

## Microsoft Exchange 2016 Installation and Basic Configuration

Microsoft Exchange Server is a mail server from Microsoft. It provides calendaring feature also. The Exchange server supports SMTP protocol to communicate with other mail servers. It supports IMAP and POP3 for clients to communicate. It also supports Messaging Application Programming Interface (MAPI). It also provides some additional features like Exchange ActiveSync for mobile devices.

Please refer the following link to identify the prerequisites of Microsoft Exchange Server. The link may provide the requirements for the latest version of Microsoft Exchange.

1. <https://learn.microsoft.com/en-us/exchange/plan-and-deploy/prerequisites?view=exchserver-2019>
2. <https://learn.microsoft.com/en-us/exchange/plan-and-deploy/system-requirements?view=exchserver-2019>

For this lab exchange will be installed on a virtual machine. The virtual machine configuration is - 1 Processor , **6 GB RAM**, 60 GB Hard Disk entirely allocated as C drive. Windows 2016 R5 Server installed. ADDS Service installed and configured to host a new forest.

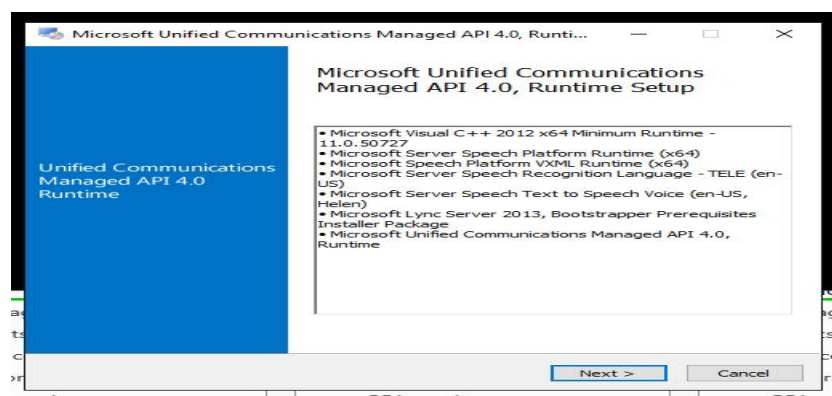
**\*\* Requires minimum 6 GB RAM**

It is recommended to install Exchange server on a member server. However in this lab environment Exchange server will be installed on the domain controller.

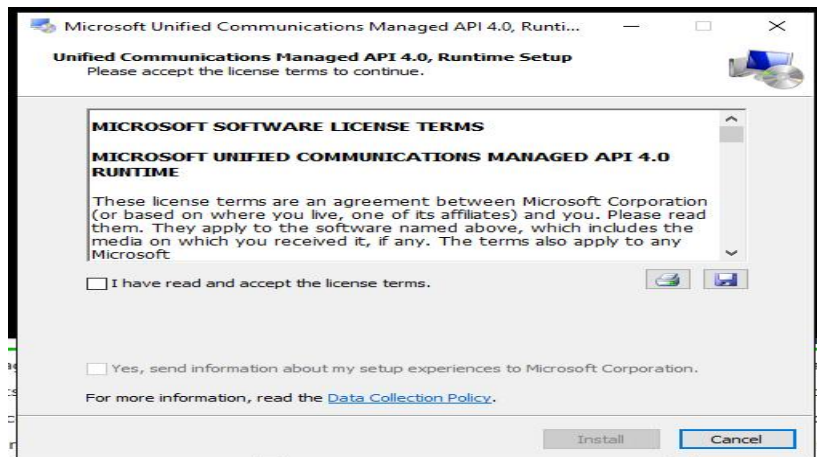
### Installation Steps: -

1. Logon to the domain controller as Administrator user.
  2. Install Microsoft Unified Communications Managed API 4.0 Runtime.
- You can download it from the following link.

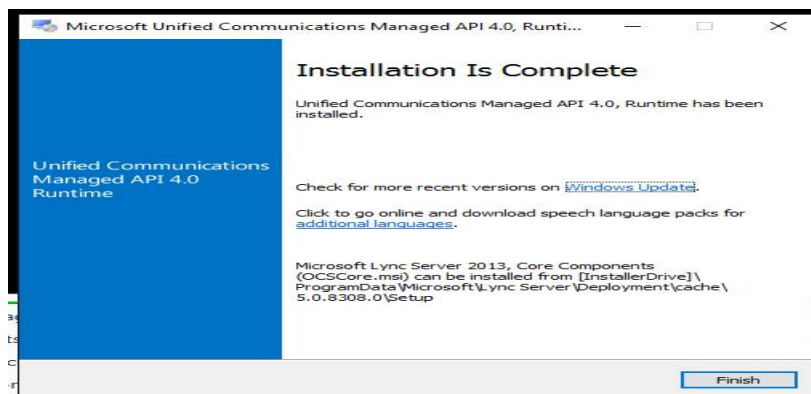
<https://www.microsoft.com/en-in/download/details.aspx?id=34992>



Click Next.



Select the check box to accept the license agreement and Click Install.



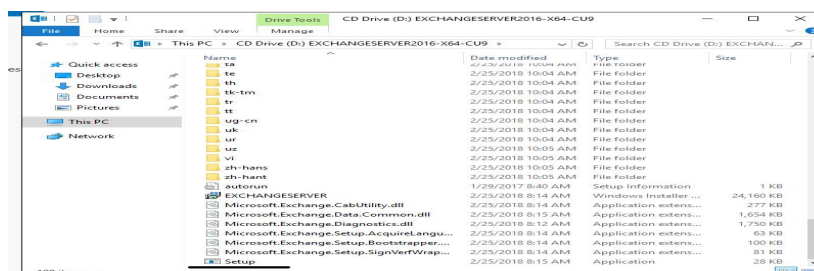
Make sure the installation completed without any errors. Click Finish to close the window.

