



A COMPLETE GUIDE TO MIGRATE EXCHANGE 2010 TO 2019

A detailed book to help administrators upgrade an on-premises Exchange Server 2010 organization to Exchange Server 2019. From planning, preparation, installation, and configuration to mailbox migration, this book covers everything you need to know.



CONTENTS

▪ INTRODUCTION	01
▪ BEFORE YOU BEGIN	02
▪ EXCHANGE MIGRATION CHECKLIST	03
▪ PART I: EXCHANGE SERVER 2019 SETUP AND MIGRATION	06
• Update Exchange 2010 for Migration	06
• Install and Setup Exchange 2013 Server	06
• Exchange Server 2013 Prerequisites	06
• Install RSAT-ADDS Tools	06
• Install Exchange Server 2013 using Setup Wizard	06
• Configure AutoDiscover Service	07
• Update OWA and Other Virtual Directories	07
• Move Mailboxes	09
• Decommission Exchange server 2010	09
▪ PART II: EXCHANGE SERVER 2019 SETUP AND MIGRATION	10
• Setup and Install Exchange Server 2019	10
• Prerequisites for Exchange 2013 to 2019 Migration	10
• Deploy Exchange Server 2019	10
• Install Exchange 2019 Prerequisites	11
• .NET Framework 4.8 or later	11
• Visual C++ Redistributable Package for Visual Studio 2012 and 2013	14
• Install Remote Tool, Administration Pack, and Windows Features	14
• Install Exchange Server 2019 Setup	15
• Prepare for Migration	21
• Setup Outlook Anywhere	21
• Setup Service Connection Point	22
• Import Certificates from Exchange 2013 to Exchange 2019	23
• Export and import Certificates using EAC	23
• Export and import Certificates using PowerShell cmdlets	25
• Configure Exchange 2019 Virtual Directories	26
• Configure Virtual Directories on Exchange 2019 using EAC	27
• Configure Virtual Directories on Exchange 2019 using EMS	28
• Update DNS Records	30
• Move mailboxes from Exchange 2013 to Exchange Server 2019	30
• Move Mailboxes using EAC	30
• Move Mailboxes Using EMS	31
• Decommission Exchange 2013/2016 server	32
▪ SUMMARY	34



INTRODUCTION

On October 13, 2020, Exchange Server 2010 reached its end of support. Since Microsoft has stopped supporting Exchange Server 2010, organizations are bound to migrate to the newer version, such as Exchange 2019, to continue receiving regular security and cumulative updates and protect from malicious attacks.

However, it is not possible to migrate from Exchange 2010 to Exchange 2019 directly. With Exchange Server 2019, there is a problem with co-existence. This means that you cannot have an Exchange Server 2010 and an Exchange Server 2019 on the same Active Directory.

Thus, Organizations need to install an Exchange 2013 or Exchange 2016 Server, migrate to it, decommission the Exchange 2010, install Exchange 2019 and then decommission the Exchange 2013 or 2016 Server.

This two-hop migration is needed as Exchange 2010 and 2019 uses different Active Directory forests, which must be upgraded to Active Directory forest functional level of Windows Server 2012 R2 or higher.

However, one of the biggest challenges that concerns administrators responsible for migration is the complexity and time required, besides a lot of research and planning.

The main purpose of this E-Book is to ease up the migration task by providing you the detailed information and walking you through the entire Exchange 2010 to 2019 migration process with step-by-step instructions. By reading this book, you can better understand the migration process that will help you avoid complications, which may cause extended downtimes and data loss.

In this book, you will learn the steps to migrate Exchange 2010 to Exchange 2019 with the Two-Hop Migration method. From setting up and configuring the new Exchange Server 2013 and Exchange Server 2019 to transferring components, such as certificates, mailboxes, virtual directories, etc., this book has it all covered for you.



BEFORE YOU BEGIN

Before beginning the migration, let's go through the things to consider and the requirements to have Exchange Server 2019 in your infrastructure.

