync a single booking to Exchange
- Import     import room & resource mailboxes
- Rooms     print a list of rooms with mailboxes
- Resources print a list of resources with mailboxes

List
exchangesync.exe -exec=list -url=<platform url> -user=<username> \
-pass=<password> [-csv=<out.csv>]

Sync
exchangesync.exe -exec=sync -url=<platform url> -user=<username> \
-pass=<password> [-csv=<out.csv>] [-bookings=<1,2,3...>]

Import
exchangesync.exe -exec=import -url=<platform url> -user=<username> \
-pass=<password> -rooms=<rooms.csv> -resources=<resources.csv>

Rooms
exchangesync.exe -exec=rooms -url=<platform url> -user=<username> \
-pass=<password> [-csv=<out.csv>]

Resources
exchangesync.exe -exec=resources -url=<platform url> -user=<username> \
-pass=<password> [-csv=<out.csv>]

Options
-exec=<command>          the command to run
-url=<platform url>      the EMS Platform API url
-user=<username>          username for authentication
                        - must have web admin privileges
-pass=<password>          password for authentication
-bookings=<booking ids>  comma separated list of booking IDs to sync
-start=<datetime>         limit sync items to after this date & time, requires -end
-end=<datetime>          limit sync items to before this date & time, requires -start
-rooms=<rooms.csv>        csv input file for room import
-resources=<resources.csv> csv input file for resource import
-csv=<output.csv>        csv output file
Action,ReservationID,BookingID,Error (if any)