### 3. Install Exchange.

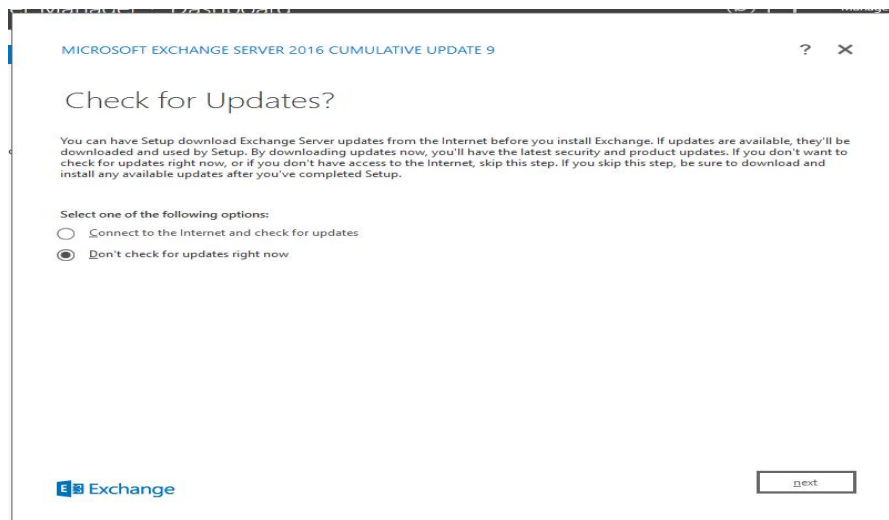
To install Microsoft Exchange download the ISO from the following link.

<https://download.microsoft.com/download/b/e/d/bed20ad6-a4cb-4a6c-b744-354b3fed6a98/ExchangeServer2016-x64-CU16.ISO>

Attach the ISO image to the Virtual Machine CD/DVD drive. If the setup doesn't start automatically then double click on the CD/DVD drive in Windows 2016 Server and run the setup.exe file.

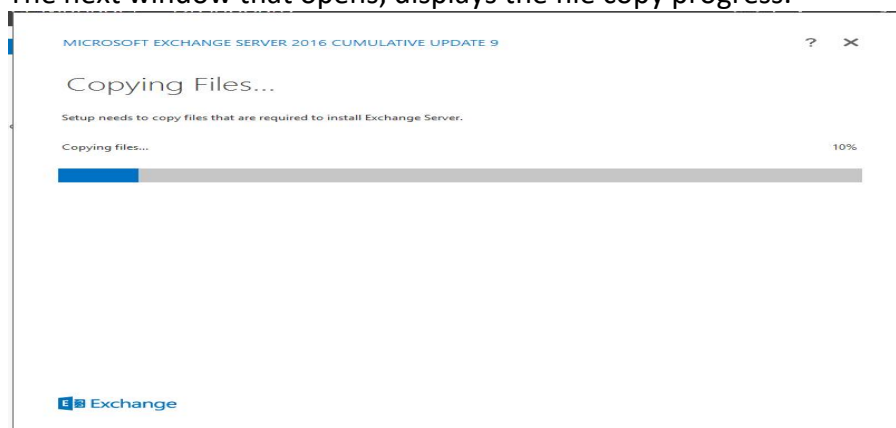


Once you double click setup.exe file , following window opens.

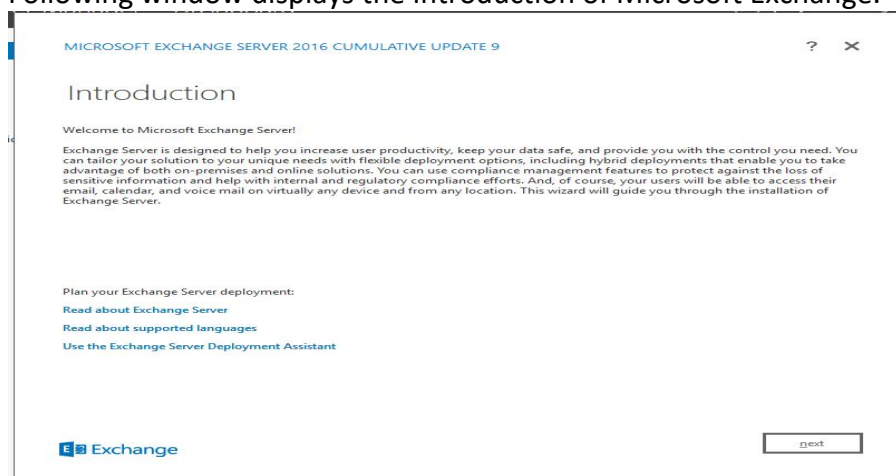


For this lab purpose, click the 'Don't check for updates right now' button. However in the production environment you should select "Connect to the Internet and Check for updates button". Click Next.

The next window that opens, displays the file copy progress.



Following window displays the Introduction of Microsoft Exchange.

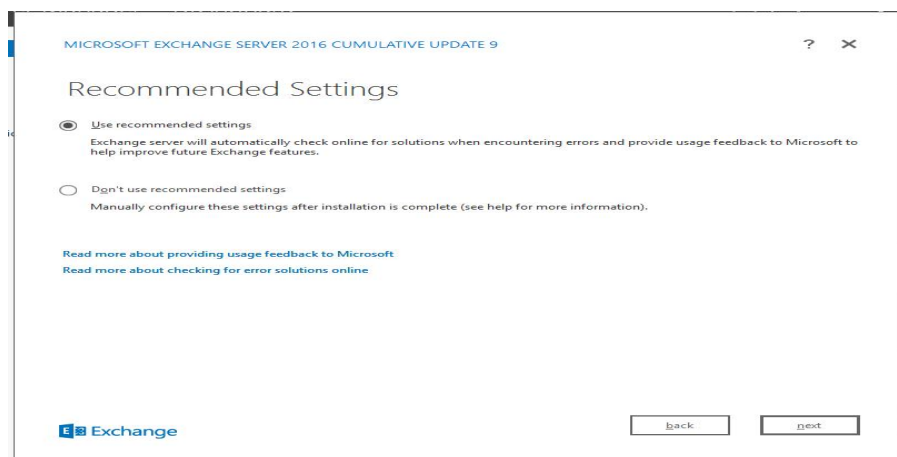


Click Next.  
Accept the license agreement displayed on the next window.

