
EVOKO

ROOM MANAGER

HOW TO SETUP
EVOKO ROOM
MANAGER WITH
EXCHANGE 2007.

Version 1.1 2016

EVOKO

TABLE OF CONTENTS

1. Introduction	3
2. Create the users in Active Directory.....	4
3. Create a Room Admin account	5
4. Create a Remote Management account (If you're going to use EVO).....	9
5. Create a Room account (Resource account).....	13
6. Setting Access Rights using powershell.....	17
7. Configure the calendar processing	18
8. Configuration via the Evoko Control Panel.....	21

1. Introduction

The Evoko Room Manager is a system for booking and managing rooms. The Evoko Room Manager is mounted outside the room and display the booking status on beautiful touch-sensitive screens, the red or green background illumination of the screen allows you to see at a distance whether or not the room is free.

You book meetings just as you have always done in MS Outlook. The Evoko Room Manager also makes it possible to create and manage bookings directly on the touch-sensitive screen.

Please watch the short interactive User Guide at www.evoko.se/userguide to see how it works! We recommend that you watch all of the chapters before starting the installation.



The different types of accounts

Account use	Account type	No. of accounts	Comment
Exchange Administrative account⁽¹⁾	AD Account	1	This account is used to create the Exchange-mailboxes that is needed to get the Evoko Room Manager up & running. The account needs to have rights to administer your Exchange 2010 Service.
Room Admin account⁽²⁾	User Mailbox	1 + x/19	This account is used to manage the resource/room accounts and is needed since resource accounts can't manage themselves. Exchange 2007 has a throttling mechanism that is based on the whole consumption on the server. The throttling is set to 1000 operations per second by default. Expected values for Client Connections are 50 / client. This setting can affect the access to the room account, more information regarding RPC Client Throttling can be found here .
Remote Management account⁽³⁾	User Mailbox	1	This account is used for the EVO features (Remote Upgrade / Monitoring / Statistics). Since a large number of emails are processed through this account it is important that it is a dedicated account only used for this purpose.
Room account⁽⁴⁾	Room Mailbox / Resource User	x	The email addresses for these accounts is what will be used to book the meeting rooms. Resource accounts don't have any passwords and cannot exist on their own as they need to have one or more Admin accounts to access the resource. The Room admin account ⁽²⁾ has to be granted "Send on behalf" and "Full access" permissions to its belonging Room accounts ⁽⁴⁾ .

x = the number of meeting rooms with Evoko Room Manager

The accounts are numbered for your convenience. Later on in this guide, you will need these accounts.

Exchange Management Console⁽⁵⁾

You will need to access the Exchange Management Console to create the user mailboxes. Exchange Management Console is located on the Exchange server.

Connection info

Please make sure that no security functions or programs block or restrict a direct http/https (80/443) communication between the mail server and the Evoko Room Manager (i.e. domain control, firewalls, proxies, network logins etc.)

The Room Manager supports encryption up to **3DES 168bit (112)** via https. If support for a higher encryption support is required then please contact the Evoko support.

The Room Managers network card supports network speeds up to 100Mbit. If you're using a Gigabit switch please specify the port to auto negotiate or 100Mbit.

EVO functionality (Remote upgrade, Monitoring, Statistics)

When using the EVO features, you will be able to upgrade the Room Managers remotely instead of using a USB-stick, you can monitor and extract valuable statistics from the Room Managers via the Evoko Control Panel.

All information/data regarding the EVO features is sent and received through a user account dedicated to the EVO features which we call a "Remote Management account⁽³⁾". It's important NOT to use an actual user account for the EVO features since this account will receive a large amount of emails and interference with the account/emails could compromise functionality.

When doing a remote upgrade, the Remote Management account⁽³⁾ will send out an email to each Room Managers Room account⁽⁴⁾ with several zip file packages that together contains the upgrade. When the email is received by the Room account⁽⁴⁾, the Room Managers will start to upgrade themselves (one per minute, to limit the pressure on the email server), once the upgrade is completed the Room Manager will reboot.

The Room Managers status can be monitored via the Evoko Control Panel under the tab "Monitoring". Depending on your configuration, each Room Manager will send an update (email) to the Remote Management account⁽³⁾ each 15 min, 1 hour, 3 hours and 1 day which later will be read by the Evoko Control Panel.

Under the tab "Statistics" in the Evoko Control Panel a document (.xlsx) containing raw data/statistics of your rooms can be exported. Each Room Manager will report (email) its statistics each day prior to going into sleep to the Remote Management account⁽³⁾ which later will be read by the Evoko Control Panel.

2. Create the users in Active Directory

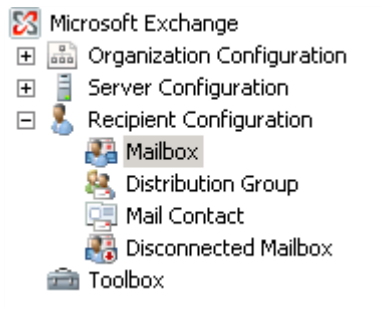
Before you proceed in the guide, you will need to create these accounts in Active Directory. Please note the Organizational Unit (OU) where you place the accounts. You will need this later on. The accounts stated below are examples and you can use other account names if you wish.

User logon name	First name	Last name	Reference
room_admin_1	Room	Admin 1	Room Admin account ⁽²⁾
remote_manager	Remote	Manager	Remote Management account ⁽³⁾

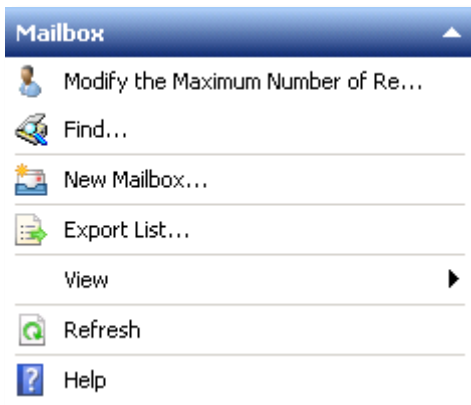
*Please note that several Room Admin accounts might be needed depending on number of Room accounts and the configured **EWSMaxConcurrency**.*

3. Create a Room Admin account

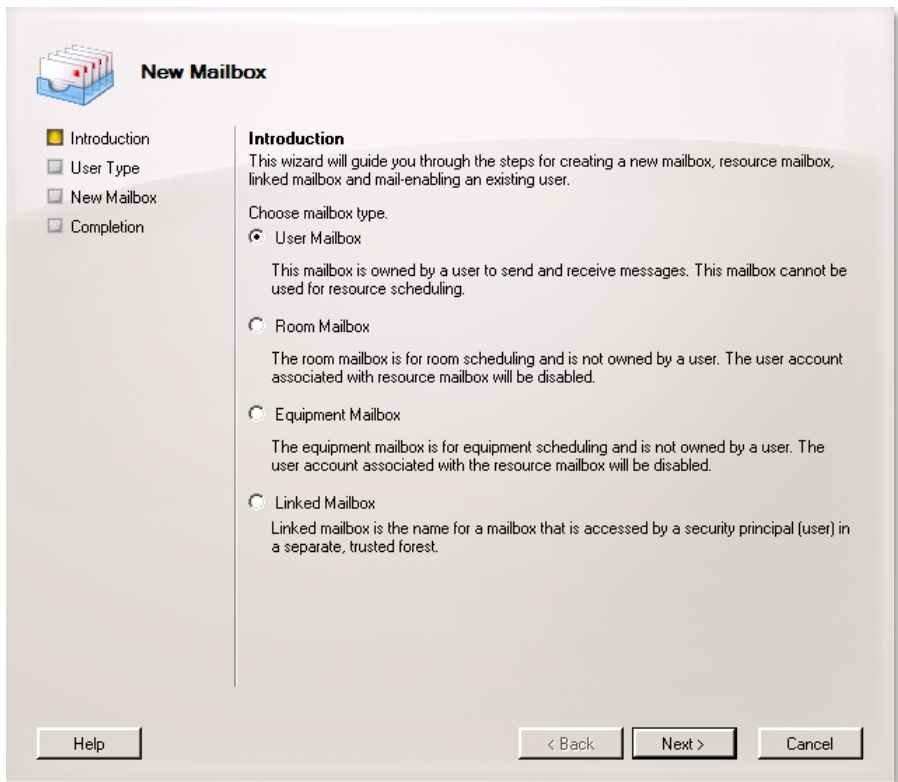
1. Go to the Exchange Management Console^[5] and login with your Exchange Admin account^[1].
2. Navigate to "Recipient Configuration" → "Mailbox".



