

# Exchange cloud Synchronization Software Installation 1.1.12

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## Pre-installation Notes

To install and configure the Exchange Cloud Connector, you will need the following:

- A Windows server to install the connector on (details below)
- The name of the account configured in Exchange that the connector will use to connect to Exchange
- The Exchange Web Services (EWS) server URL for the customer's Exchange service
  - This URL will be different for each hosting provider
  - Instructions are included at the end of this document for Office 365
  - The connector will do its best to use Exchange's autodiscovery to locate the EWS server, but many environments won't have autodiscovery configured.

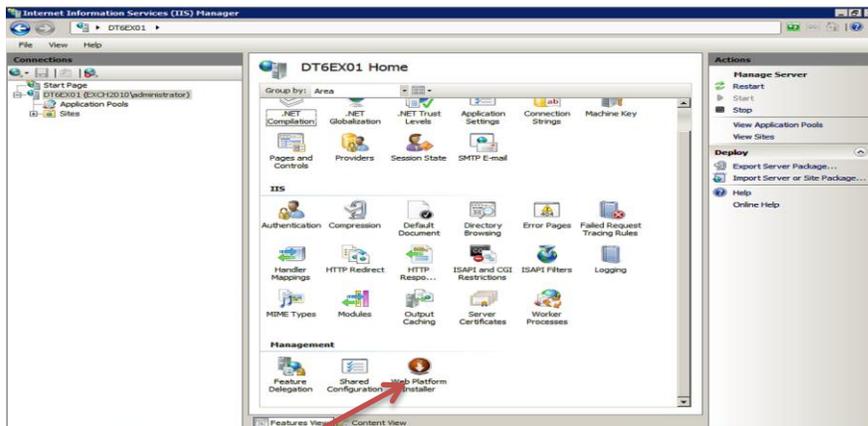
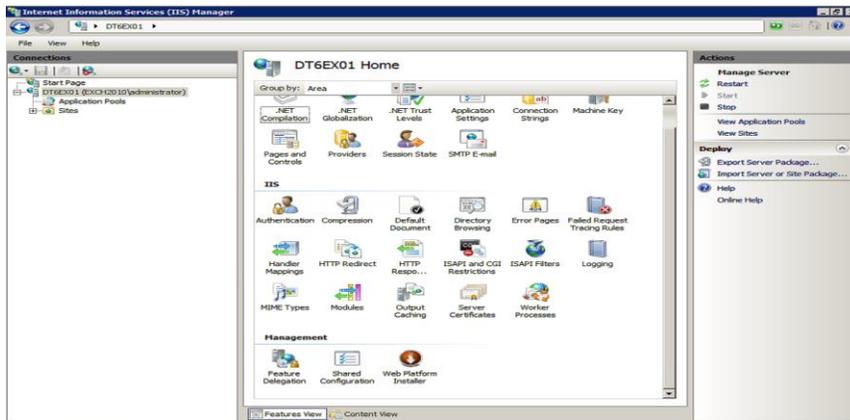
## System Requirements

- Windows 7 / XP SP3 / Server 2003 SP2 or newer
  - Required to be able to run software listed below
- IIS 6 or 7
  - <http://www.iis.net/>
- .NET Framework 4.0
  - <http://www.microsoft.com/net/>
- Web Platform Installer
  - <http://www.microsoft.com/web/downloads/platform.aspx>
- Running Windows Server 2008 R2 running IIS7.5 install "Web Deploy 2.0"
  - <http://www.iis.net/download/WebDeploy>

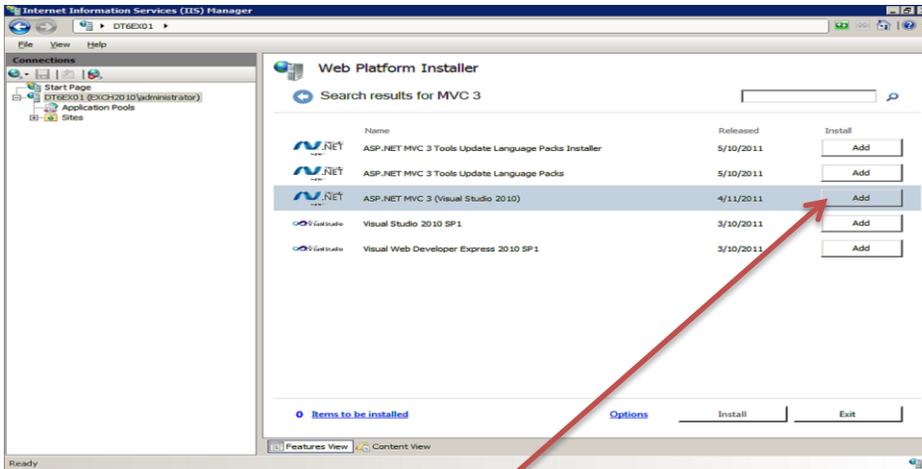
## Use the Web Platform Installer to install ASP.NET MVC 3

This section will walk you through the process of setting up your environment to run the Exchange Online Connector. You should already have the appropriate software installed as listed under the System Requirements section above.

Launch the Internet Information Services (IIS) Manager application and you will see this screen

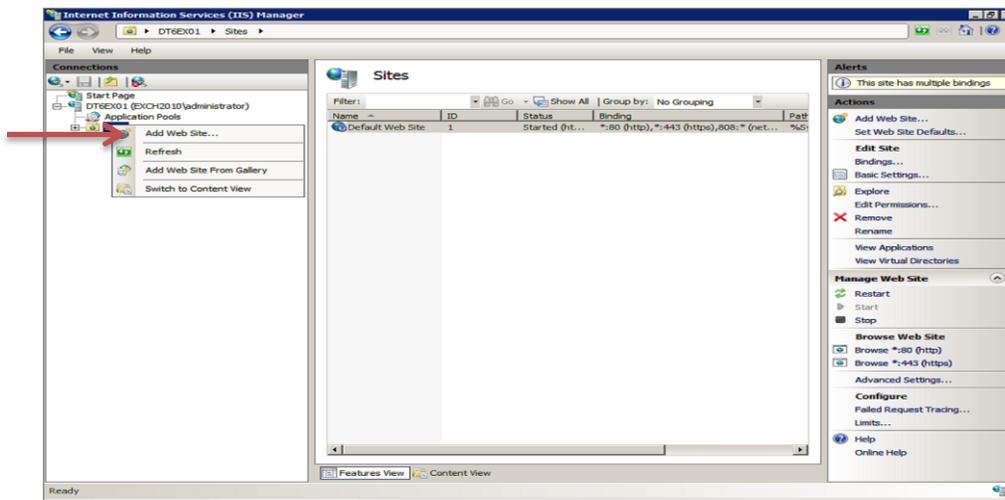


Click on the Web Platform Installer icon at the bottom of the center pane under Management. Clicking will launch the search page shown below.