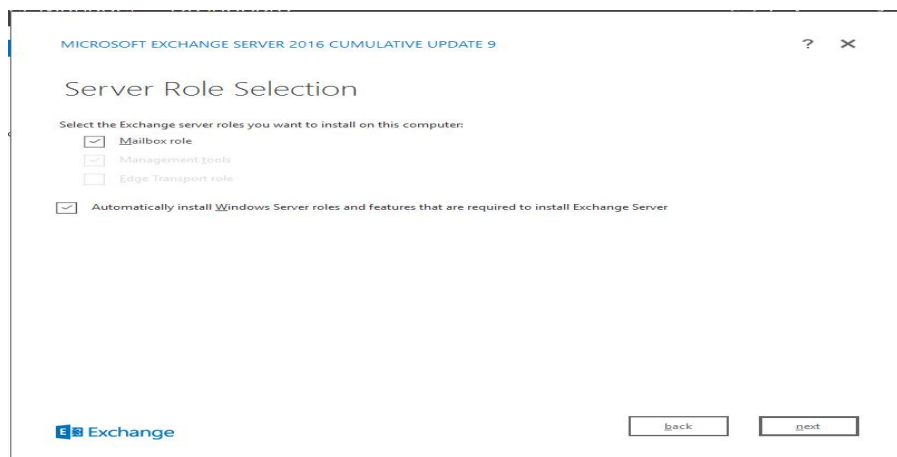


Click Next.

On the next Window keep the default setting to use recommended settings.



Click Next. The following window opens.



On this window select the checkbox for the Mailbox Role. The Edge Transport Role will be automatically disabled. As on a server only one of these roles can be installed. Management tools will be automatically selected.

\*\*\*Please make sure you select “Automatically install Windows Server roles and features that are required to install Exchange Server” checkbox.

**Note:-**

**In Exchange Server 2016 the Mailbox server role contains transport services for routing mail, mailbox databases, Client access services to accept client connections, and Unified Messaging (UM) components.**

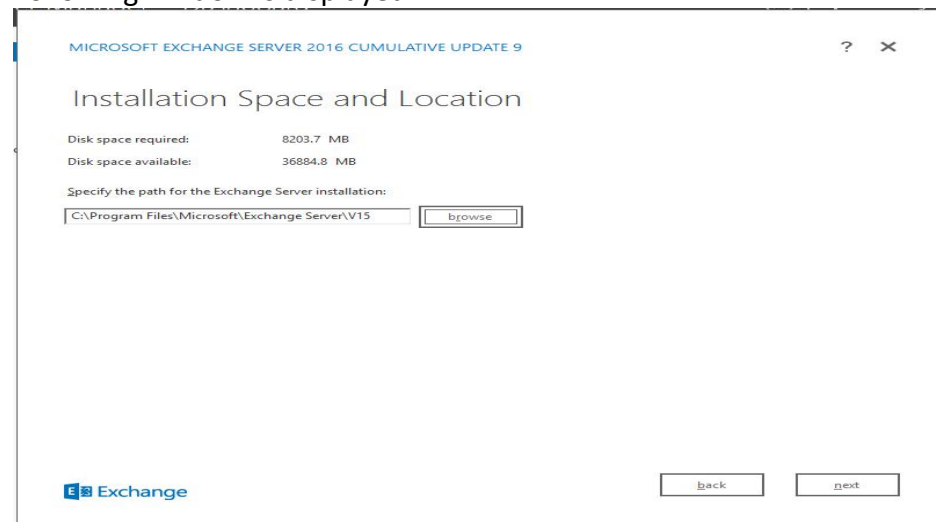
**The Edge Transport server role is an optional role that's typically deployed on a computer located in an Exchange organization's perimeter network and is designed to minimize the attack surface of the organization. The Edge Transport server role handles all internet-facing mail flow, which provides SMTP relay and smart host services for the internal on-premises Exchange servers in your organization.**

Please find details about this on the following link.

<https://learn.microsoft.com/en-us/exchange/architecture/mailbox-servers/mailbox-servers?view=exchserver-2019>

Click Next after you select the Mailbox Role and Automatically install check boxes.

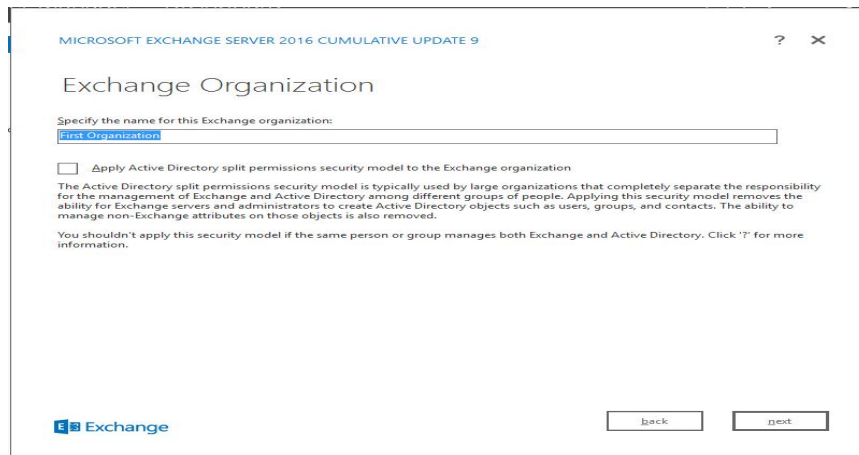
Following window is displayed.