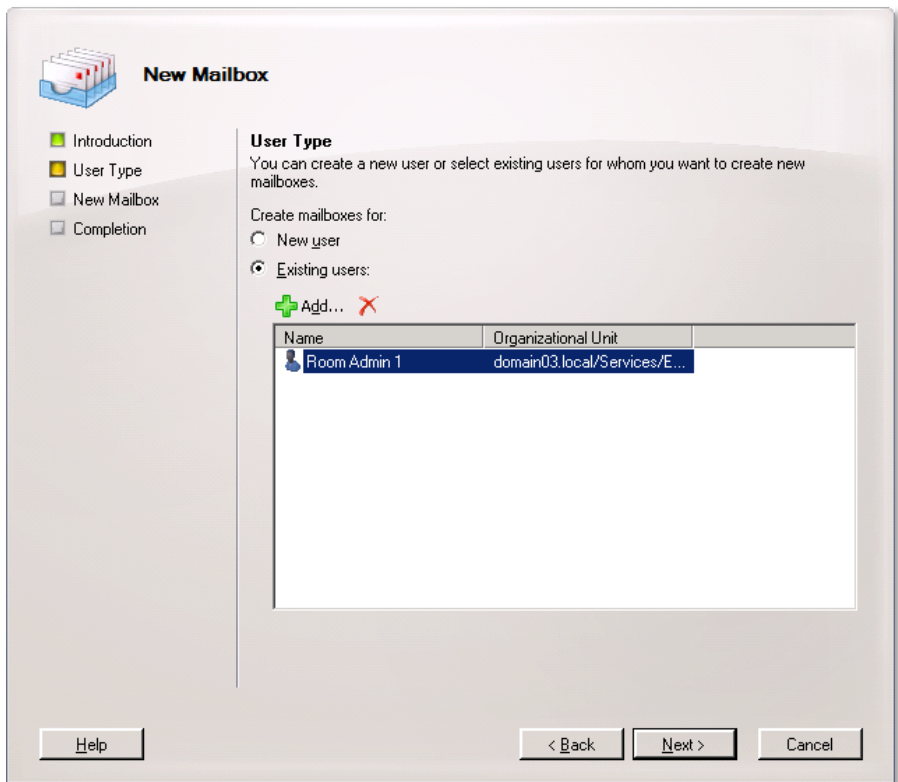
3. In the right menu, choose New Mailbox...



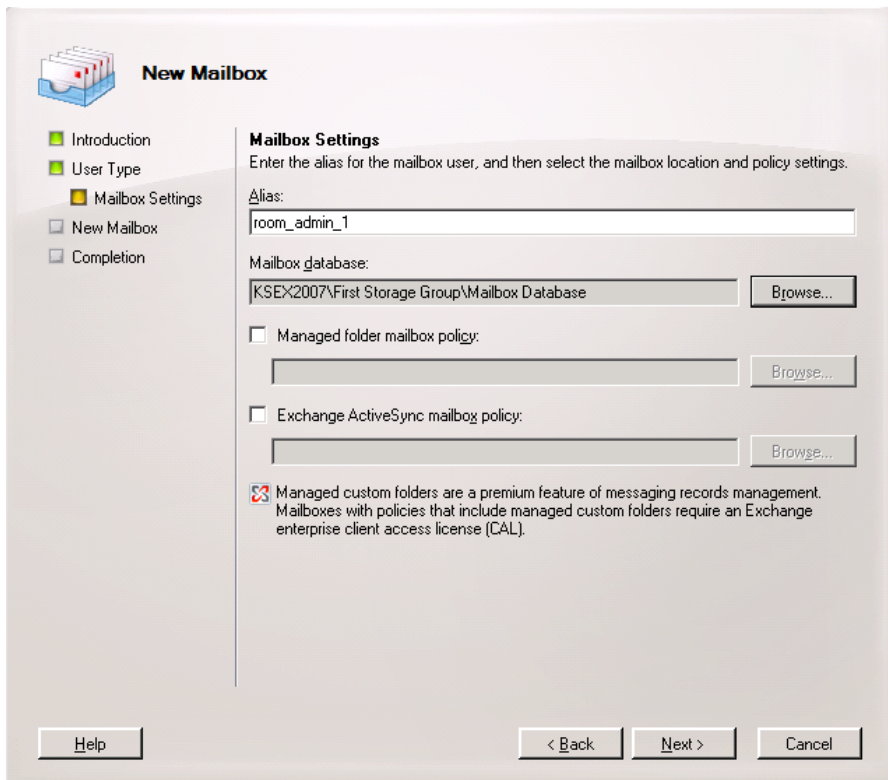
4. Select "User Mailbox" and press "Next".



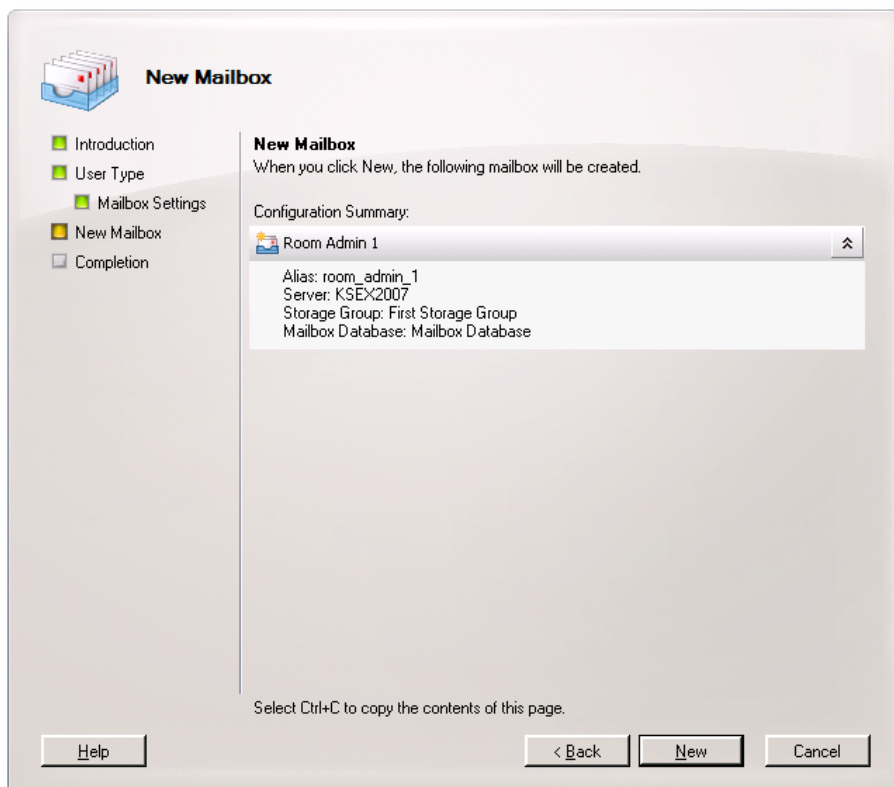
5. Choose Existing Users and add the pre-created Room Admin account⁽²⁾ from Active Directory, then press "Next".