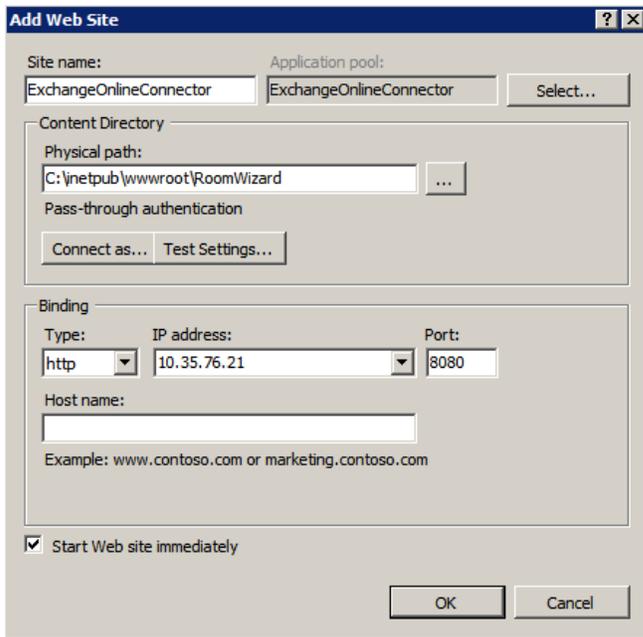


Search for MVC, and click the Add button next to “ASP.NET MVC 3 (Visual Studio 2010)”. Click the Install button at the bottom and follow the instructions to complete the installation process.

Create a new website running on a .NET 4.0 application pool

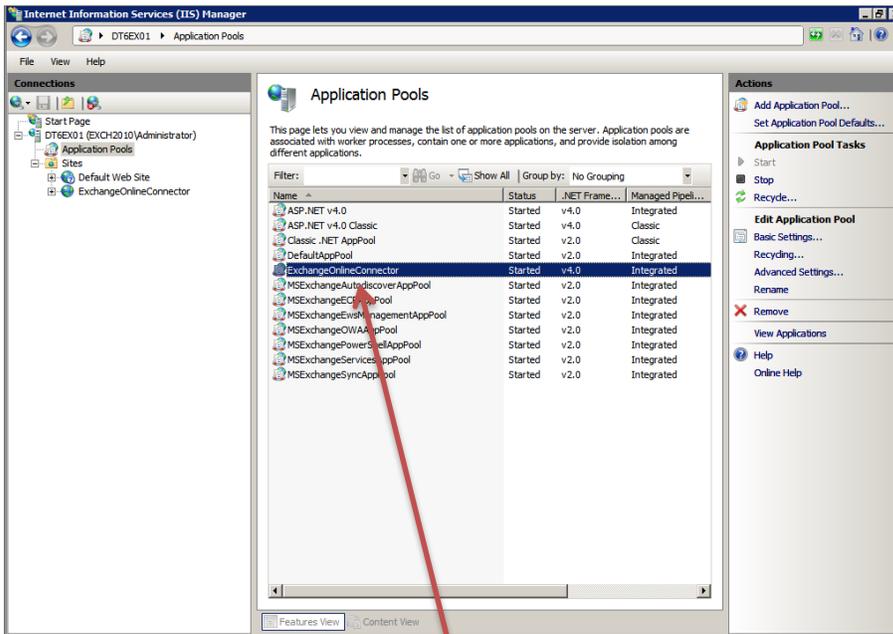


Right click on the “Sites” folder in the left pane of the IIS Manager application and select “Add Web Site...” to begin. This will bring up the dialog shown below.



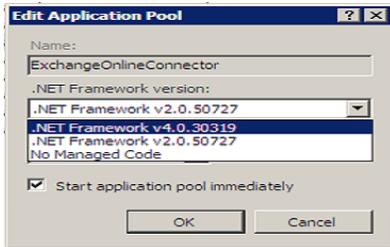
Enter a name for the site and choose where on the server's hard drive the application will be installed in the 'Physical Path' (E.g. C:\inetpub\www.root\RoomWizard) edit box.

Configure the Binding section so that it will not conflict with other sites running on the server, if you have any. Click the "OK" button to create the site. Note what application pool it is going to use – you will be configuring that also.



To configure the application pool, click on the "Application Pools" item in the left pane to bring up the list of current application pools on the server. Double click on

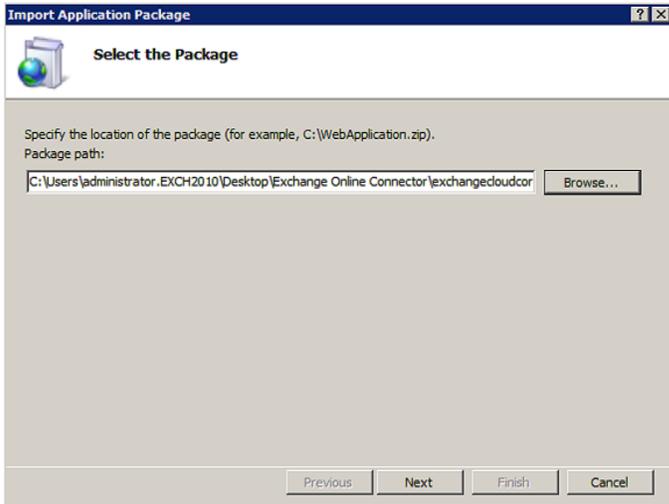
the application pool you configured the new site to use. This will bring up the dialog below.



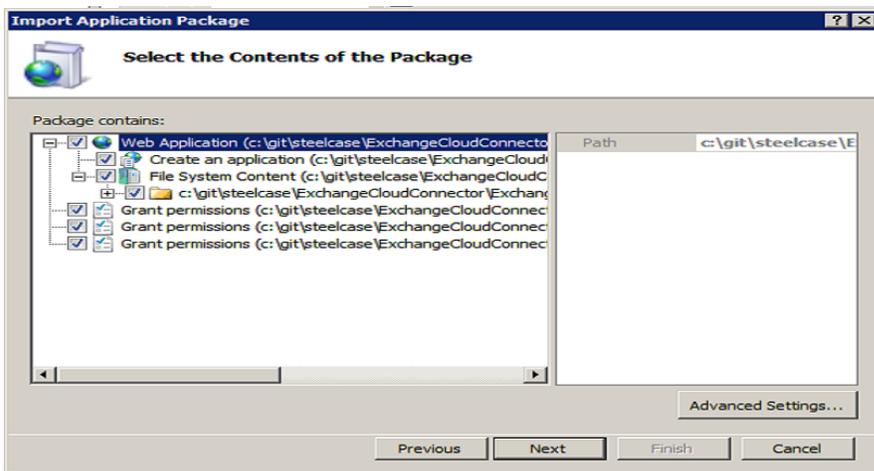
Select .NET Framework v4.0.xxxxx from the list. If it doesn't appear in the list, make sure you have the .NET framework version 4 installed. Click the "OK" button to save the changes.



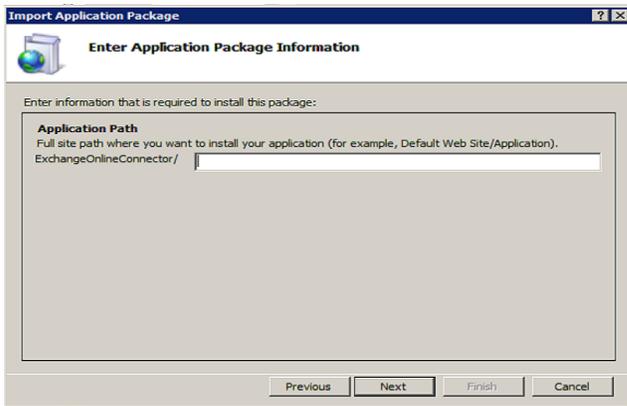
Now click back on the new website you created. There will be a link on the left-hand side named "Import Application...". Click it. This will let you import a zipped-up application bundle into the website.