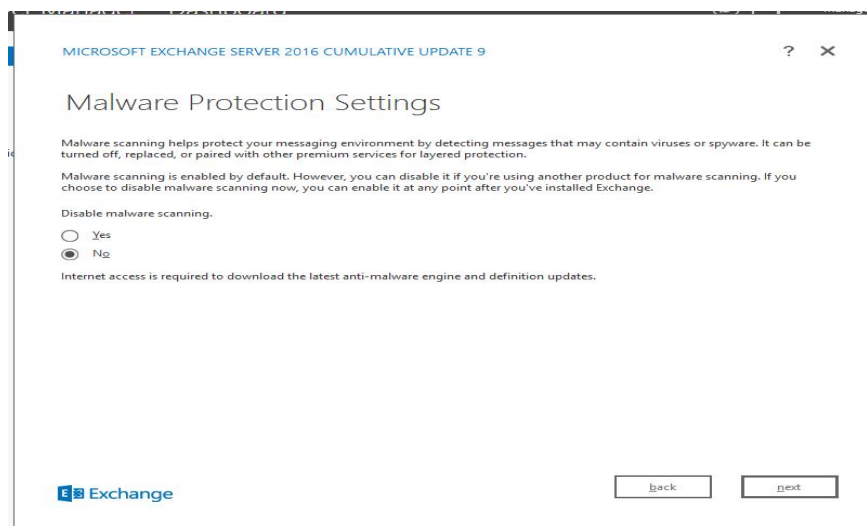
If required select a different location. Here we keep the default as it is. Click Next.

The next window will ask the name for the exchange organization. Also it will provide an option to split the Active Directory administration and Exchange server administration between different administrators.

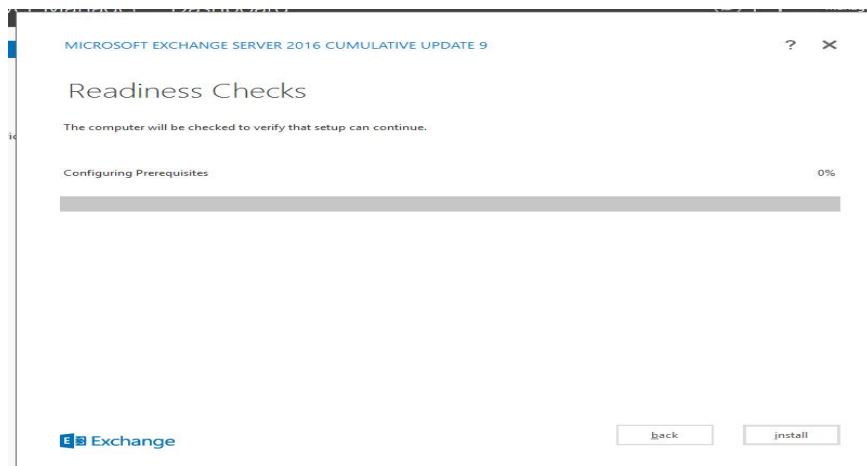
The exchange organization name is used by exchange internally to group all exchange servers installed within an organization.



Here we keep all settings to default. Don not select the check box. Click Next.

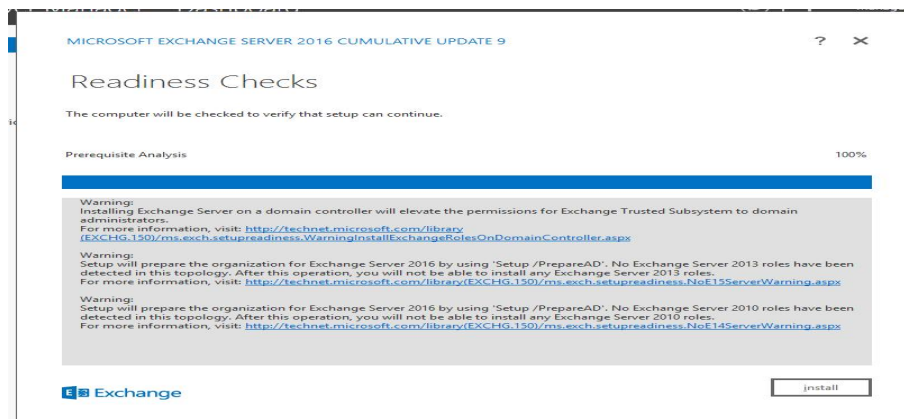


On the above window displayed, click Next.



It will start the readiness check as shown in the above window.

Once the process finishes, following window is displayed. Make sure there are no errors. Setup will not continue if there are any errors. Warning messages are ok. Setup will continue.



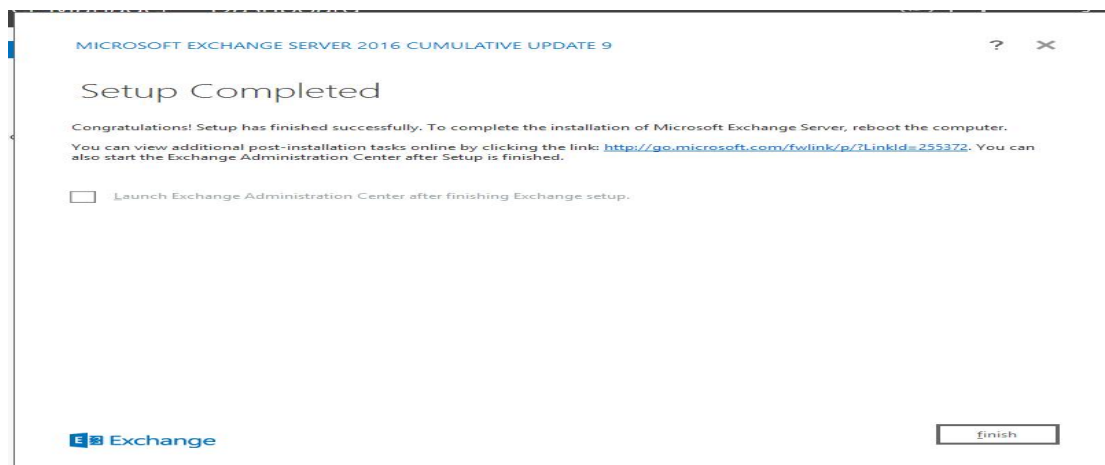
Click Install.