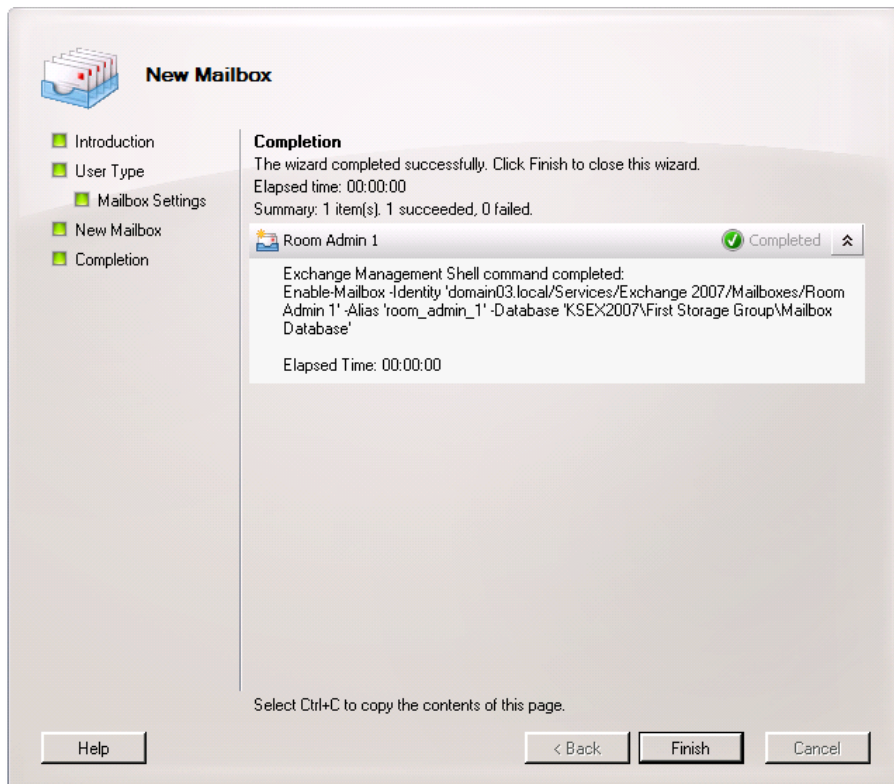
- 6. Specify the Alias, choose mailbox database for your Room Admin account^[2] and press "Next".



- 7. Your mailbox is now ready for provisioning, press "New"

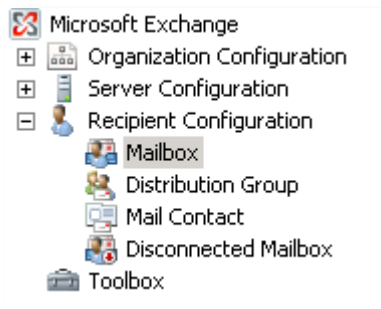


8. Your Room Admin account^[2] is now created.

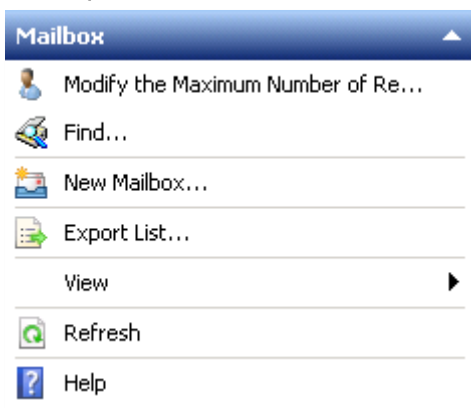


4. Create a Remote Management account (If you're going to use the EVO functionality)

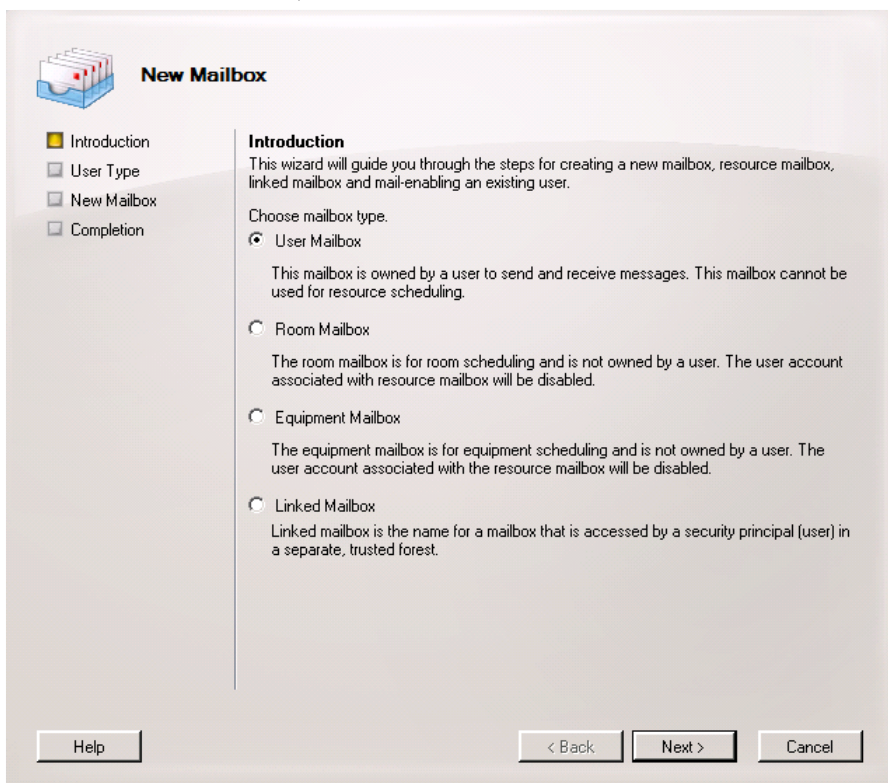
1. Go to the Exchange Management Console⁽⁵⁾ and login with your Exchange Admin account⁽¹⁾.
2. Navigate to "Recipient Configuration" → "Mailbox".



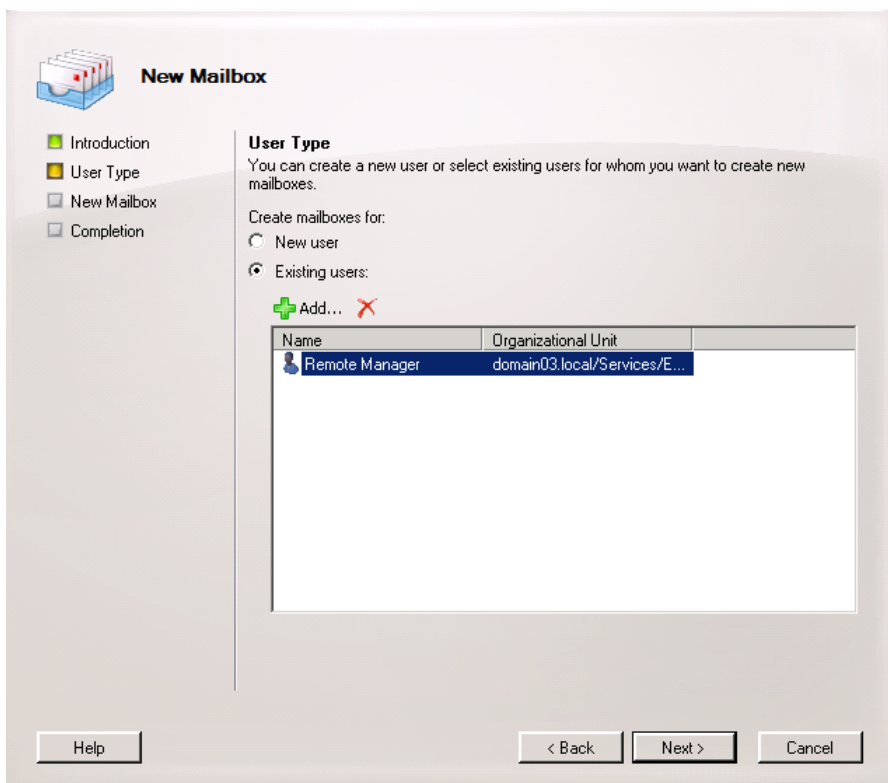
3. In the right menu, select "New Mailbox..."