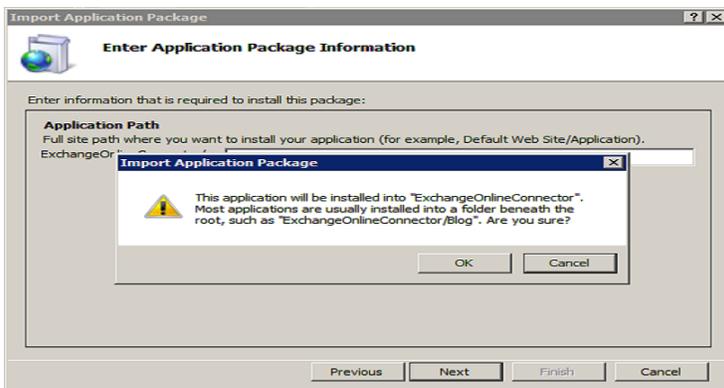
Click the “Browse...” button and locate the .zip file containing the Exchange Online Connector. Click “Next” to continue.



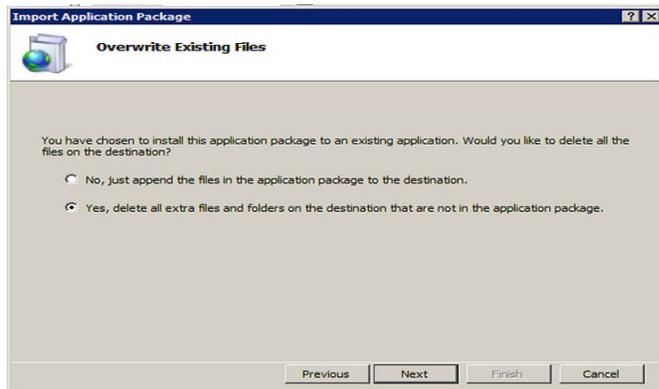
The defaults are correct here – you want to copy in all of the contents of the Zip file. Click “Next” to continue.



Clear the file name and click "Next" to continue.

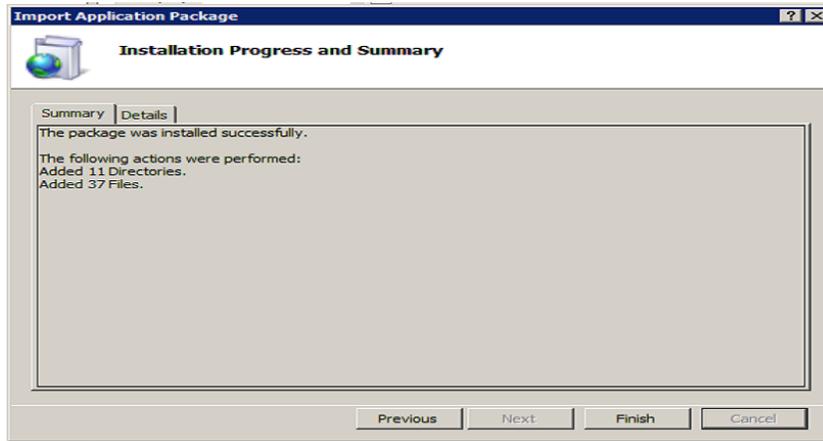


Choose the path on the website that should host the application. We recommend clearing out the text and installing it in the root of the site. If you do that, a dialog will appear confirming your choice to install the application at the root of the site instead of in a folder beneath the root. Click "Next", and "OK" if prompted, to continue.

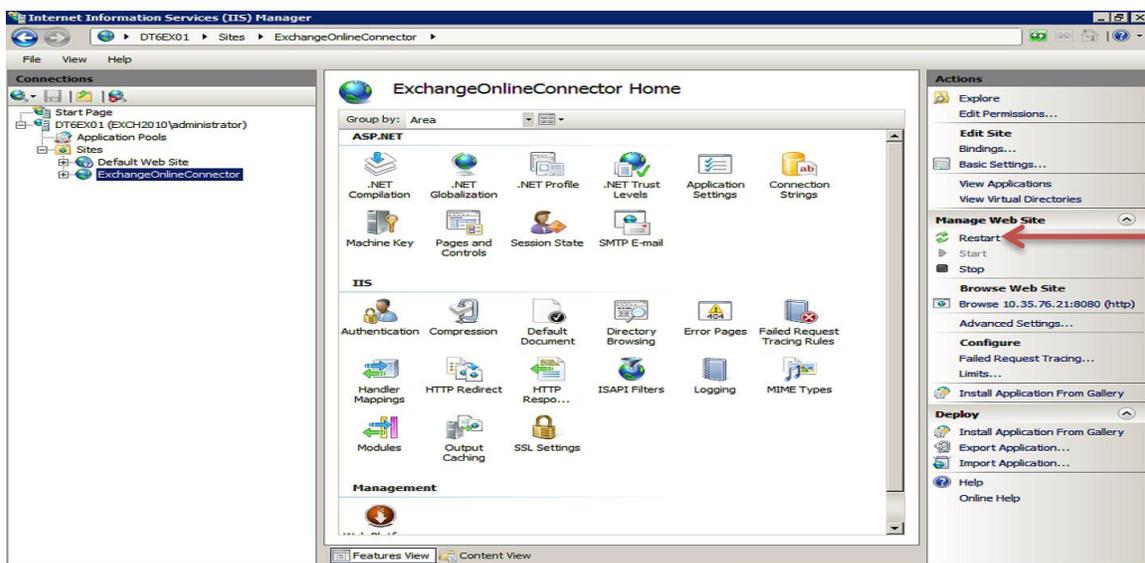


On the first installation, the value chosen here will not matter. Click "Next" to continue.

If it is not a new installation, select “Yes, delete all extra files and folders on the destination that are not in the application package” Click “Next” to continue.



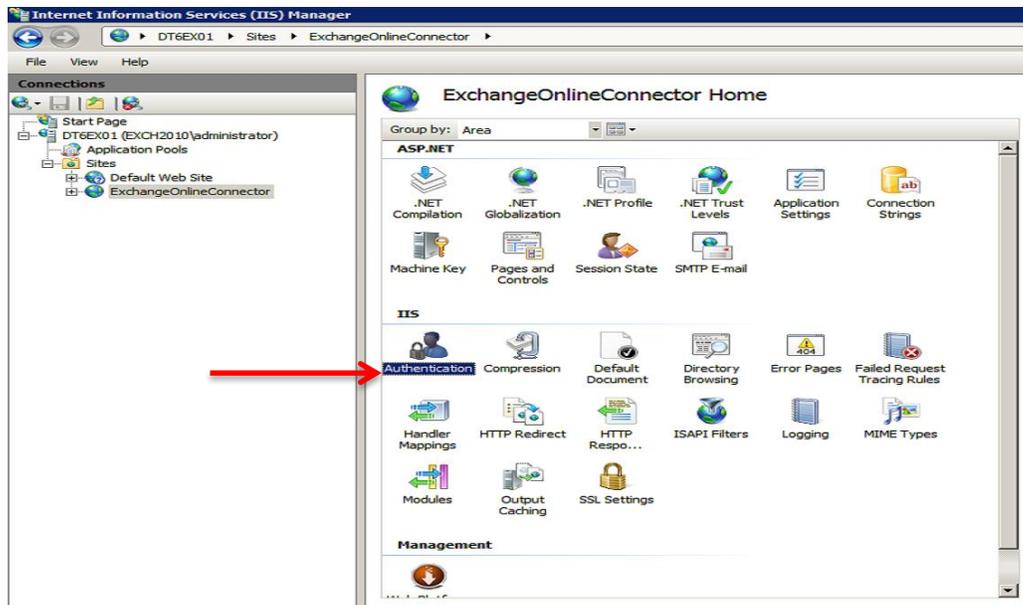
The application has now been installed. The amount of files can be different than the ones listed in the image. Click “Finish” to exit the site installer.



Select the site in the left-hand pane and “Restart” it using the link on the right.