It will start the exchange installation process as below.



Setup will take time to complete all the 15 steps. The time will depend on the server hardware configuration. It may take more than an hour also.

Once the setup finishes, following window is displayed.

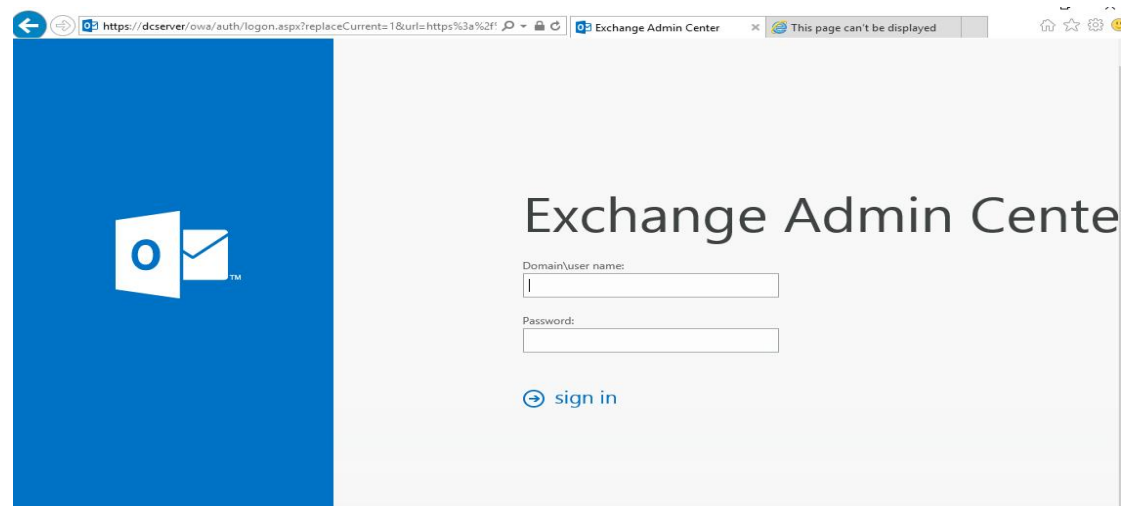




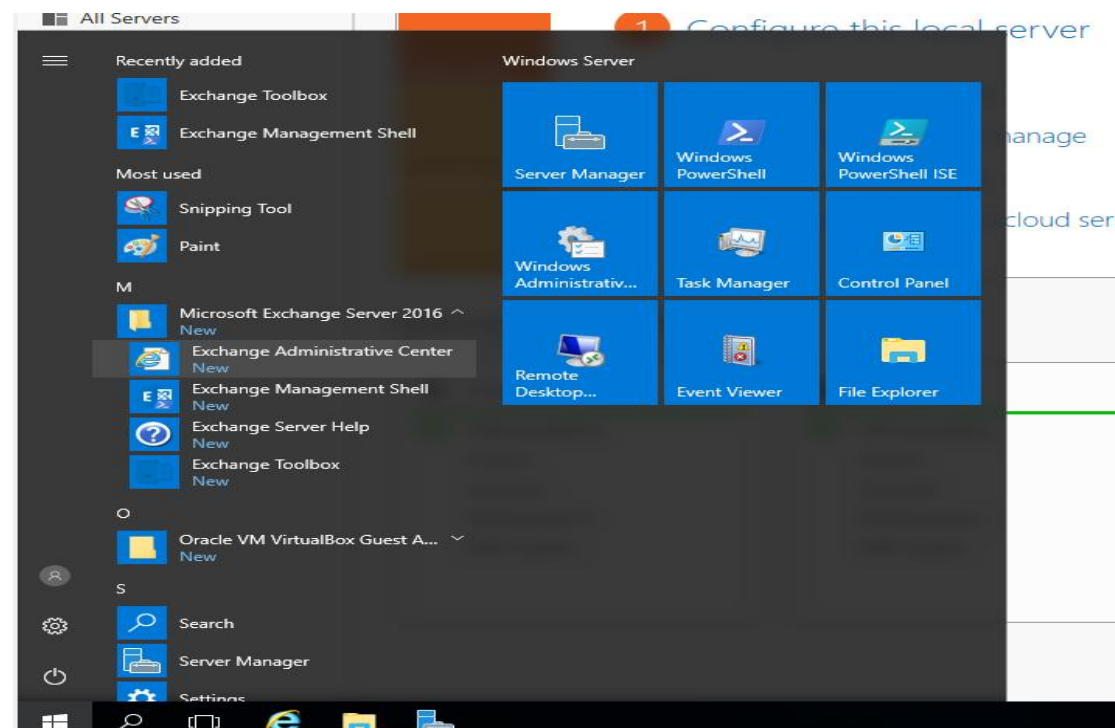
Click the checkbox “ Launch Exchange Administration Center after Finishing Exchange setup” .

Click Finish.

Internet Explorer will open. You may need to click Add and OK multiple times till you get following scree. A second tab may open that takes you to Microsoft site. Just click on the Exchange Admin Center tab.