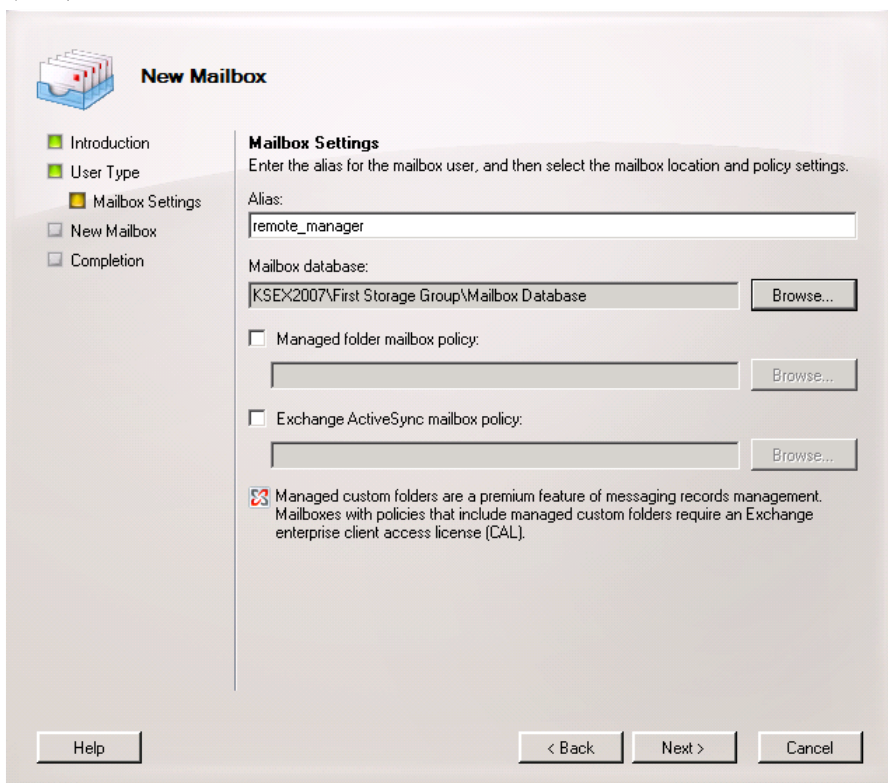
- 4. Select "User Mailbox" and press "Next".



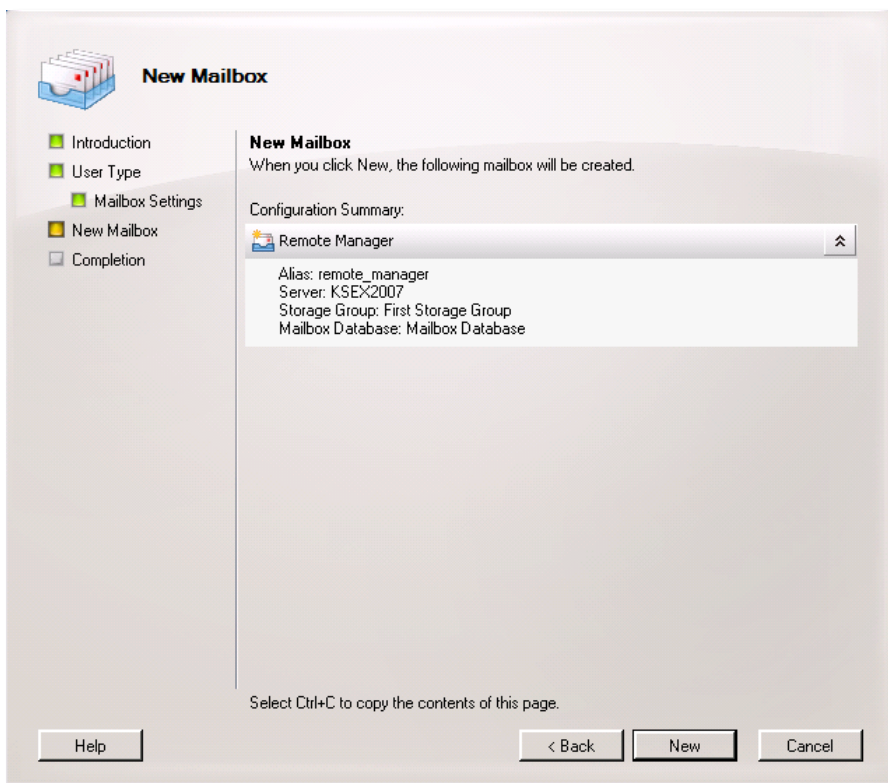
- 5. Choose "Existing users" and add the pre-created Remote Management account⁽³⁾ from Active Directory, then press "Next".



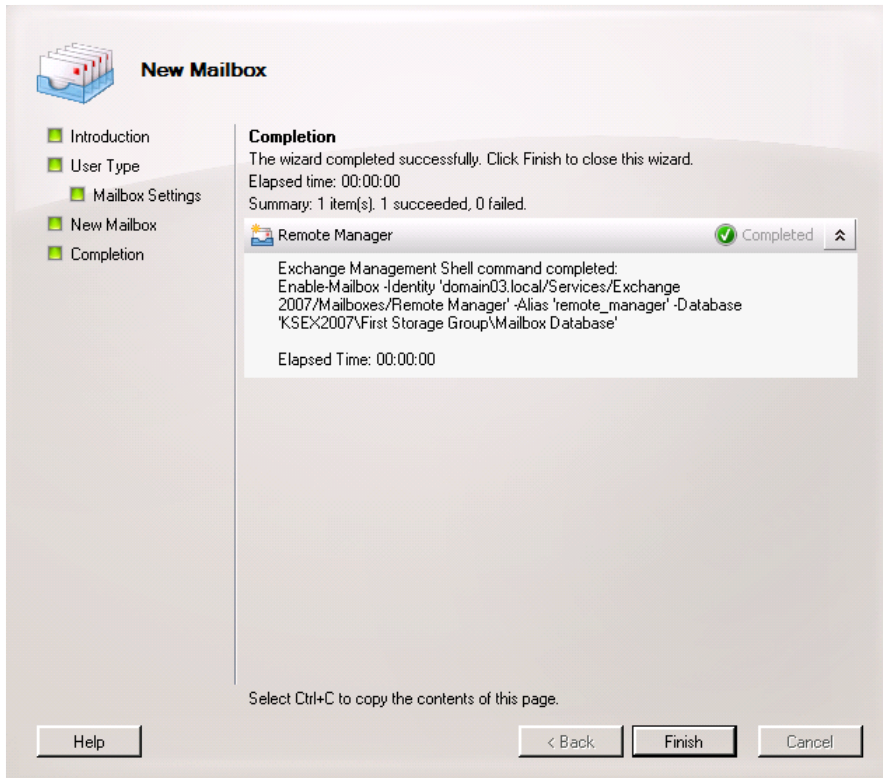
- 6. Specify the Alias, choose mailbox database and click "Next"



- 7. Your mailbox is now ready for provisioning, press "New".