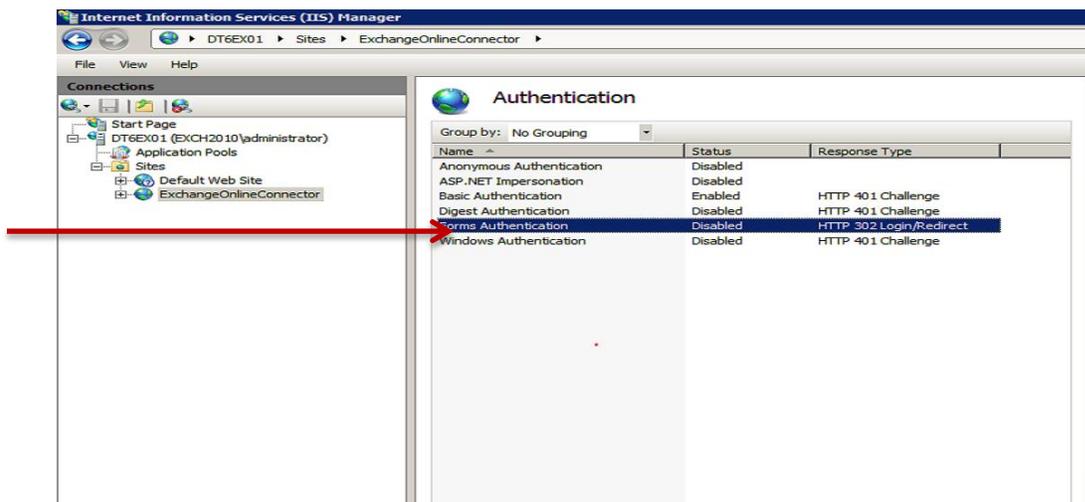
## Configuring the Exchange Online Connector

1. Open IIS; Click Start > Administrative Tools > Internet Information Services (IIS) Manager
2. Expand the server name and then expand Sites to drop down the hosted sites “New website name” example: “ExchangeOnlineConnector”



3. Make sure the “Forms Authentication” is disabled by double clicking over the Authentication icon.

### Forms Authentication “Disable”

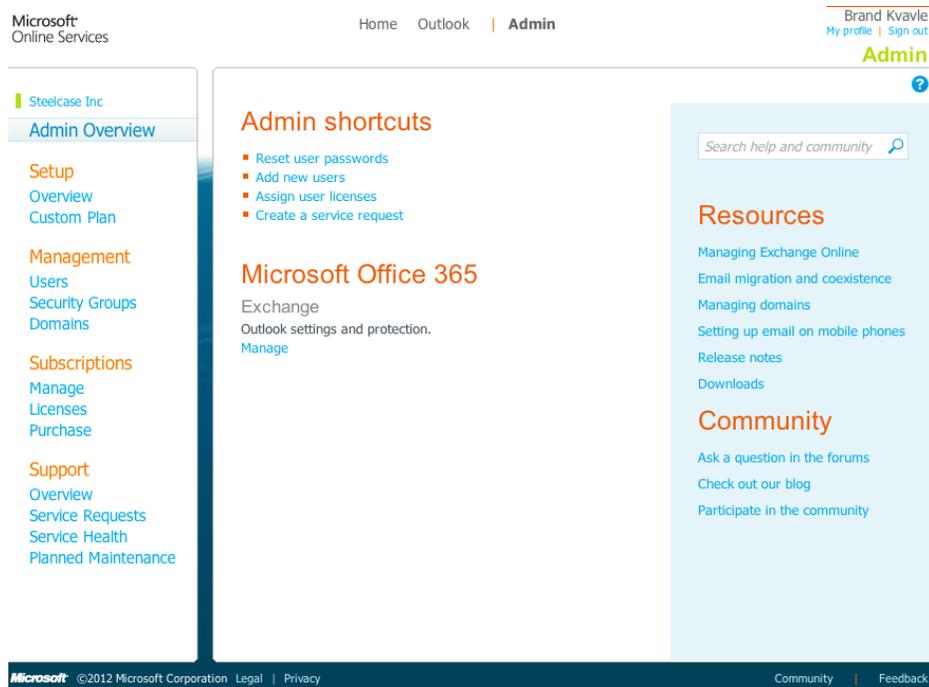


4. In the right pane, click “Browse”

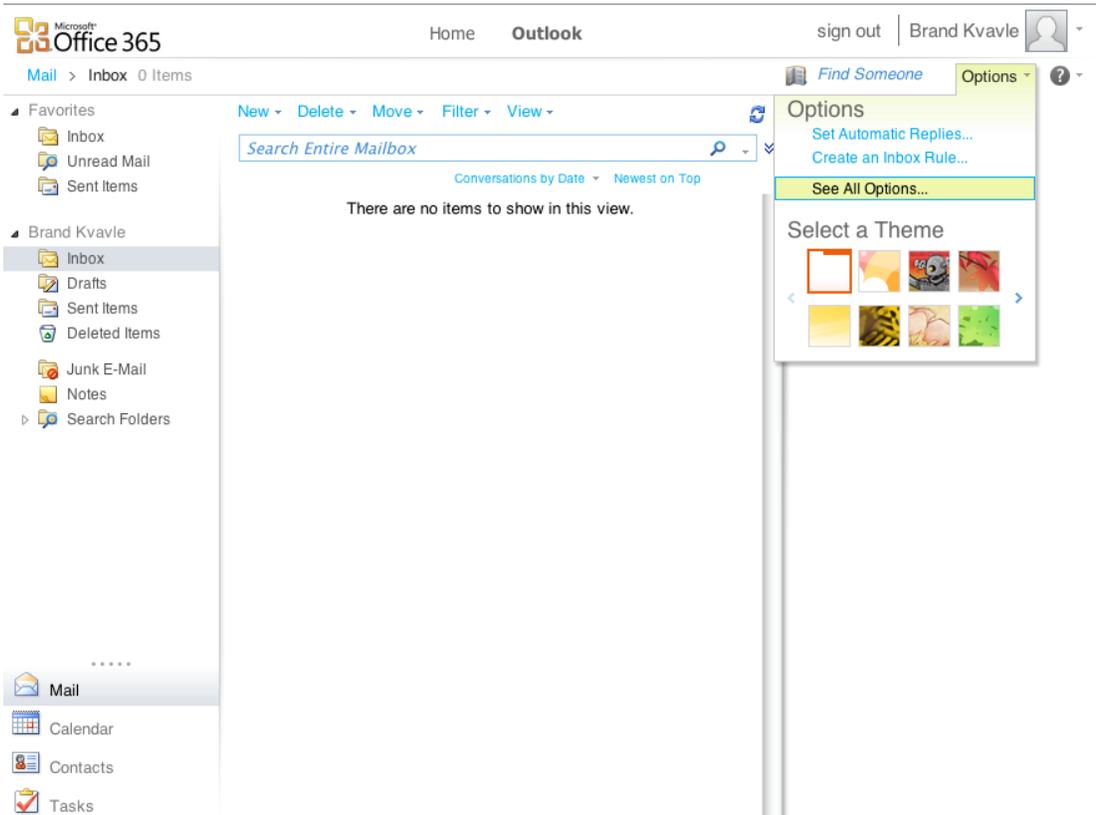


## Locating the Exchange Web Services URL for Office365

1. Log in to Office 365 using your administrator account
2. Select Outlook from the top middle of the screen



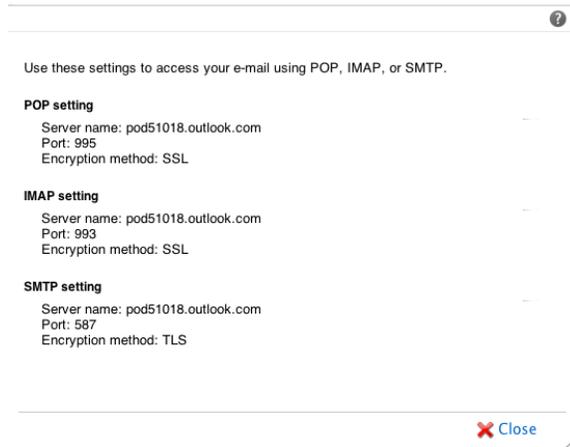
3. In the top right, select Options, then select “See All Options”