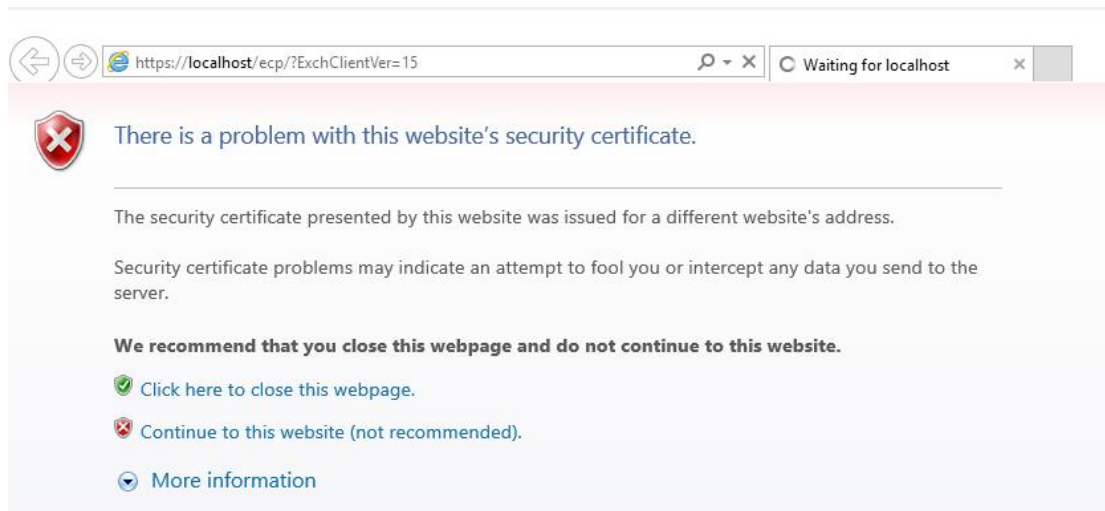


You can start Exchange Admin Center anytime from the start menu as shown below.

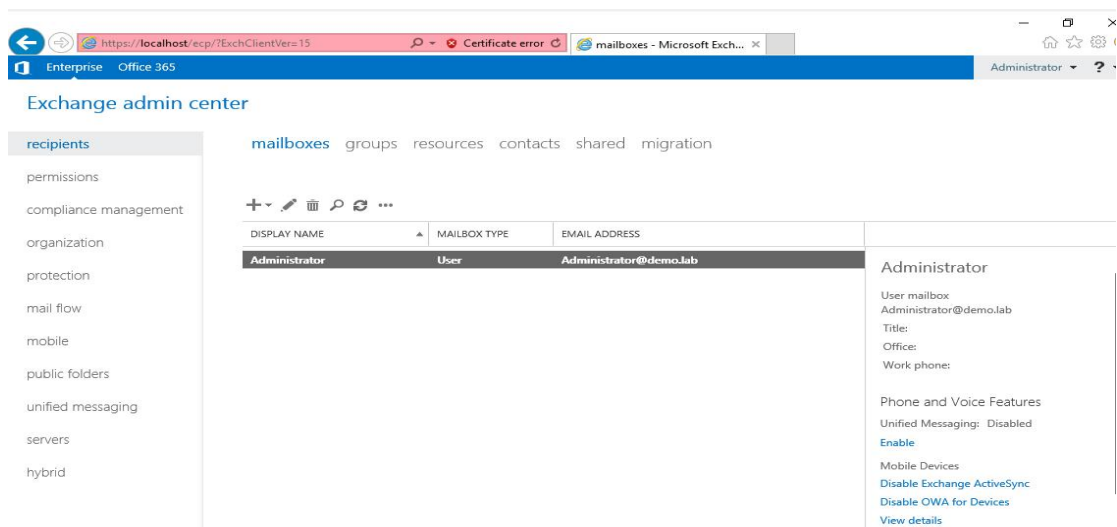


You may get following error, when Internet Explorer opens.



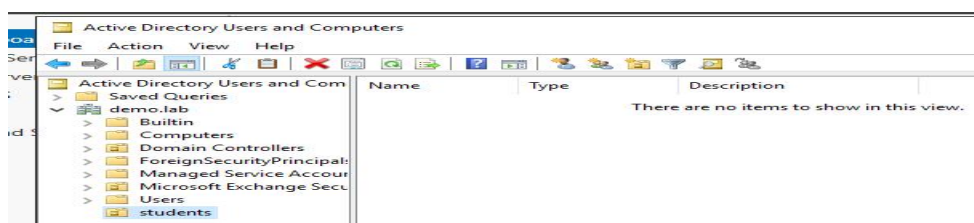


Click “Continue to the website” option. You will get the login page of Exchange Admin Center. Logon as administrator. As we have not used split administration option, administrator for Active Directory and Exchange is same. Also you can directly open <https://localhost/ecp> to open Exchange Admin Center. Once you logon to the Exchange Admin Center, following page will be displayed.



By default only for the Administrator user a mailbox is created. Now we will add 2 users and create mailboxes for them.

For this first open Active Directory Users and Computers and create an OU by name students as shown below.



Now in the Internet Explorer in the Exchange Admin Center click the plus button just above the Display Name column in the above page. Then click User Mailbox option as shown below.



This will open the following page. Select New user option. Fill the required information as shown below. In the Organizational Unit field select the students OU created above. Here we create a user by name user1.

User Mailbox - Internet Explorer

new user mailbox

☒ New user

First name: user1

Initials:

Last name:

\*Display name: user1

\*Name: user1

Organizational unit: demo.lab/students [X] Browse...

\*User login name: user1 @ demo.lab

\*New password: .....

\*Confirm password: .....

☐ Require password change on next login

Save Cancel

https://localhost/ecp/UsersGroups/NewMailboxOnPremises.aspx?pwmcid=48 100%

Click Save.

Again perform the same steps to create second user. Here we create second user by name user2 in the students OU.

