accruent

EMS Exchange Room Integration

Installation & Configuration Guides

V44.1

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CHAPTER 1: Introduction to Exchange Room Integration (ERI)

What Is ERI?

Exchange Room Integration (ERI) is an add-on module that provides the ability to configure EMS rooms and resources to invite Microsoft® Exchange resource mailboxes, simplifying integrations with third-party technology, such as video conference systems. Bookings made by everyday users in EMS will handle the addition of the technologies, without the need for a separate process.

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., video conference [VC] 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.

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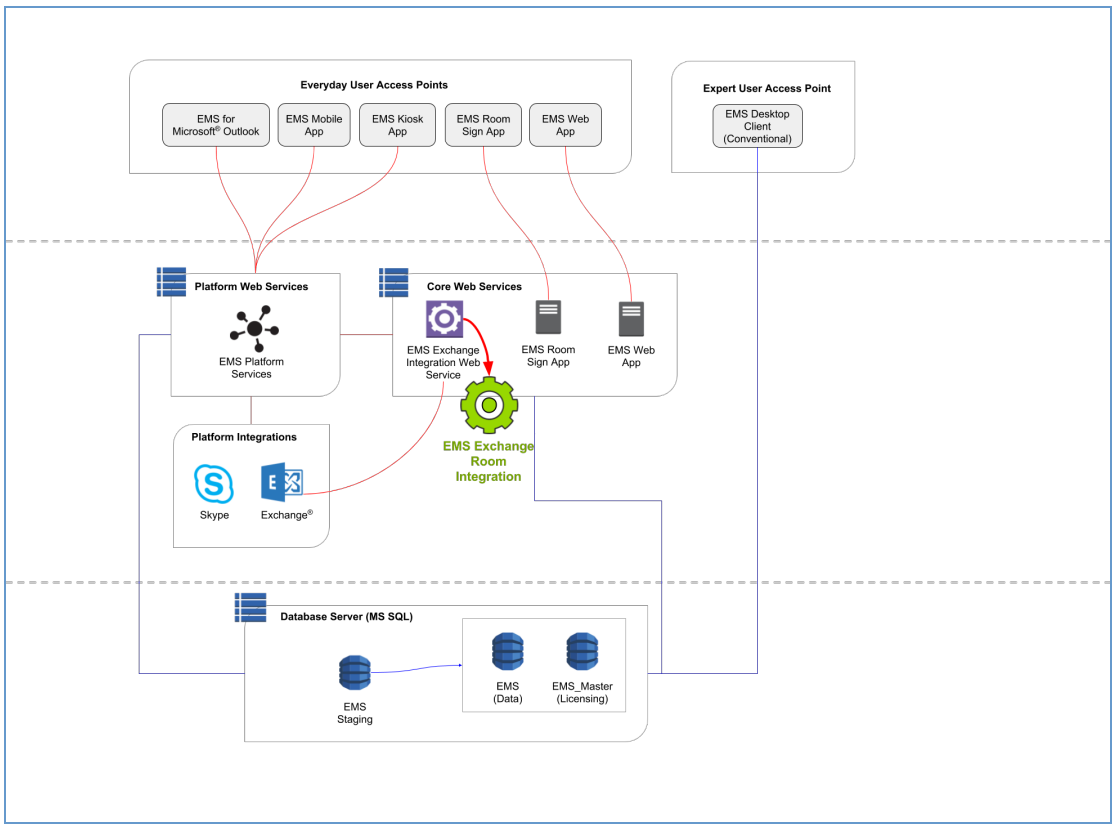
CHAPTER 2: System Requirements for ERI

Important!

The latest version of EMS software (V44.1) must be installed before you begin Installing 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 have been met.
2. Ensure EMS Platform Services have been installed.
3. Ensure the 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.

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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