4. Make sure you are under Account, and My Account, and select “Settings for POP, IMAP and SMTP access...”

The screenshot shows the Microsoft Outlook Web App interface. At the top left, it says "Microsoft Outlook Web App" with a "sign out" link on the right. Below the header, there's a navigation bar with "Mail" and "Options: Manage Myself". On the right side of the header, it says "My Mail" with a help icon. The main content area is titled "Account" and has a sidebar with options: "Organize E-Mail", "Groups", "Settings", "Phone", and "Block or Allow". The "My Account" section is active, showing "Account Information -". Under "General", there are fields for "Display name:" and "User ID:". Under "Mailbox Usage", there's a progress bar and text: "4.53 KB of mailbox space used. At 24.75 GB you won't be able to send mail." Under "Contact Numbers", there are fields for "Work phone: 503 523 2009" and "Mobile phone: +1 5033177961". A link "Settings for POP, IMAP, and SMTP access..." is visible. An "Edit" button is at the bottom right of the account information section. Below this is a feedback section: "Like it? Don't like it?" with a message: "We'd like to know what you think. Please give us feedback." On the right side, there are two columns of shortcuts. The first column is "Shortcuts to other things you c..." and includes: "See e-mail from all your accounts in one place", "Tell people you're on vacation", "Learn how to get Direct Push e-mail on your mobile phone", "Connect Outlook to this account", "Forward your e-mail", "Change your password", and "Import your contacts from an existing e-mail account". The second column is "Shortcuts to administrative tools" and includes: "Manage your organization".

5. You will see a server name which will look something like:  
pod51009.outlook.com



6. Place your server name in this form:
  - [https://<SERVER\\_NAME>/EWS/Exchange.asmx](https://<SERVER_NAME>/EWS/Exchange.asmx)

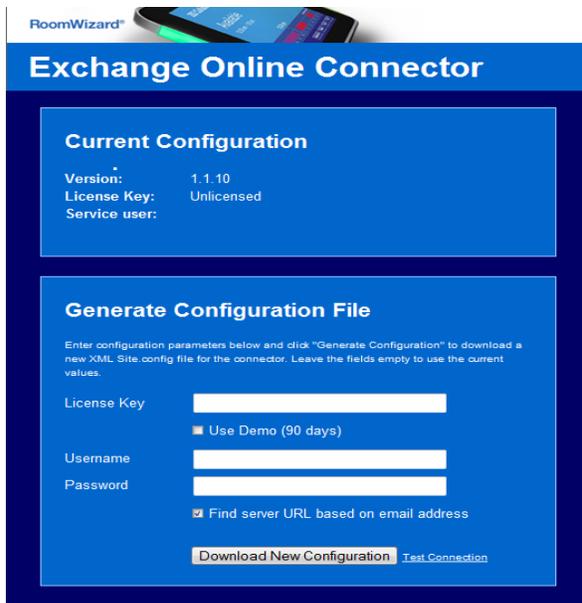
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### Testing your service user's access to a room mailbox

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1. Log in to Office 365 using your service user account
2. Select Outlook from the top middle of the screen
3. In the top right, click the email name and at the bottom of the tab select "Open Other Mailbox"
4. Enter in the room's email address
5. Click "Open..."
6. You should see that user's Outlook online interface
7. Open the browser go to <http://server:8080/>

You should see the following page:



## The Exchange Online Connector needs three pieces of information to operate:

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1. A license key or demo license.
2. An email address (username) for the Exchange Online account to whom you plan to grant administrative rights over RoomWizard room calendars.
3. The password for the Exchange Online account.

### Generate a new configuration

*If you have a license*

1. Enter your license key.
2. Enter the username and password for the Exchange Online account
3. Click “ Test Connection”
4. Click “Download New Configuration” and save the Site.config file

### If you want to use the Demo for up to 90 days

1. Check the “Use Demo” checkbox
2. Enter the username and password for the Exchange Online account
3. Click “Download New Configuration” and save the Site.config file

## Installing your new configuration

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Under the directory where you installed the connector, there is a directory named bin. In that directory you will find a file named Site.config. Copy the one you downloaded from the connector's configuration page over the old one.

For example, install the connector under :

- C:\inetpub\wwwroot\connector

then the configuration file will be located at:

- C:\inetpub\wwwroot\connector\bin\Site.config

Restart the connector website and reload the connector page in your browser to see that the new configuration is live.

## To update your configuration from a Demo to a licensed version

Open up the configuration webpage, then:

1. Enter your license key
2. Uncheck the "Use Demo" checkbox
3. Download and install the new configuration as before
4. Restart the connector

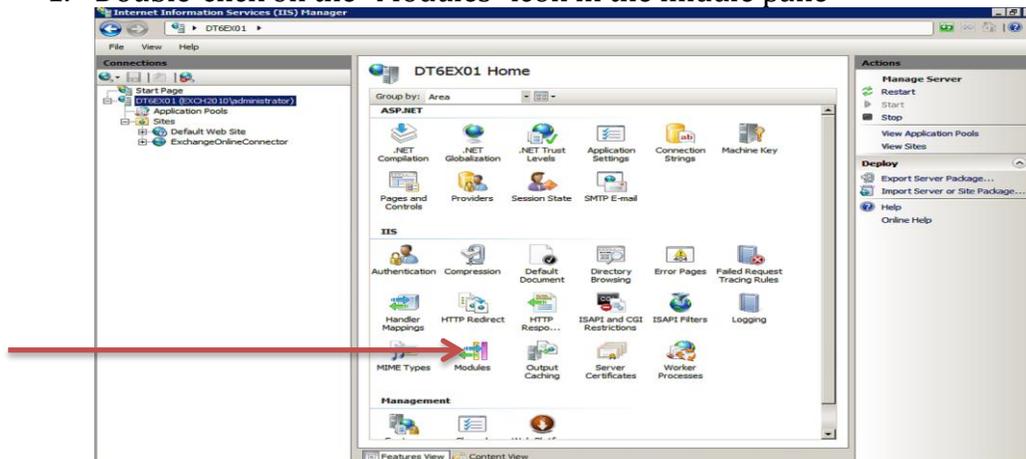
## Configuring Basic Authentication (IIS7) If is not already configured.