User Mailbox - Internet Explorer

new user mailbox

☒ New user

First name: user2

Initials:

Last name:

\*Display name: user2

\*Name: user2

Organizational unit: demo.lab/students [X] Browse...

\*User login name: user2 @ demo.lab

\*New password: .....

\*Confirm password: .....

☐ Require password change on next login

Save Cancel

100%

Click Save.

Thus now you have 2 users with mailbox created as shown below.

Exchange admin center

recipients mailboxes groups resources contacts shared migration

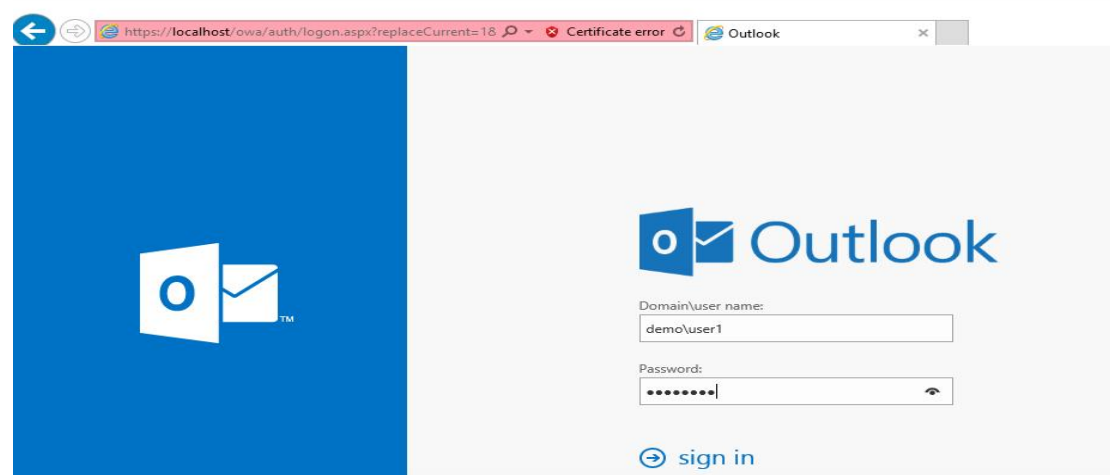
permissions  
compliance management  
organization  
protection  
mail flow

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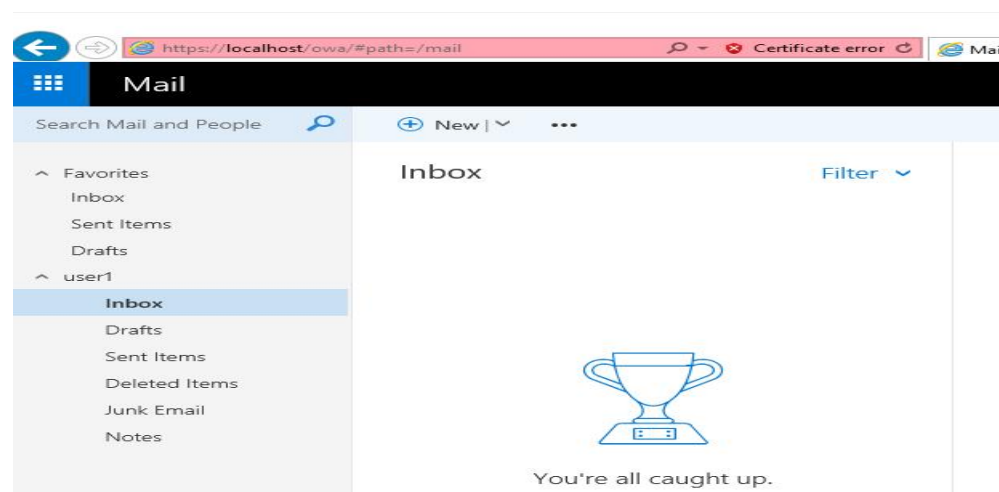
DISPLAY NAME	MAILBOX TYPE	EMAIL ADDRESS
Administrator	User	Administrator@demo.lab
user1	User	user1@demo.lab
user2	User	user2@demo.lab

Now logout as administrator.

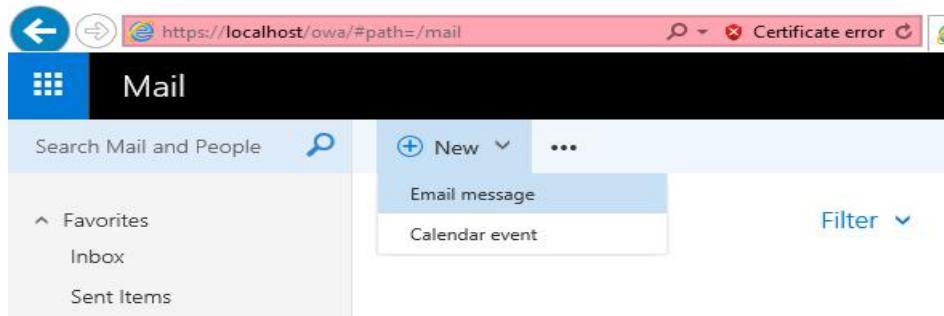
Now open another tab and type <https://localhost/owa>. This the URL for accessing user portal. On the login page that opens, login as user1 as shown below.



On login, it will ask you to set the language and the Time Zone. Set as per your requirement and click Save. Following page is displayed.