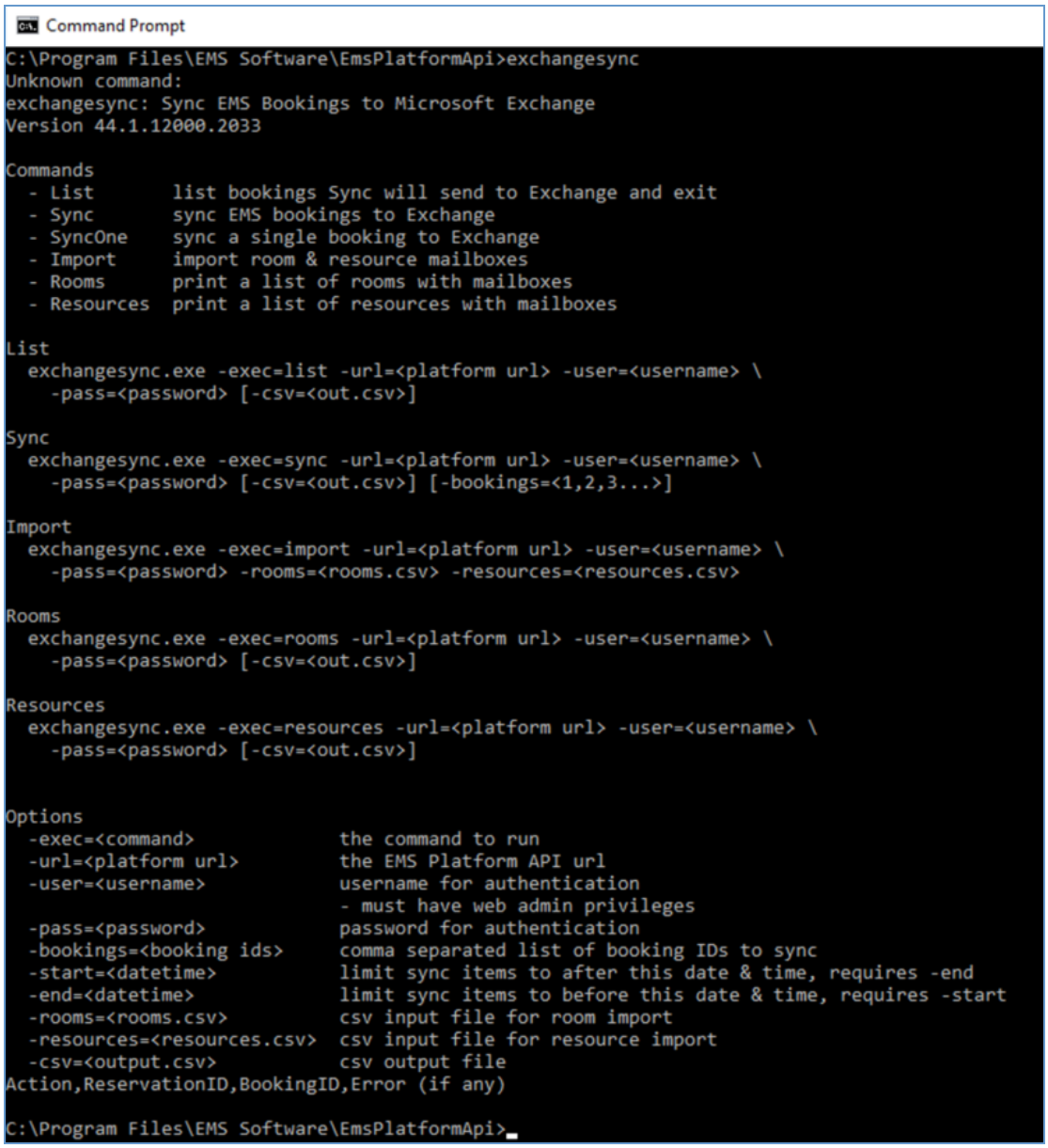
Commands	
	potential conflicts.
-Sync	Use this command to synchronize EMS bookings to Exchange.
-SyncOne	Use this command to synchronize a single booking to Exchange.
-Import	Use this command to import room and resource mailboxes into EMS. The format utilizes the ID of the room or resource and the SMTP 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	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>]

Parameters	
-exec=<command>	The command to run

Parameters	
-url=<platform url> -user=<username>	The EMS Platform API url Username for authentication **Note:** Must have web admin privileges.
-pass=<password> -bookings=<booking ids> -start=<datetime>	The password for authentication Comma separated list of booking IDs to sync 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 Example: - format 2008-09-08T22:47:31-07:00
-rooms=<rooms.csv> -resources=<resources.csv> -csv=<output.csv>	CSV input file for room import CSV input file for resource import CSV output file

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 on configuring room and equipment resource mailboxes.

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 VC 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. To make the feature available to everyday users, select the **Available to Everyday Users** checkbox and verify the **Tied to Resource** checkbox is unchecked.
11. Click **OK**.
12. Create a Resource for each room. Navigate to **Configuration** > **Resources**. Choose your Category from the dropdown list.
13. Click **New**. Create a Description that details the Resource (e.g., Conference Room 101 Self-service Video Conference Device).
14. Uncheck the **Available to Everyday Users** box.
15. It is **not** necessary to select the **Maintain Inventory** checkbox for fixed resources.