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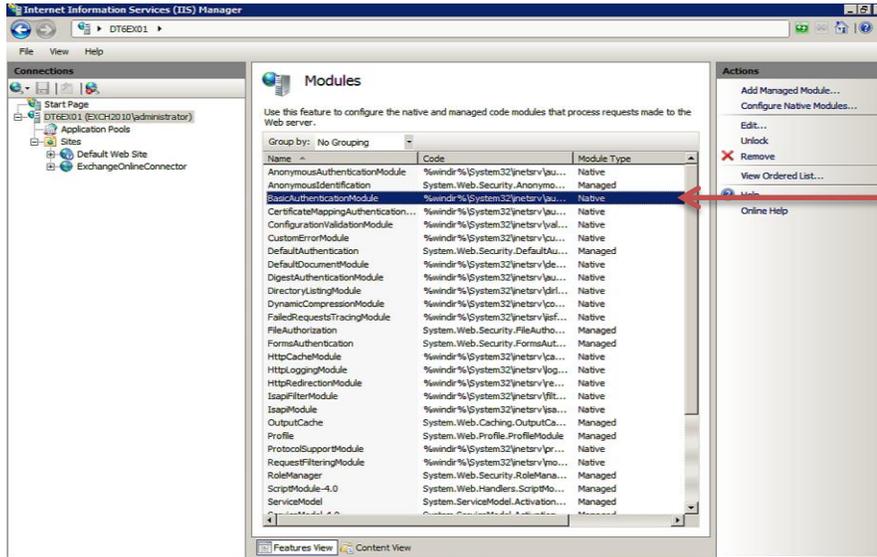
**Ensure the Basic Authentication module is present**

Under the server features area,

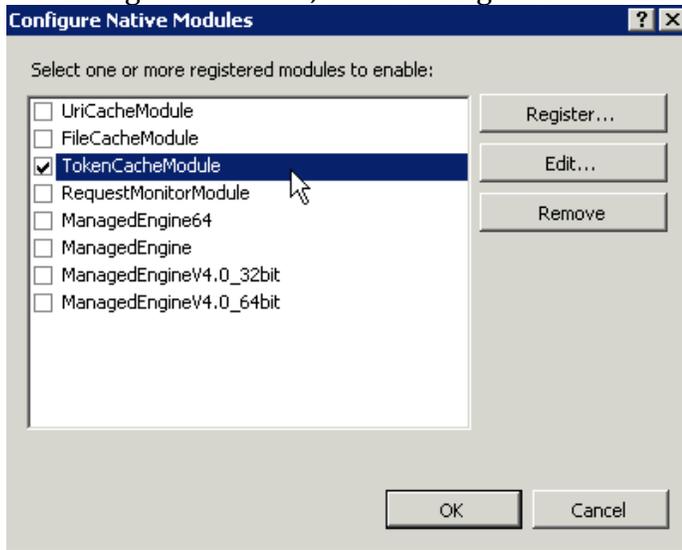
1. Double-click on the "Modules" icon in the middle pane



2. Click on “BasicAuthenticationModule”



On the right-hand side, click “Configure Native Modules”

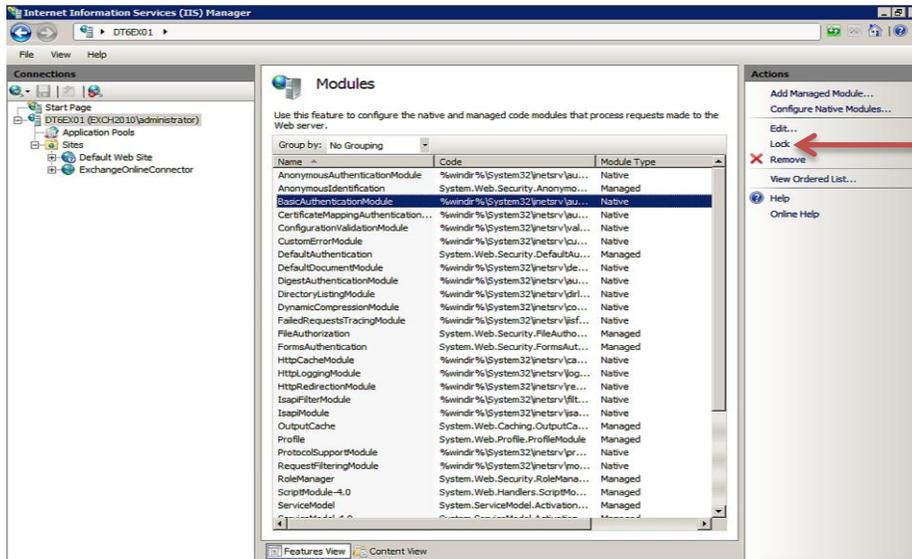


3. If TokenCacheModule is in the list, check the box next to it

4. If is not in the list Click “Ok”

5. Click “BasicAuthenticationModule” in the Modules list

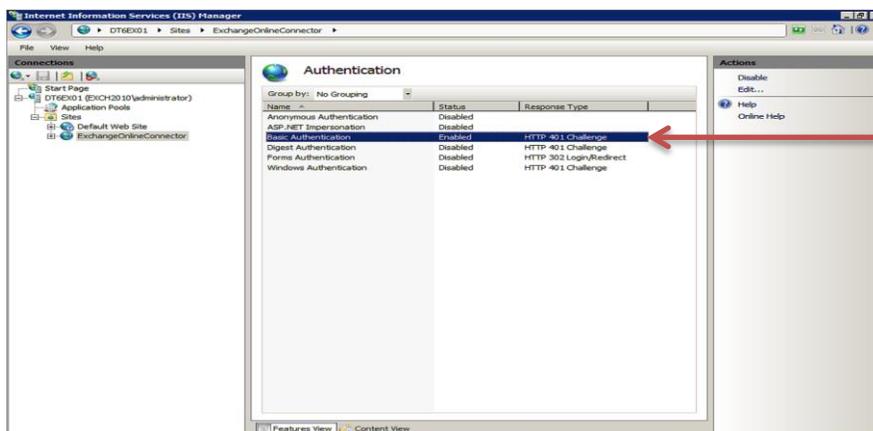
On the right-hand side, if “Unlock” is present beneath “Edit...”, click it. The word “Lock” should now appear beneath “Edit...”. This indicates that individual sites running on the server can configure the module.



## Configure Basic Authentication for the site

Under the site features area,

1. Double-click the “Authentication” icon in the middle pane
2. Disable all forms of authentication (including “Anonymous Authentication”)



3. Enable “Basic Authentication” if it is disabled and turn Off anything else.
4. Restart IIS to complete the process.

## Granting Service User Access to Room Mailboxes

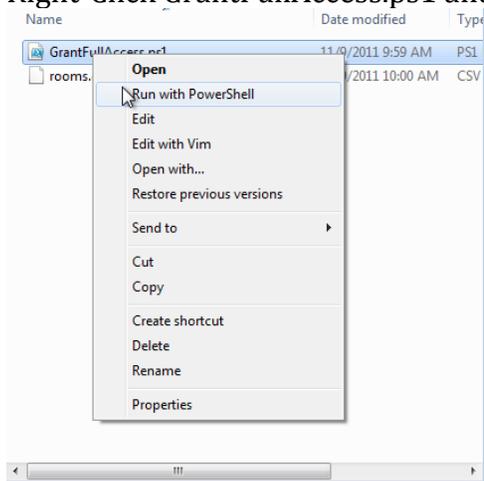
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The Exchange Online connector requires a user who has full access to the room mailboxes managed by the RoomWizard devices.