OPERATING SYSTEM/ HARDWARE

Exchange 2019 is only supported on a Windows Server 2019 Standard or Datacenter. The cost of the operating system and the hardware support must be highly considered because you will end up with a failed Exchange Server if the hardware is either unstable or not capable of handling the load. You must also check the maintenance agreements with the server/ storage supplier to see the end of the maintenance date and possible hardware upgrades.

CLIENTS

If you are upgrading to Exchange Server 2019, you need to make an inventory of the Microsoft Office installations and upgrade all clients on the systems which are running a Microsoft Office 2010 or lower. The only supported clients are from Microsoft Office 2013 or newer.

UNIFIED MESSAGING

With Exchange 2019, Microsoft has discontinued Unified Messaging (UM) support, i.e., Lync Server 2010/2013 or Skype for Business Server. Unfortunately, this means that you will lose the feature to save voicemails in your mailboxes and need to find alternatives to the services, such as CX-E or Azure Voicemail on Office 365.

EFFORT

There is a huge effort in the migration that needs clever planning and resources in case of the right people and skills, hardware, licenses, and time. Firstly migrating to Exchange Server 2013 and then to Exchange Server 2019 is an administrative effort in both your admin people and the users; plus, it will take a considerate amount of time.



EXCHANGE SERVER MIGRATION CHECKLIST

Following is the Exchange 2010 to Exchange 2013 and Exchange 2019 server migration checklist to upgrade and migrate Exchange.

1. Get acquainted with the Release Notes

The first and foremost thing to do is to check the release notes on the new version you want to update. It contains critical information required for a successful deployment and migration of Exchange. It includes segments such as Setup and deployment, Mailbox, Public folders, Mail flow, Exchange Management Shell, Client connectivity, and Exchange 2010 coexistence.

2. Authenticate the System Requirements

This section acquaints you with the obligation of the Exchange 2013 and Exchange 2019 installation. In addition, it includes information about hardware, clients, software, Operating system, or Network needs. Further, it guides you about the supported coexistence scenarios.

3. Check and ensures whether Prerequisite Steps are Done

This section entails installing requirements for the Microsoft Exchange Mailbox, Edge Transport Server, and Client Access roles. These installation steps are prerequisites on Windows Server 2008 R2, Windows Server 2012 R2, Windows Server 2019 Operating System.

4. For all Exchange 2010 Mailbox Databases, Choose an Offline Address Book

Use the Exchange Management Shell or the Exchange Management Console for provisioning the offline address book (OAB) downloads recipients. There are three ways to identify which recipient uses which OABs.

These methods are required when an individual uses multiple OABs in the organization.

a. Per-Mailbox Database

For this, you need to access the Exchange Management Shell or Exchange Management Console. It will specify the public folder database & the OAB being downloaded by the recipients.

b. Per-Recipient

For this, you need to use the Set-Mailbox cmdlet within the Exchange Management Shell. You cannot specify the public folder database at this level but can state which recipients will download.

c. Per Multiple Recipients

For this, you need to use the pipeline command in the Exchange Management Shell. At this level, you can define some OAB recipients for downloading a particular OAB based on mutual attributes.



5. Generate the Legacy Exchange Hostname

Create and check the legacy domain name system (DNS) hostname. It is necessary to ensure that legacy Exchange 2010 and Exchange 2010/2013 coexist. In addition, client Access servers and Autodiscover use this hostname while redirecting legacy users to the servers.

6. Exchange 2013 and Exchange 2019 Installation

Use Microsoft Exchange Server 2013 and Exchange Server 2019 Setup Wizard for Exchange Mailbox and Client Access roles and Edge Transport role installation. Further, it also guides how to verify the installation of Microsoft Exchange Server Migration from 2010 to 2013 and from 2013 to 2019. For this, the recommended way is to run the Get-ExchangeServer cmdlet and review the setup log file.

7. Prepare an Exchange 2010/2013 Mailbox

In an Exchange organization, mailboxes are considered the most common recipient type for the information workers. Every mailbox has an Active Directory user account associated along with it. These mailboxes are used to send and receive messages and salvage tasks, appointments, documents, tasks, messages, notes, etc. You can easily create the mailbox using Shell (Exchange 2010 SP1 and later) or EAC (Exchange 2013 and later).