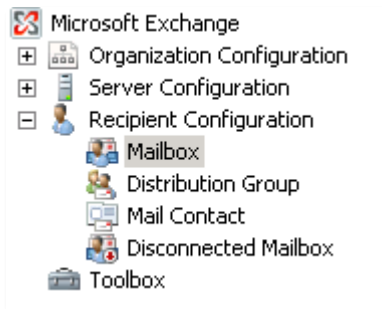


8. Your Room management account^[3] is now created.

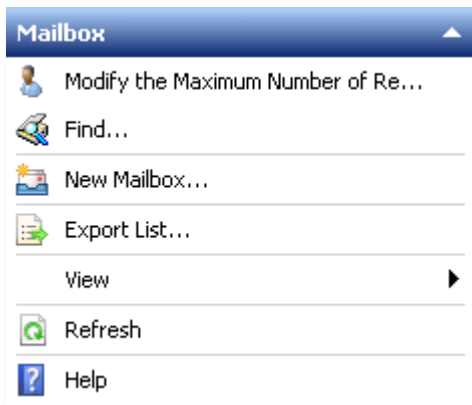


5. Create a Room account (Resource account)

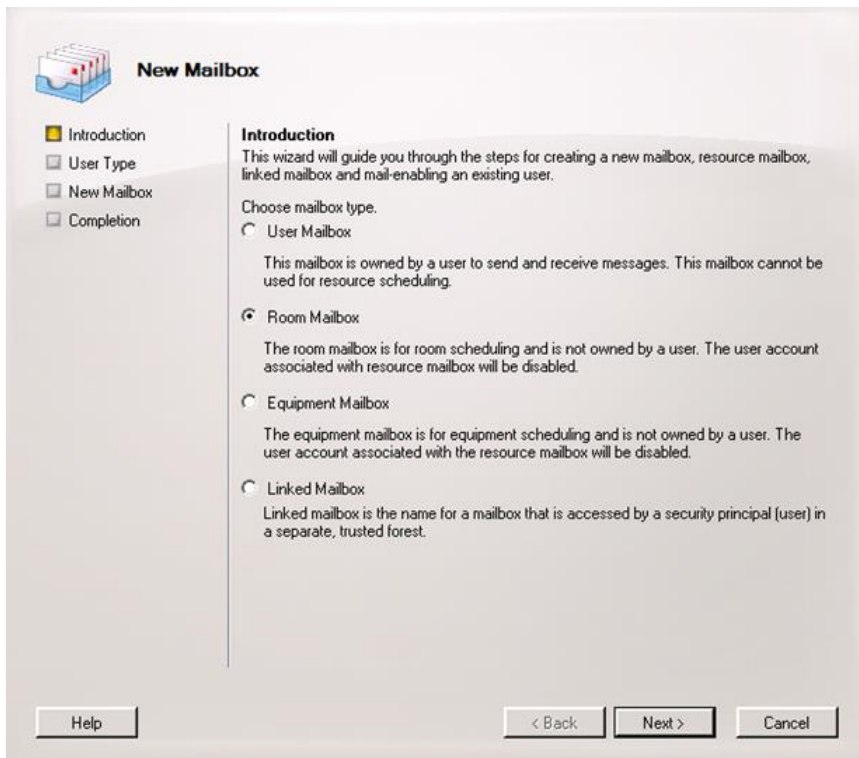
1. Go to the Exchange Management Console^[5] and login with your Exchange Admin account^[1].
2. Navigate to "Recipient Configuration" → "Mailbox".



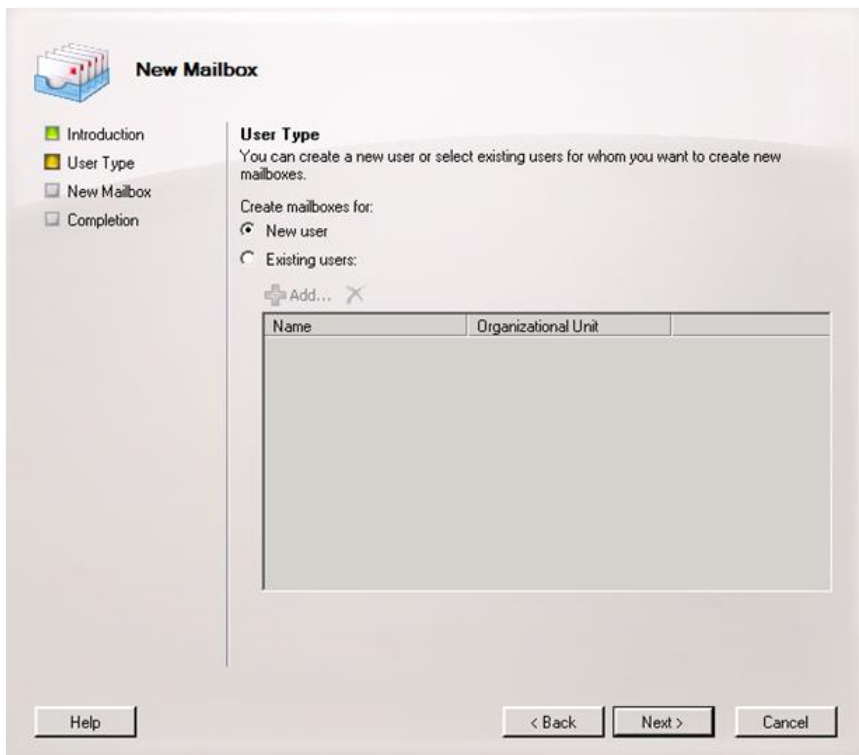
3. In the right menu, choose "New Mailbox...".



4. Select "Room Mailbox".



5. Select "New User".



6. Enter the name of the Room Account⁽⁴⁾ and select the Organizational Unit (OU) where you want the Room Account⁽⁴⁾ to be placed. Enter First and Last name of the Room Account⁽⁴⁾, then press "Next".

New Mailbox

- Introduction
- User Type
- User Information**
- Mailbox Settings
- New Mailbox
- Completion

User Information
Enter the user name and account information.

Organizational unit:

First name: Initials: Last name:

Name:

User logon name (User Principal Name):
 @evoko.se

User logon name (pre-Windows 2000):

Password: Confirm password:

User must change password at next logon

7. Add an Alias for your Room Account⁽⁴⁾, specify mailbox database and press "Next".

New Mailbox

- Introduction
- User Type
- User Information
- Mailbox Settings**
- New Mailbox
- Completion

Mailbox Settings
Enter the alias for the mailbox user, and then select the mailbox location and policy settings.

Alias:

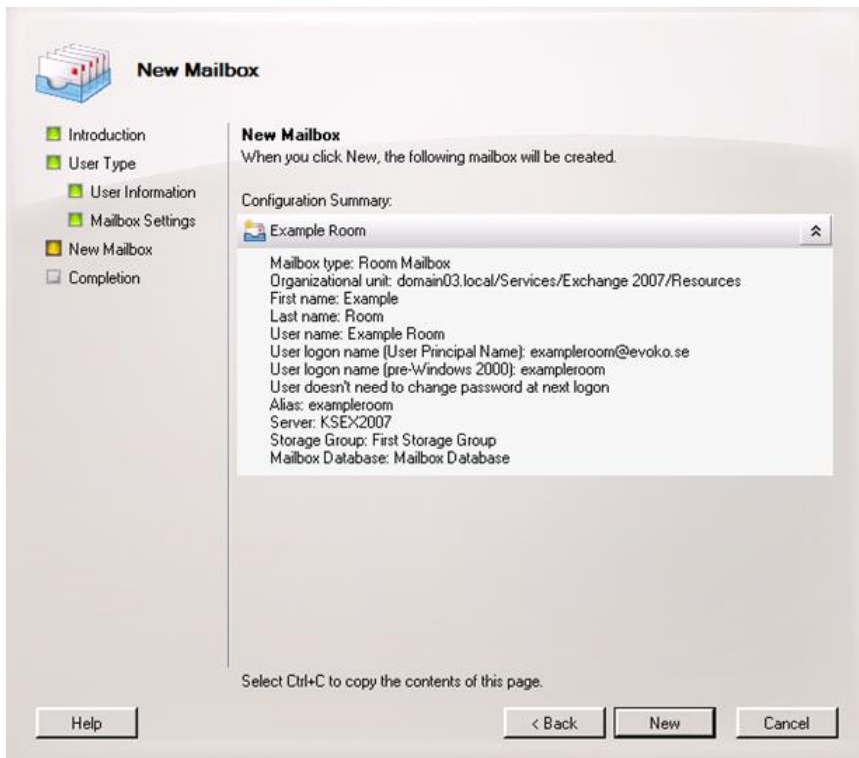
Mailbox database:

Managed folder mailbox policy:

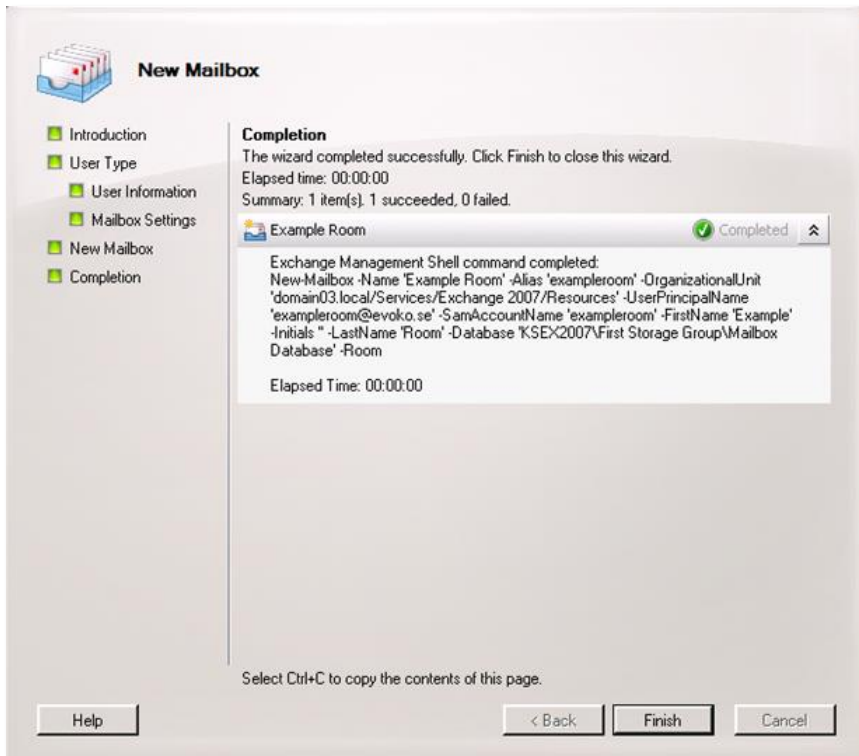
Exchange ActiveSync mailbox policy:

Managed custom folders are a premium feature of messaging records management. Mailboxes with policies that include managed custom folders require an Exchange enterprise client access license (CAL).

8. Your Room Account^[4] is ready to be created. Press “New”



9. Your Room Account^[4] is now created, press “Finish”.



Note: If you would like to create several Room accounts^[4] simply repeat step 5.3-5.9.

6. Setting Access Rights using powershell

When integrating Evoko Room Manager(s) with your Exchange server, certain permissions is needed to be set using the Exchange Management Shell.

1. Start Exchange Management Shell (**run as administrator**) while logged in to your Exchange server (typically using a RDP-Connection) with an Exchange Admin account⁽¹⁾.
2. Run the following **required** commands:
(Simply replace "**exampleroom**" and "**room_admin_1**" to the equivalent for your accounts)

Commands

```
Add-MailboxPermission exampleroom -User room_admin_1 -AccessRights FullAccess
```

This command grants the Room admin⁽²⁾ Full Access permission to the Room account⁽⁴⁾.

```
Set-Mailbox exampleroom -GrantSendOnBehalfTo room_admin_1
```

This command grants the Room account⁽⁴⁾ Send on Behalf permission to the Room admin account⁽²⁾.

3. Run the following **optional** commands:

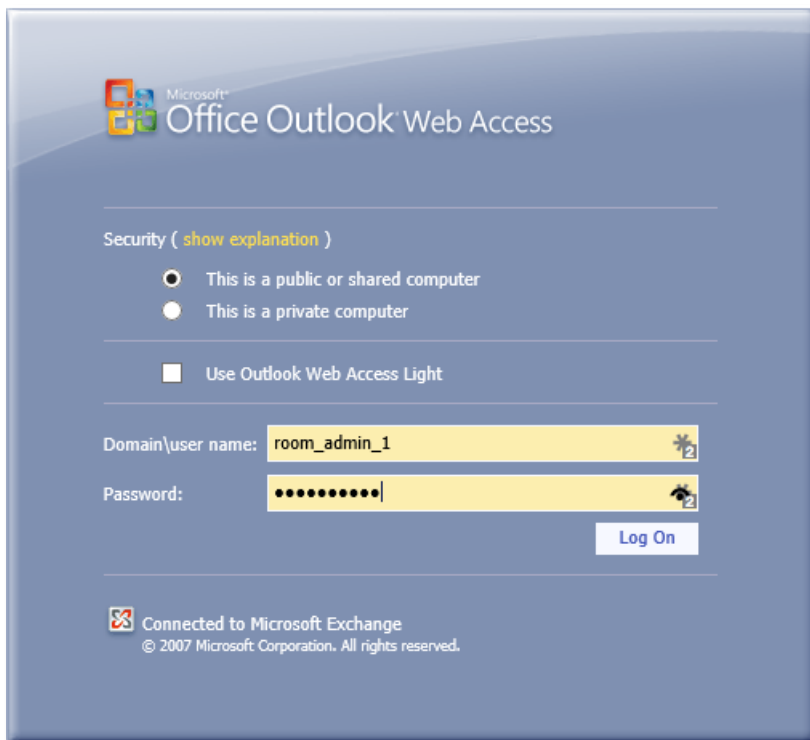
Command

```
Get-mailbox exampleroom | Set-CalendarProcessing -ProcessExternalMeetingMessages: $true
```

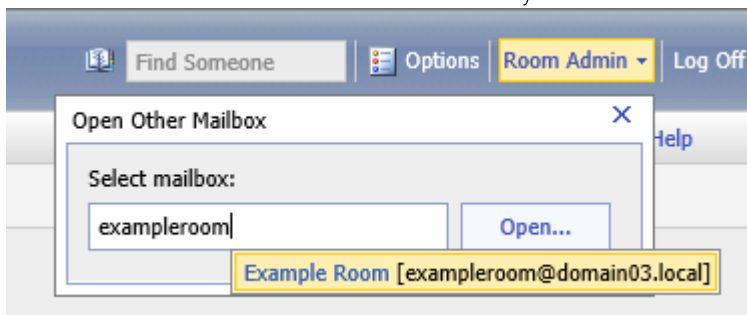
This command allows for booking of the Room account⁽⁴⁾ from external parties.

7. Configure the calendar processing

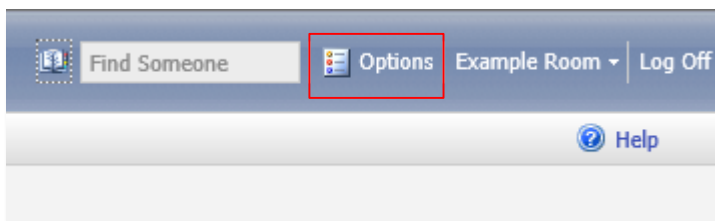
1. Login to your Outlook Web Access with your Room Admin Account^[3], make sure that Outlook Web Access Light is unchecked.