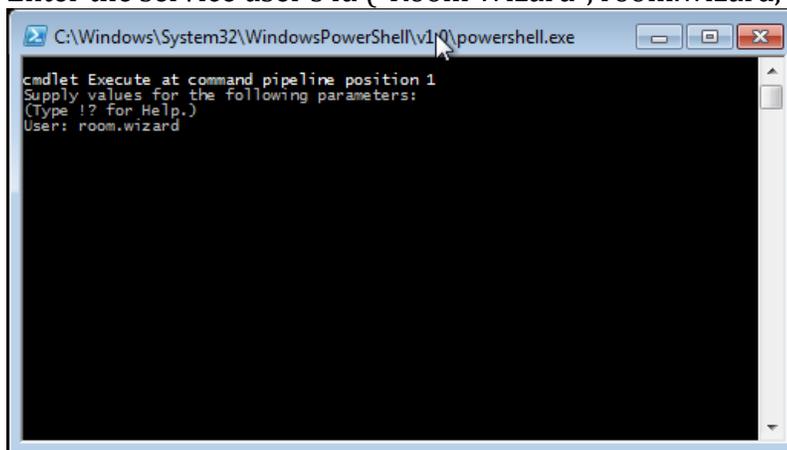
There are several ways that an administrator can provide full access to the Room Wizard service user using PowerShell. We have provided a script that can automatically grant full access to resource mailboxes. However, if you chose to forgo the script we have provided alternative PowerShell instructions.

### Granting Access via PowerShell Script

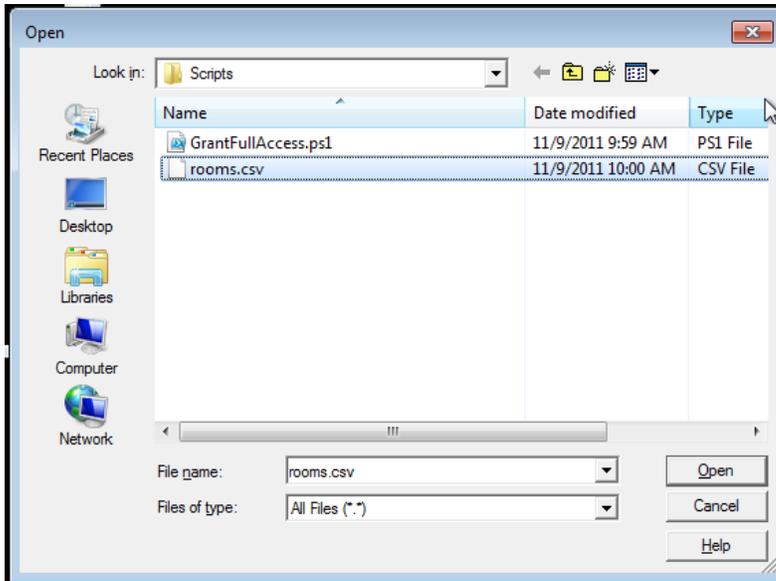
1. Right-Click GrantFullAccess.ps1 and execute it with PowerShell



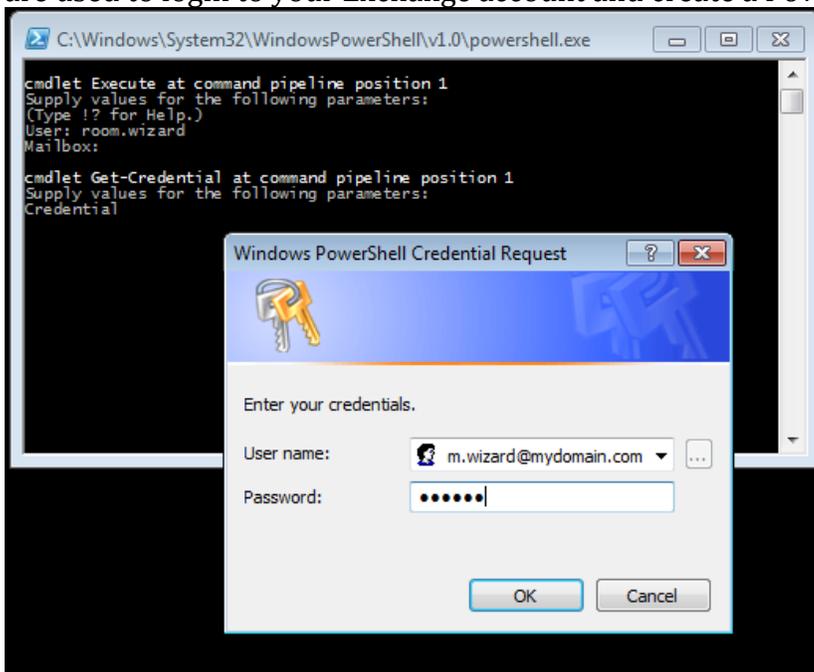
2. Enter the service user's id ("Room Wizard", room.wizard, etc.)



3. Enter the mailbox to configure or hit enter to choose a CSV file containing a new line delimited list of room identifiers. The CSV file should contain a header named "Rooms".



4. Next you will be prompted to enter a username and password. These credentials are used to login to your Exchange account and create a PowerShell session.



- 5.
6. Once the above step has been completed it will establish a remote PowerShell session with Outlook online and grant the given user full access to the rooms specified in the CSV.

## Establishing remote session with Outlook online

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In order to configure mailboxes access permissions you'll need to establish a remote PowerShell session using your Exchange account. This section assumes you have a working knowledge of PowerShell.

Note: You will need to run PowerShell as an administrator.

### The following commands will establish a remote session with Outlook online:

Enter your outlook online credentials:

```
$credentials = Get-Credential
```

Establish a remote session:

```
$session = New-PSSession -ConfigurationName Microsoft.Exchange -ConnectionUri  
https://ps.outlook.com/powershell -Credential $credentials -Authentication Basic -  
AllowRedirection
```

Depending on your security policy you may need to execute this command in order to import the session (including the commands):

```
Set-ExecutionPolicy -ExecutionPolicy RemoteSigned
```

Import session:

```
$sessionimport = Import-PSSession $session
```

You should now be able to execute exchange commands against your remote Outlook online account.

## Granting delegate access manually via PowerShell

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This section will provide the necessary commands to configure a room mailbox so that the Room Wizard service user has full access to the mailbox. This section assumes you have a working knowledge of PowerShell.

**The following command can be used to grant a user full access to a mailbox:**

```
Add-MailboxPermission "<Mailbox Identifier>" -User: <Service User> -AccessRights: FullAccess -InheritanceType: All
```

For example:

```
Add-MailboxPermission "UpstairsConferenceRoom" -User: room.wizard -AccessRights: FullAccess -InheritanceType: All
```

**The following command will find all resources and grant a user full access to them:**

```
Get-Mailbox -filter {isResource -eq $True} -Resultsize unlimited | Add-MailboxPermission -User: <Service User> -AccessRights: FullAccess -InheritanceType: All
```

Note: You can provide other filtering properties that will reduce the result set. See [http://technet.microsoft.com/en-us/library/bb738155\(EXCHG.80\).aspx](http://technet.microsoft.com/en-us/library/bb738155(EXCHG.80).aspx) for more filterable properties.

## Configuring Room Mailbox

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By default a room does not auto-accept invitations. In order for the Room Wizard and Exchange Connector to work properly the rooms need to be configured to auto accept invitations. You also should configure the room to reject conflicting meetings.

### The following command will configure every room's mailbox to auto accept invitations:

```
Get-Mailbox | where{$_ResourceType -eq "Room"} | Set-CalendarProcessing -  
AutomateProcessing AutoAccept -AllowConflicts $false
```

If you want to maintain the comments and private flag between the resource and the user add the following arguments to the above command:

```
-RemovePrivateProperty $false -DeleteComments $false
```

Reference: <http://technet.microsoft.com/en-us/library/dd335046.aspx>

### The following command will configure a specific room's mailbox to auto accept invitations:

```
Get-Mailbox "UpstairsConferenceRoom" | Set-CalendarProcessing -  
AutomateProcessing AutoAccept
```

Also, by default, the room does not display the original subject of an appointment. Instead the room shows the organizer's name as the subject of the appointment. If this behavior is not desired the following command will reconfigure the room mailbox to show the original subject.

```
Set-CalendarProcessing -Identity "$ResourceName$" -AddOrganizerToSubject $false -  
DeleteSubject $false
```

## Viewing attendee response status from RoomWizard

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In order for the connector to see how attendees have responded to an appointment the service user requires delegate access to all of the user's mailboxes. The connector will continue to function, however, if it is not given delegate access. The attendee response status will just be unknown to the connector.