8. Ensure the Configuration of Exchange-related Virtual Directories

You must ensure the Exchange-related virtual directories configuration. Irrespective that the Exchange 2013 Client Access server does not tackle client protocols processing, certain settings still need to be applied to the Client Access server. These settings are for certificates and virtual directories.

9. Ensure configuration of Exchange 2010 as well as 2019 certificates

This section outlines an overview of Digital Certification. It also provides details about different certificates, which certificates to choose from, Proxying, and Digital certificate best practices.

Generally, in Exchange, SSL is designed to create a secure communication between a server and a client. The reason is that clients use computers and smartphones inside an organization and computers outside an organization. Therefore, when we install Exchange 2019, client communication is auto-encrypted.



10. Ensure configuration of Edge Transport server

Create Internet mail flow using a subscribed Edge Transport server. To establish Internet mail using an Edge Transport server, an individual needs to subscribe to an Active Directory site for the Edge Transport server. It auto-generates the much-needed twin Send connectors for Internet mail flow on subscription.

These Configured Send Connectors are as follows:

- One Send Connector is to direct the outbound email to all Internet domains
- Another Send Connector is to direct Edge Transport server Inbound Email to the Exchange 2010/2013 Mailbox server

Before beginning with the configuration process, you need to perform the following:

- Assign Permissions
- Authoritative domains, as well as email address policies, for Exchange organization, are configured
- Enable Secure LDAP Port 50636/TCP



PART I: EXCHANGE SERVER 2013 SETUP AND MIGRATION

UPDATE EXCHANGE 2010 FOR MIGRATION

To migrate from Exchange 2010 to Exchange 2013, Upgrade Exchange Server 2010 to Service Pack 3 (SP3) and SP3 Update Rollup 11.

Open the Exchange Management Shell and execute the following command to check the current Exchange Server version,

```
Get-ExchangeServer | Format-List Name, AdminDisplayVersion, Edition
```

To update, download the SP3 package & install it on your server and then update to SP3 Rollup 11.

INSTALL AND SETUP EXCHANGE 2013 SERVER

Deploy a VM or physical server with Windows Server 2008 or higher and then install the prerequisites to begin the installation and setup.

- **Exchange Server 2013 Prerequisites**

- **Install RSAT-ADDS Tools**

- On Windows Server 2008 R2 (SP1 or later), run the following command in PowerShell as administrator,

```
Import-Module ServerManager
```

```
Add-WindowsFeature RSAT-ADDS
```

On Windows Server 2012, run

```
Install-WindowsFeature RSAT-ADDS
```

- **Install Exchange Server 2013 using Setup Wizard**

To install Exchange Server 2013, connect the USB media containing Exchange Server 2013 to the server machine and mount the ISO. Then open the Command Prompt window to navigate to the Setup.exe location using the cd (change directory) command.



Then run the below command in Command Prompt window to prepare the Schema & the AD.

```
setup.exe /PrepareSchema /IAcceptExchangeServerLicenseTerms
```

After the schema is ready, run the following command to prepare AD:

```
setup.exe /PrepareAD /IAcceptExchangeServerLicenseTerms
```

Now prepare your domain using the following command:

```
setup.exe /PrepareDomain /IAcceptExchangeServerLicenseTerms
```

With this, the AD installation is complete. Now you can go to the ISO mount location and launch the Setup.exe file to install Microsoft Exchange Server 2013.

While installing, choose 'Mailbox role' and then proceed with the wizard. After the installation, click finish and restart the server.