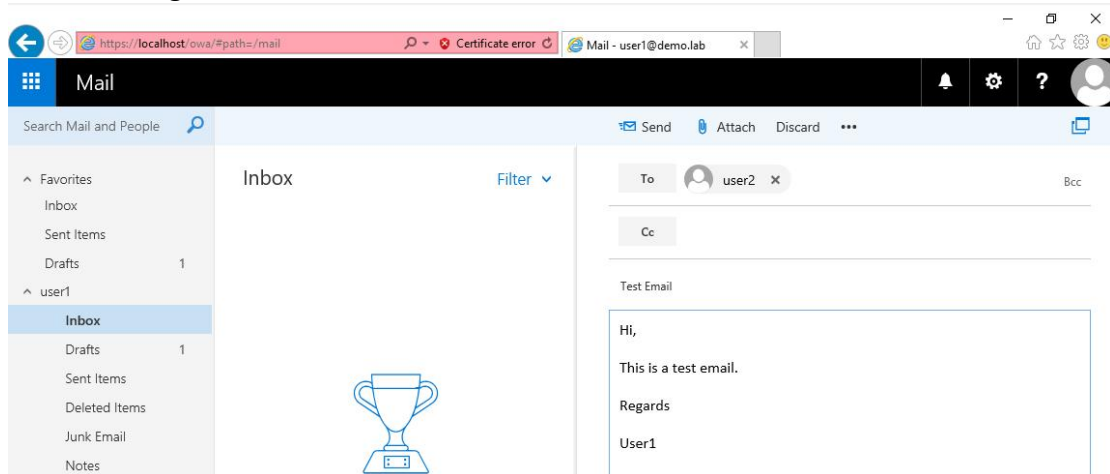


Now click New. We will send an email to user2 to make sure the exchange installation is successful.



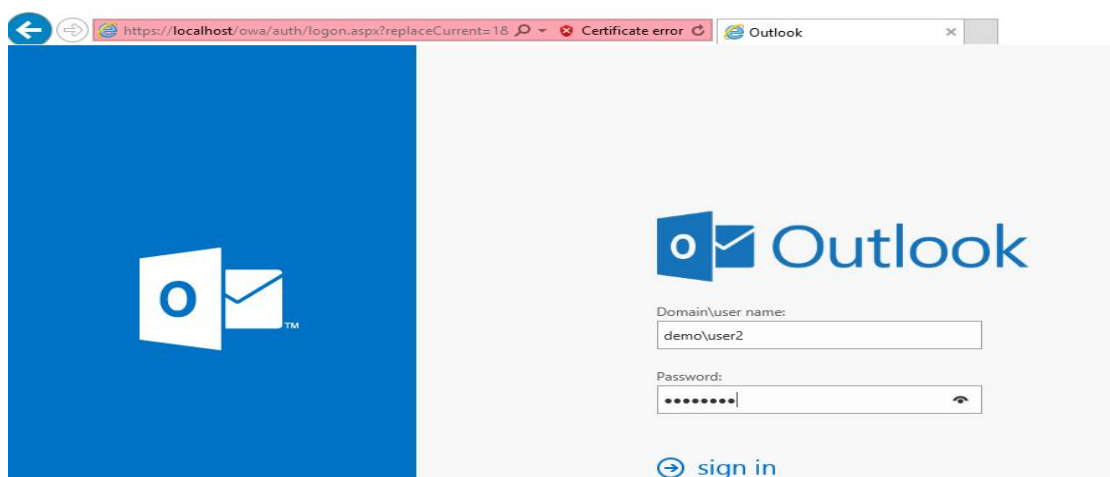
Select Email message.

In the TO field type user2 and click search directory option. Type some subject. Type some message as shown below.

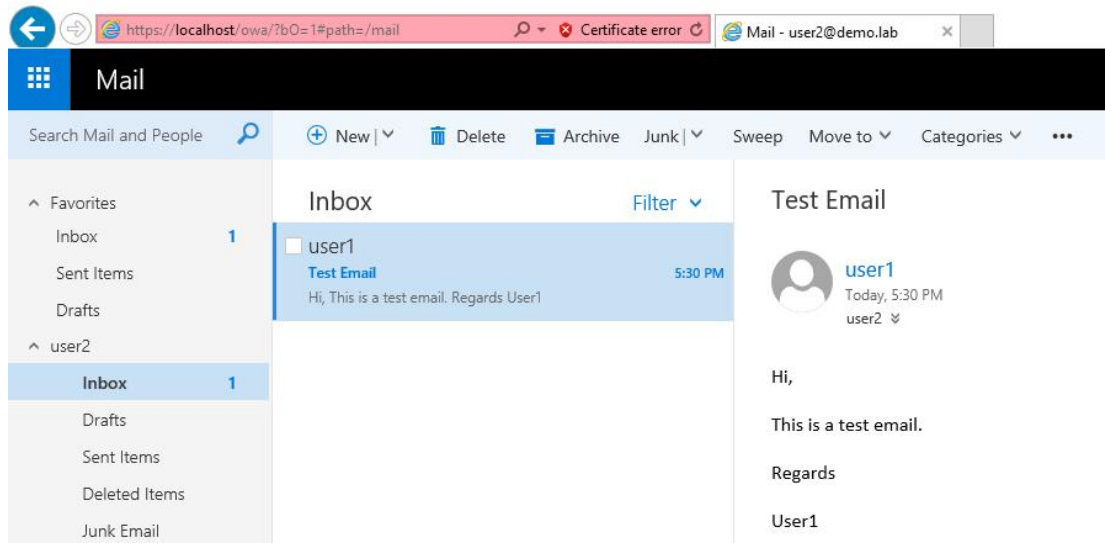


Finally click send to send the email.

Now logout as user1. Login as user2 on the login page.



On the first login user will be asked to set the language and the Time zone. Once the user2 logs in, following screen will be displayed.



Thus you can see that user2 has received the email sent by user1.

This means the Microsoft Exchange Server is working properly.

You can create more users and try sending emails. Also you can try other features of Microsoft Exchange Server.

Important Links to remember on Exchange Server

1. <https://localhost/ecp> - Exchange Admin Center (Exchange Control Panel)
2. <https://localhost/owa> - Exchange User Portal

**This is how you have successfully installed a Microsoft Exchange 2016 Server.**