C:\Program Files\EMS Software\EmsPlatformApi>
```

CHAPTER 6: Configure Exchange Room Integration (ERI)

This section will provide information on configuring EMS Exchange Room Integration (ERI).

- » [Configure Resource Mailboxes in Microsoft Exchange](#)
- » [Configure a Room in EMS for Exchange Room Integration](#)
- » [Configure Fixed Resources in a Room](#)
- » [Configure Mobile Resources \(Without Service Orders\)](#)
- » [View Configuration Information](#)

CONFIGURE RESOURCE MAILBOXES IN MICROSOFT® EXCHANGE

Consult your [Microsoft Exchange documentation](#) for instructions to configure room and equipment resource mailboxes.

Tip: Best practices for Exchange configurations include:

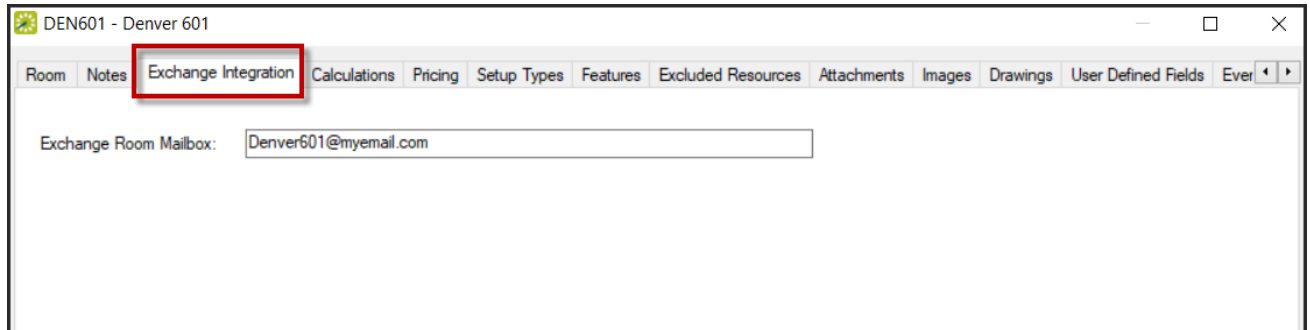
- » Microsoft Exchange resource mailboxes must be set to automatically accept/decline invitations by setting **Accept or decline booking requests automatically** for Booking

requests under Booking Delegates section of the mailbox configuration or by using the Booking Attendant.

- » Enable the **Hide from address lists** option under the General section of the mailbox configuration to forbid users from booking a room or resource outside of EMS.
- » Ensure **Allow repeating meetings** is enabled to allow recurring bookings.
- » Enable **Allow conflicting meeting requests** option under the Resource Policy section of the mailbox configuration to ensure resources are properly booked for recurring meetings. Without this setting, any exceptions to a recurring meeting will result in the entire series being declined.
- » Modify **Resource Policies** to replicate EMS booking rules, including **Booking window** and **Maximum duration**.
- » Use a **Mail flow** rule to suppress email confirmations from resource mailboxes. Be sure to enable the rule prior to utilizing the Exchange Sync utility.

CONFIGURE A ROOM IN EMS FOR EXCHANGE ROOM INTEGRATION

1. From the Desktop Client, select **Configuration > Facilities > Rooms**. Filter the dialog to display the room(s) you would like to edit.
2. Click **Edit**.
3. On the **Exchange Integration** tab, enter the email address as it was configured in Microsoft Exchange.

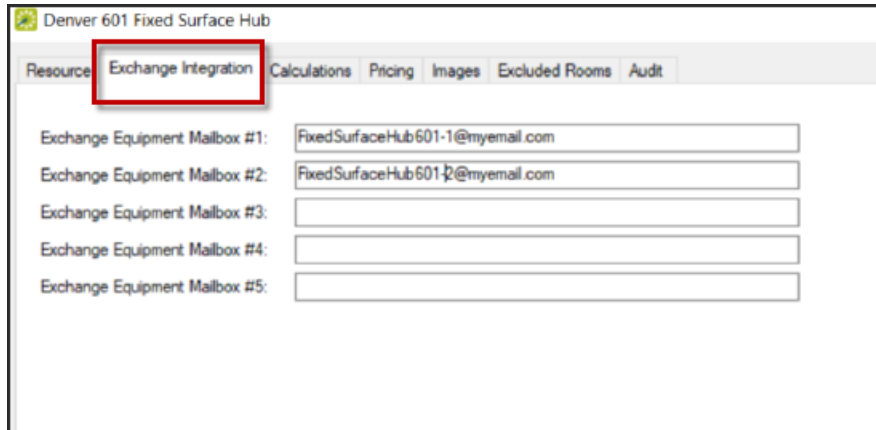


4. On the **Everyday User Process Templates** tab, make sure the room is utilizing process templates with **Enable Integration to Microsoft Exchange** enabled. For instructions on creating process templates, please refer to [Configure Everyday User Process Templates](#).
5. Click **OK**.

CONFIGURE FIXED RESOURCES IN A ROOM

1. From the Desktop Client, create a **Category**. Navigate to **Configuration > Administration > Categories**.
2. Click **New**. Create a name for your **Category** (e.g., Self-service Video Conference Devices).
3. From the Category Type dropdown, select **Resources w/o Service Orders**.
4. From the Default Time In Use dropdown, select **Event Time**.
5. Navigate to the **Everyday User Applications** tab. Leave the **Display to Everyday Users** checkbox unchecked.

6. From the **Buildings** tab, map this category to a building by selecting a building and clicking the **Select (>)** arrow.
7. Click **OK**.
8. Create a **Feature**. Navigate to **Configuration > Facilities > Features**.
9. Click **New**. Create a **Feature** name (e.g., Self-service Video Conference).
10. Check the **Tied to Resource** box.
11. If you want the feature to be available to everyday users so they can search for rooms with that feature, check **Available to Everyday Users**. If you wish the feature to be hidden from everyday users, do **not** check the **Available to Everyday Users** box.
12. Click **OK**.
13. Create a Resource for each room. Navigate to **Configuration > Resources**.
Choose your Category from the dropdown list.
14. Click **New**. Create a Description that details the Resource e.g., Conference Room 101 Self-service Video Conference Device).
15. Uncheck the **Available to Everyday Users** box.
16. It is **not** necessary to select the **Maintain Inventory** checkbox for fixed resources.