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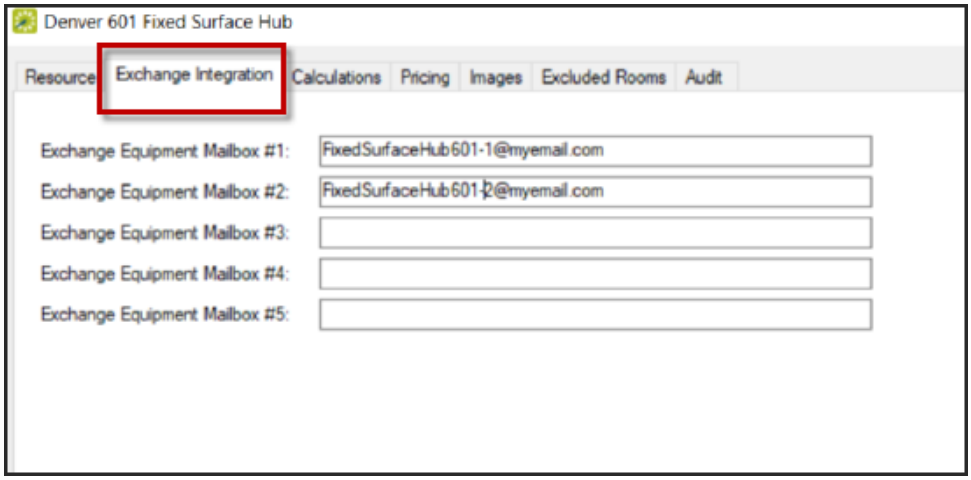
16. On the **Exchange Integration** tab, enter the email address as it was configured in Microsoft Exchange. There are multiple fields for email addresses on this tab. If a room contains multiple device features, enter all the corresponding email addresses.



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

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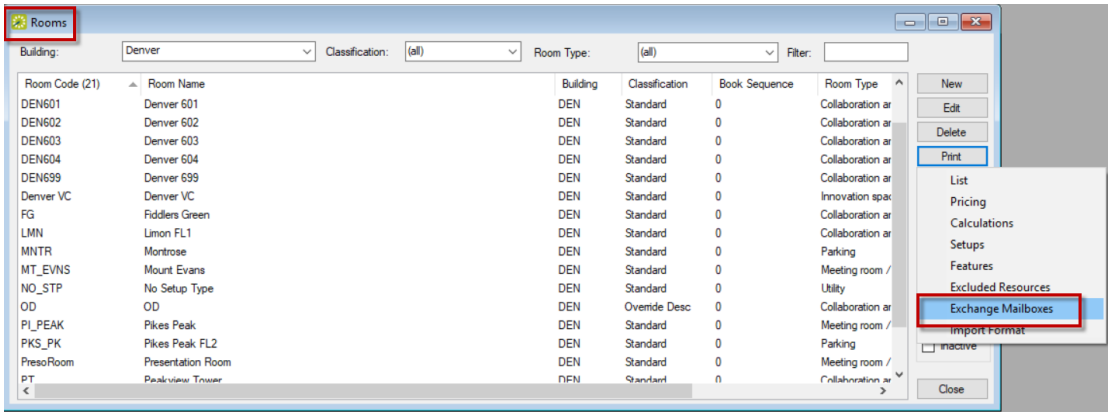
10. Check the **Maintain Inventory** checkbox and enter the **Quantity Available** as **1**.
11. Check the **Available to Everyday Users** box.
12. If you want users to be able to choose the resource while making a booking, check the **Available at Checkout** box. If you prefer users to add the resource 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**.

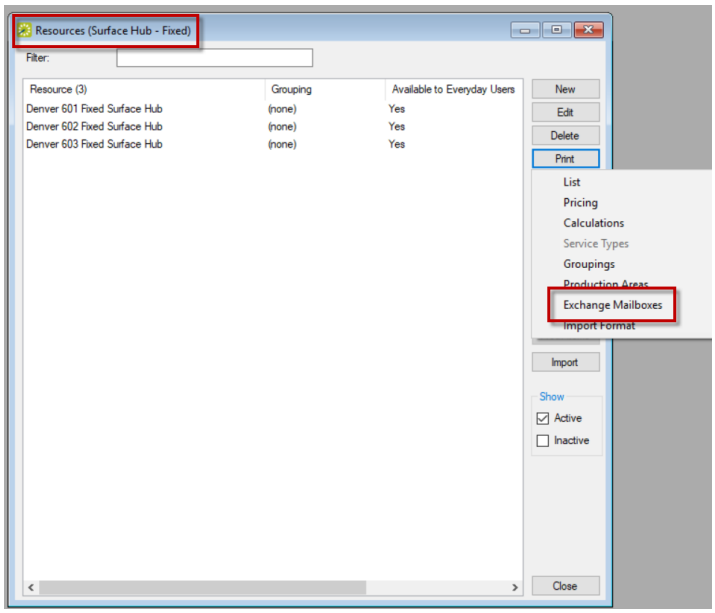
> **Important!**
>
> Though there are multiple fields for email addresses in the Exchange Integration for resources, when configuring a mobile device resource, the device must be configured to a **single** Exchange equipment mailbox in order to properly enable third-party endpoints.

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



Resource Report ERI

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