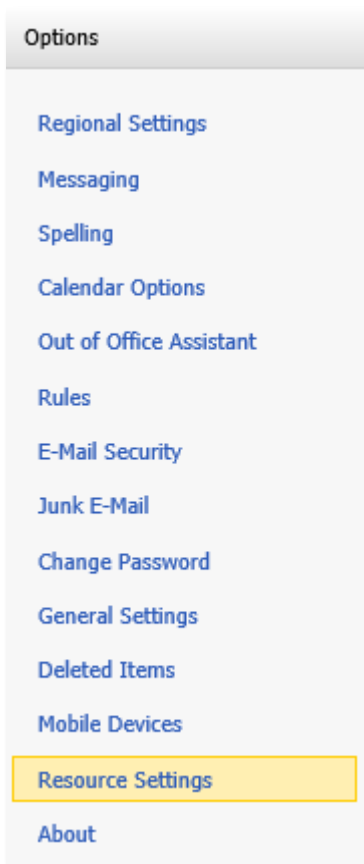
2. In the top right corner press the down arrow by your name to show "Open Other Mailbox".
3. Enter the email address of the resource room you want to administer and press "Open".



4. Once you have opened the resource room press "Options" in the top right corner.



5. Select "Resource Settings" in the menu to the left.

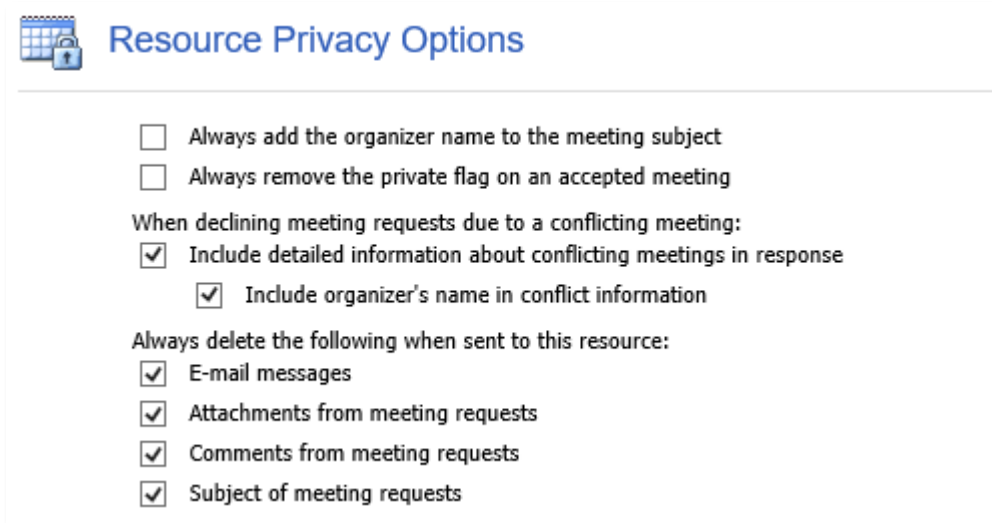


6. Make sure that "Allow conflicts" under "Resource Scheduling Options" is unchecked and press "Save" at the top.

The image shows the "Resource Scheduling Options" dialog box. It contains the following settings:

- Automatically process meeting requests and cancellations
 - Disable Reminders
 - Maximum number of days:
 - Always decline if end date is beyond this limit
 - Limit meeting duration
 - Maximum allowed minutes:
 - Allow scheduling only during working hours
 - Allow conflicts
 - Allow recurring meetings
 - Allow up to this number of individual conflicts:
 - Allow up to this percentage of individual conflicts:

7. Under "Resource Privacy Options", you can further configure how you want the meetings on your Evoko device to display.



Resource Privacy Options

- Always add the organizer name to the meeting subject
- Always remove the private flag on an accepted meeting

When declining meeting requests due to a conflicting meeting:

- Include detailed information about conflicting meetings in response
 - Include organizer's name in conflict information

Always delete the following when sent to this resource:

- E-mail messages
- Attachments from meeting requests
- Comments from meeting requests
- Subject of meeting requests

Always add organizer name to meeting subject:

If checked, the meeting organizer's name is included in the meeting subject.

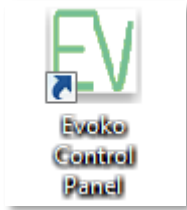
Always remove the private flag on an accepted meeting:

If checked, private meeting requests which are accepted by the resource will be marked as public so that the resource schedule can be viewed by other people.

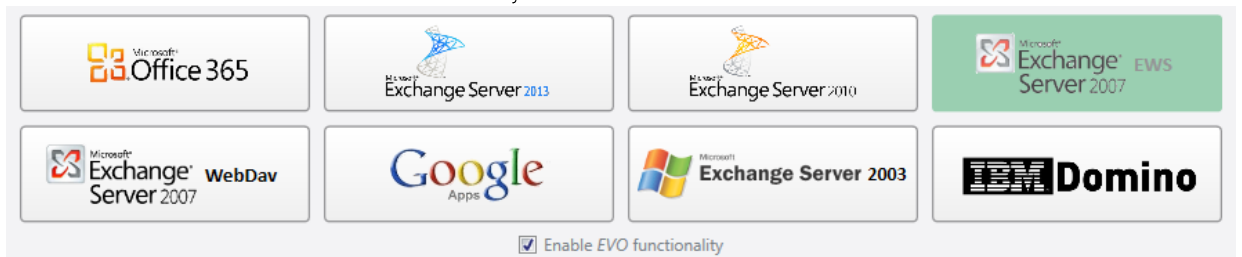
8. Configuration via the Evoko Control Panel

Tip: press the -button to receive further information on each step during your configuration.

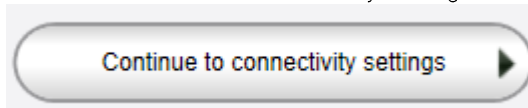
1. Download and install the Evoko Control Panel. The software is available at our [website](#).
2. Launch the Evoko Control Panel.



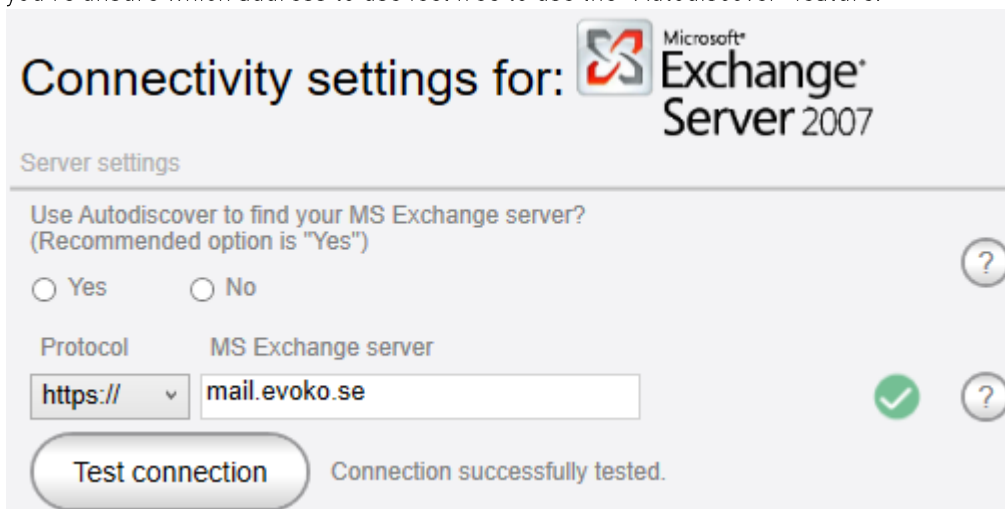
3. Choose "Exchange 2007" as your mail server, enable "EVO functionality" if you would like to use the EVO features (remote upgrade, monitoring, statistics) and have setup a Remote Management account^[3]. Please note that the Evo functionality is