17. On the **Exchange Integration** tab, enter the email address as it was configured in Microsoft Exchange. There are multiple fields for email addresses on this tab. If a room contains multiple device features, enter all the corresponding email addresses.



18. Click **OK**.
19. To add the feature to the appropriate room, edit the room in the Desktop Client.
Navigate to **Configuration > Facilities > Rooms**.
20. Filter the dialog to find the appropriate room, and then click **Edit**.
21. On the **Features** tab, select your feature (e.g., Self-service Video Conference) using the **Select (>)** arrow. The Resource Selector dialog box will appear.
22. From the Category dropdown, choose the specific category (e.g., Conference Room 101 Self-service Video Conference Device) for that room. Click **Select**.
23. Click **OK** to save your selections.

CONFIGURE MOBILE RESOURCES (WITHOUT SERVICE ORDERS)

1. Create a **Category**. Navigate to **Configuration > Administration > Categories**.
2. Click **New**. Create a name for your **Category** (e.g., Mobile Surface Hubs).

3. From the Category Type dropdown, select **Resources w/o Service Orders**.
4. From the Default Time In Use dropdown, select **Event Time**.
5. Navigate to the **Everyday User Applications** tab. Click the **Display to Everyday Users** checkbox.
6. From the **Buildings** tab, map this category to a building by selecting a building and clicking the **Select (>)** arrow.
7. Click **OK**.
8. Create a Resource for each mobile device. Navigate to **Configuration > Resources**. Choose your Category from the dropdown list.
9. Click **New**. Create a Description that details the Resource (e.g., Sixth Floor Mobile Surface Hub).
10. Check the **Maintain Inventory** checkbox and enter the **Quantity Available** as **1**.
11. Check the **Available to Everyday Users** box.
12. If you want users to be able to choose the resource while making a booking, check the **Available at Checkout** box. If you prefer users to add the resource after making a booking, leave this selection unchecked.
13. On the **Exchange Integration** tab, enter a single email address as it was configured in Microsoft Exchange. Click **OK**.

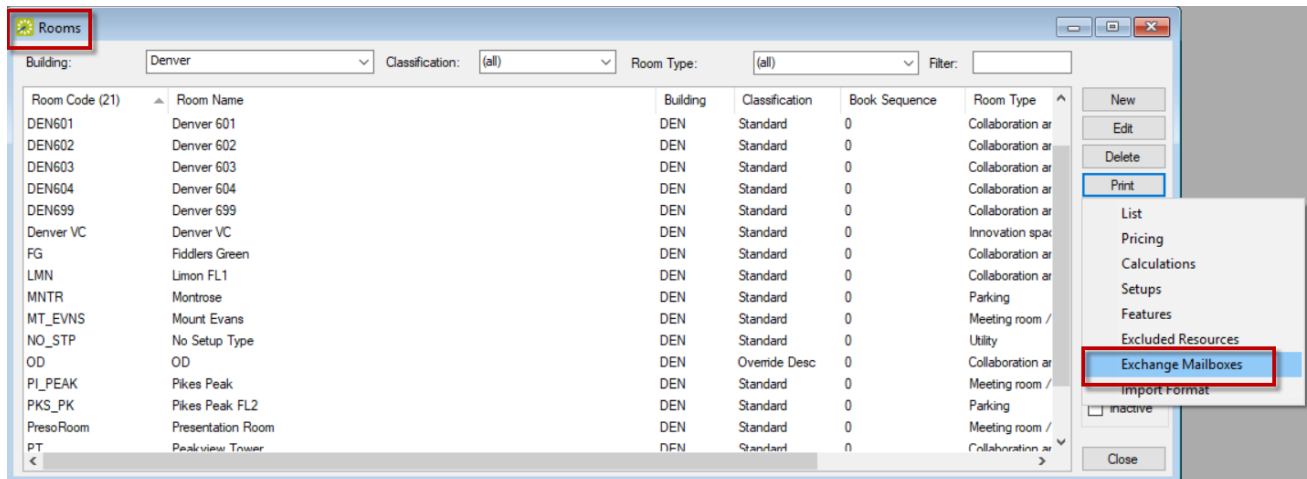
Warning: Though there are multiple fields for email addresses in the Exchange Integration for resources, when configuring a mobile device

resource, the device must be configured to a **single** Exchange equipment mailbox in order to properly enable third-party endpoints.

14. You must add the Categories to the appropriate Everyday User Process Templates. The templates must be configured with **Enable Integration to Microsoft Exchange** enabled. For instructions on creating process templates, please see [Configure Everyday User Process Templates](#).

VIEW CONFIGURATION INFORMATION

Room Report ERI



The screenshot shows the 'Rooms' configuration window. The 'Building' dropdown is set to 'Denver'. The table lists rooms with columns: Room Code (21), Room Name, Building, Classification, Book Sequence, and Room Type. A context menu is open over the table, showing options like List, Pricing, Calculations, Setups, Features, Excluded Resources, and **Exchange Mailboxes** (which is highlighted with a red box).

Room Code (21)	Room Name	Building	Classification	Book Sequence	Room Type
DEN601	Denver 601	DEN	Standard	0	Collaboration ar
DEN602	Denver 602	DEN	Standard	0	Collaboration ar
DEN603	Denver 603	DEN	Standard	0	Collaboration ar
DEN604	Denver 604	DEN	Standard	0	Collaboration ar
DEN699	Denver 699	DEN	Standard	0	Collaboration ar
Denver VC	Denver VC	DEN	Standard	0	Innovation spa
FG	Fiddlers Green	DEN	Standard	0	Collaboration ar
LMN	Limon FL1	DEN	Standard	0	Collaboration ar
MNTR	Montrose	DEN	Standard	0	Parking
MT_EVNS	Mount Evans	DEN	Standard	0	Meeting room /
NO_STP	No Setup Type	DEN	Standard	0	Utility
OD	OD	DEN	Override Desc	0	Collaboration ar
PI_PEAK	Pikes Peak	DEN	Standard	0	Meeting room /
PKS_PK	Pikes Peak FL2	DEN	Standard	0	Parking
PresoRoom	Presentation Room	DEN	Standard	0	Meeting room /
PT	Peakview Tower	DEN	Standard	0	Collaboration ar

Resource Report ERI