**The following command will find all users and grant a user full access to them:**

```
Get-Mailbox -filter {isResource -eq $False} -Resultsize unlimited | Add-MailboxPermission -User: <Service User> -AccessRights: FullAccess -InheritanceType: All
```

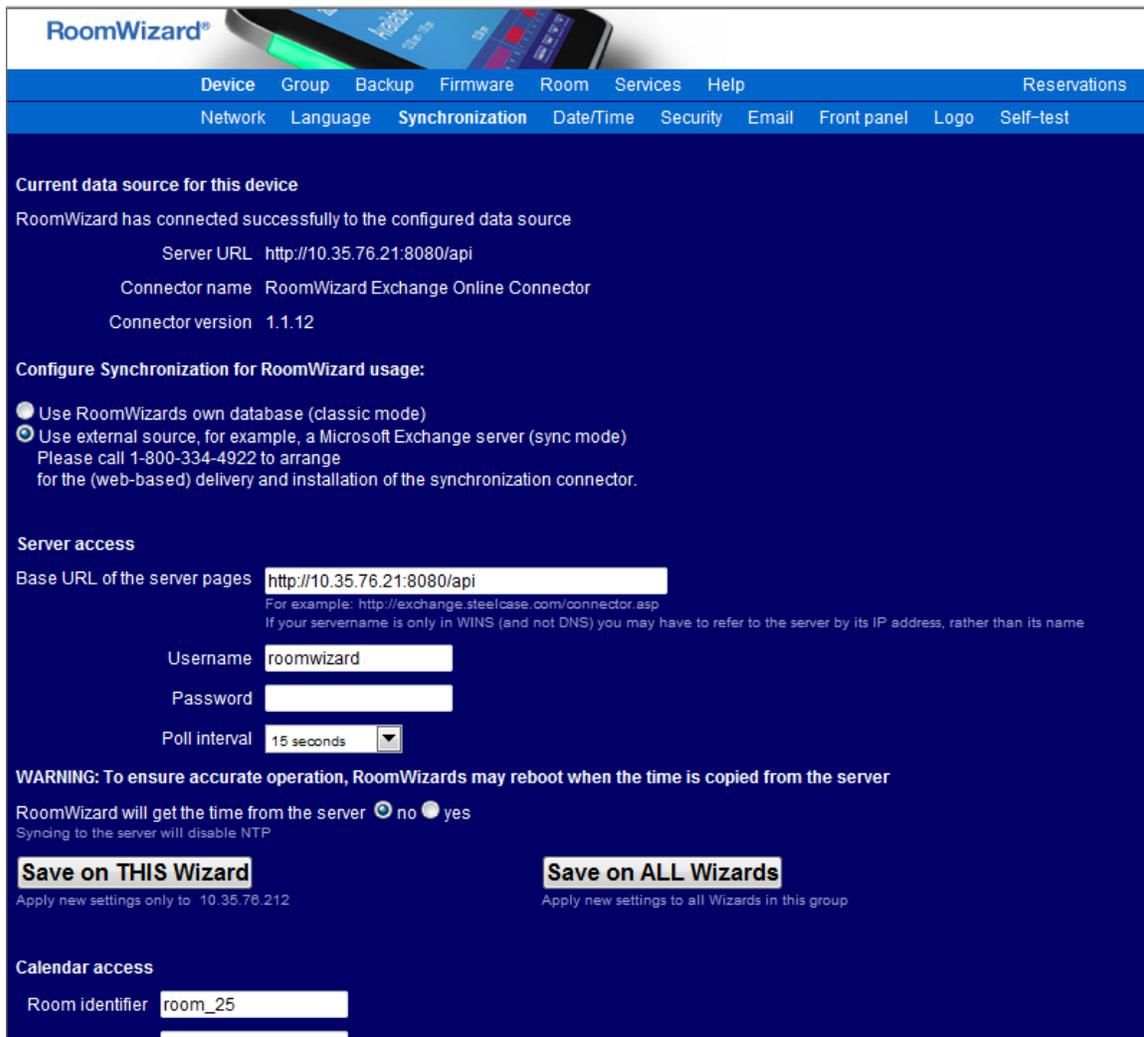
## Configuring the RoomWizard

The RoomWizard should be set into Synchronized mode. The URL for the connector will be:

<http://server:8080/api>

Where “server” is the server you installed the connector on, and 8080 is the port number used.

Enter the name of the mailbox exactly as it is configured in Exchange Online. Do not include the domain – only the name. (e.g., ConferenceRoom not ConferenceRoom@company.com).



The screenshot shows the RoomWizard configuration web interface. At the top, there is a navigation menu with items: Device, Group, Backup, Firmware, Room, Services, Help, Reservations, Network, Language, Synchronization, Date/Time, Security, Email, Front panel, Logo, and Self-test. The main content area is titled "Current data source for this device" and displays the following information: "RoomWizard has connected successfully to the configured data source", "Server URL http://10.35.76.21:8080/api", "Connector name RoomWizard Exchange Online Connector", and "Connector version 1.1.12". Below this, there is a section "Configure Synchronization for RoomWizard usage:" with two radio button options: "Use RoomWizards own database (classic mode)" and "Use external source, for example, a Microsoft Exchange server (sync mode)". The "sync mode" option is selected. A note below the second option reads: "Please call 1-800-334-4922 to arrange for the (web-based) delivery and installation of the synchronization connector." The "Server access" section contains input fields for "Base URL of the server pages" (filled with "http://10.35.76.21:8080/api"), "Username" (filled with "roomwizard"), "Password", and a "Poll interval" dropdown menu set to "15 seconds". A warning message states: "WARNING: To ensure accurate operation, RoomWizards may reboot when the time is copied from the server". Below the warning, there are radio buttons for "RoomWizard will get the time from the server" with "no" selected and "yes" unselected. A note says "Syncing to the server will disable NTP". At the bottom of the form, there are two buttons: "Save on THIS Wizard" (with a note "Apply new settings only to 10.35.76.212") and "Save on ALL Wizards" (with a note "Apply new settings to all Wizards in this group"). The "Calendar access" section is partially visible at the bottom, showing a "Room identifier" field filled with "room\_25".

## Other Notes / Troubleshooting

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- The connector should be configured with the EWS URL when local Exchange / Office 365 are running together in hybrid mode because autodiscovery may not work correctly.
- Most problems with the connector have been fixed by:
  - Disabling autodiscovery and entering the Exchange Web Services (EWS) URL directly.
  - Correcting a permissions error in Exchange
- The connector does not work with Forms-based Authentication, but can be configured to work with Basic Authentication.

## What is autodiscovery, and how does it work?

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Autodiscovery is a process that Microsoft supports for locating Exchange Web Services servers based around an email address or domain. This is, presumably, easier than specifying an EWS URL because most people will know an email address but not the name of a server.

However, many environments are not configured to support the autodiscovery process. If a connector fails to connect to Exchange, disabling autodiscovery should be the first step in troubleshooting.

## Tech Support:

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If you have any trouble installing and configuring the connector, Tech Support is available 24 hours a day, Monday through Friday.

PHONE: 800-334-4922

EMAIL: [techsupport@steelcase.com](mailto:techsupport@steelcase.com)