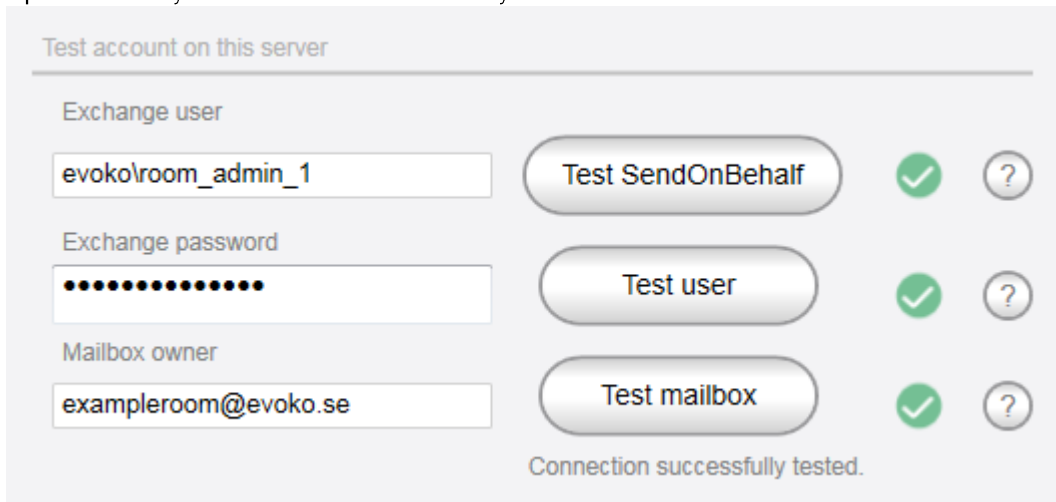
4. Click on "Continue to connectivity settings" in the bottom right corner to continue.



5. Fill in your Exchange 2007 mailserver address, we're going to use "mail.evoko.se" for our setup. If you're unsure which address to use feel free to use the "Autodiscover" feature.

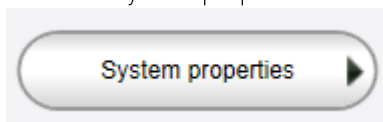


6. **Optional:** Test your accounts for functionality.

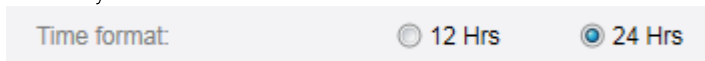


- Exchange user - Fill in your Room Admin account^[2]
- Exchange password – Fill in your Room Admin password
- Exchange email – Fill in your email-address to your Room account^[4].

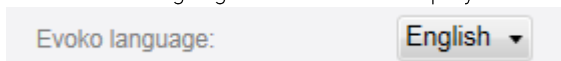
7. Click on “System properties” in the bottom right corner to continue.



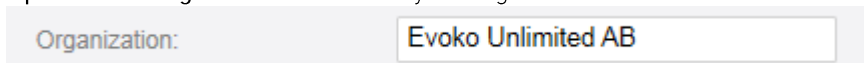
8. Choose your “Time format”.



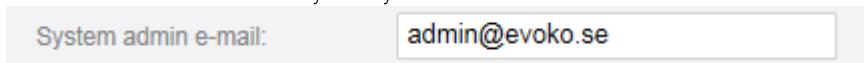
9. Choose the language which will be displayed on the Room Manager.



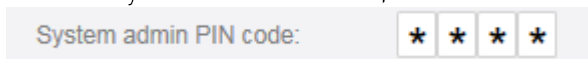
10. **Optional setting:** Enter the name of your Organization.



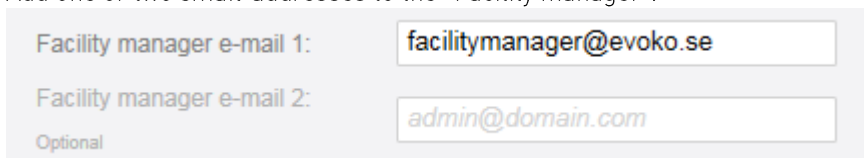
11. Enter the email-address to your System Administrator.



12. Choose a system Admin PIN code, the code is used to access the Admin menu on the Room Manager.



13. Add one or two email-addresses to the “Facility manager”.



- Choose a Facility manager PIN code, the code is used to access the Facility manager menu on the Room Manager.

Facility manager PIN code:

- Fill in your "Remote Management account"⁽³⁾ (presumed that you're going

Remote Management user:
DO NOT PUT A NORMAL USER ACCOUNT HERE, press "?" for details.

Remote Management password:

Remote Management email:

Remote monitor update duration:

- Remote Management user – Fill in the email-address for your Remote Manager account⁽³⁾.
- Remote Management password – Fill in the password for your Remote Manager account⁽³⁾.
- Remote Management email – Fill in the email-address to your Remote Manager account⁽³⁾.
- Remote monitor update duration – (This sets how often each Room Manager send email-reports for the monitoring feature).

- Add a unique "Security key" (Max 16 characters).

Security key:

- Choose if you want the Room Manager always on or set by time.

Always on: Yes No

Wake up time:

Go to sleep time:

- Choose your Time zone at the Room Manager unit location.

Time zone:

- Optional Setting:** Assign one or multiple NTP-servers, separate the servers with a comma.

NTP Servers:
Optional

- Click on "Admin credential" in the bottom right corner to continue.

- Click on button "Add users".

22. Add your Room Admin account(s)^[2].

23. Click on "Room dashboard" in the bottom right corner to continue.

24. Click on "Add group" to create a group.

25. Choose method to add a room, for this guide we'll go with "Quickly".

26. Fill in Room Name, "Exchange User" (Room Admin account^[2]) and "Mailbox owner" (Room account^[4]).

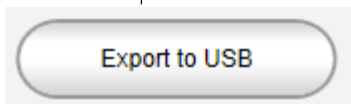
27. Fill in the amount of seats in the room and choose the room facilities.

28. Enable the optional features that you would like to configure your Room Manager with.

- **Book meeting** - Enables the user to book a meeting on the Room Manager.
- **Extend meeting** - Enables the user to extend a meeting on the Room Manager.
- **End meeting** - Enables the user to end a meeting on the Room Manager.
- **Report issue** - Enables the user to report any of the chosen facilities.
- **Display Subject** - Enables the subject of the meeting to be displayed on the Room Manager.
- **Display Organizer** - Enables the organizer of the meeting to be displayed on the Room Manager.
- **Confirm Meeting (5-30min)** - Enables a check in feature which will trigger a confirm/check-in button that will popup on the Room Manager 10 min prior to the meeting start and will be displayed 5-30 min post to the meeting start. If the confirm button isn't pressed within the selected timeframe the meeting room will be released.
- **Confirm Reminder** - Enables a reminder-email which will be sent to the organizer of the meeting. This email is triggered 5 minutes before the confirm time expires and is only sent out if the room hasn't already been confirmed/checked in.

Note: To add several Rooms to your configuration simply repeat step 6.25-6.28.

29. Insert an empty USB-stick in your computer, max 4 GB and FAT-formatted (NOT FAT32).
30. Click on "Export to USB" in the bottom right corner to export your configuration.



Now you're done with the configuration, to proceed simply upload the configuration to the Evoko Room Manager via your USB-stick and follow the instructions on the screen.

Thank you for using Evoko's Exchange 2007 guide!

For further assistance, please contact the Evoko Support Team.

www.evoko.se/support

support@evoko.se

support.us@evoko.se

Meetings Made Magnificent

EVOKO