• **Configure AutoDiscover Service**

To configure and update the AutoDiscover service connection point, run the following command in the Exchange Management Shell.

```
Set-ClientAccessService -Identity EXCH02 -AutodiscoverServiceInternalURI  
https://<SMTPAddress>/autodiscover/autodiscover.xml -AutoDiscoverSiteScope "Mail"
```

For instance,

```
Set-ClientAccessService -Identity "MBX-01" -AutoDiscoverServiceInternalUri  
"https://mbx01.contoso.com/autodiscover/autodiscover.xml" -AutoDiscoverSiteScope "Mail"
```

• **Update OWA and Other Virtual Directories**

To update OWA and other virtual directories, such as ECP, Outlook Anywhere, OAB, etc., settings, you can use Exchange Management Shell or Exchange Admin Center.

You can execute the following cmdlets in EMS to update the virtual directories.



```
Get-OutlookAnywhere -Server EXCHSRV2013 | Set-OutlookAnywhere -InternalHostname
ex02.mydomain.com -InternalClientAuthenticationMethod Ntlm -InternalClientsRequireSsl
>true -ExternalHostname ex02.mydomain.com -ExternalClientAuthenticationMethod Basic
-ExternalClientsRequireSsl $true -IISAuthenticationMethods Negotiate,NTLM,Basic
```

```
Get-EcpVirtualDirectory -Server EXCHSRV2013 | Set-EcpVirtualDirectory -InternalUrl
https://ex02.mydomain.com/ecp -ExternalUrl https://ex02.mydomain.com/ecp
```

```
Get-OwaVirtualDirectory -Server EXCHSRV2013 | Set-OwaVirtualDirectory -InternalUrl
https://ex01.mydomain.com/owa -ExternalUrl https://ex02.mydomain.com/owa
```

```
Get-WebServicesVirtualDirectory -Server EXCHSRV2013 | Set-WebServicesVirtualDirectory
-InternalUrl https://ex02.mydomain.com/EWS/Exchange.asmx -ExternalUrl
https://ex02.mydomain.com/EWS/Exchange.asmx
```

```
Get-ActiveSyncVirtualDirectory -Server EXCHSRV2013 | Set-ActiveSyncVirtualDirectory
-InternalUrl https://ex02.mydomain.com/Microsoft-Server-ActiveSync -ExternalUrl
https://ex02.mydomain.com/Microsoft-Server-ActiveSync
```

```
Get-OabVirtualDirectory -Server EXCHSRV2013 | Set-OabVirtualDirectory -InternalUrl
https://ex01.mydomain.com/OAB -ExternalUrl https://ex02.mydomain.com/OAB
```

```
Get-MapiVirtualDirectory -Server EXCHSRV2013 | Set-MapiVirtualDirectory -InternalUrl
https://ex02.mydomain.com/mapi -ExternalUrl https://ex02.mydomain.com/mapi
```

After this, restart Internet Information Services (IIS) using the IISRESET command for changes.



MOVE MAILBOXES

To move the system database, you can use the Exchange Admin Center.

1. In the EAC, go to Recipients> Migration.
2. Click on the New + icon and click the Move to a different database option.
3. In the New local mailbox move page, click on Select, the users you want to move option.
4. Click on Add + option.
5. In the Select Mailbox page, add the mailbox with the below-mentioned properties:
 - Display Name: Microsoft Exchange
 - Alias Mailbox Email Address: SystemMailbox{e0dc1c29-89c3-4934-b678-e6c29d823ed9}
6. Click on OK and then click on Next.
7. On the Move configuration page, enter the name of the migration batch.
8. Next to Target database, box click on Browse option.
9. In the Select Mailbox Database page, enter the mailbox's name to which the system mailbox is migrated.
10. Select OK and click on the Next option.
11. In the Start, the batch page, click on the option for automatically starting the migration request.
12. Click on New.

You may also manually export mailboxes to PST using [New-MailboxExportRequest](#) cmdlet and then import them to Exchange 2013 server using the [New-MailboxImportRequest](#) cmdlet in Exchange Management Shell (EMS).

DECOMMISSION EXCHANGE SERVER 2010

You can decommission the Exchange Server 2010 and proceed with the Exchange 2019 installation as a final step. This step is critical as Exchange 2010 and Exchange 2019 cannot coexist. To decommission, you must dismount and remove the database from the server and then use Control Panel to uninstall Exchange Server 2010.

PART II: EXCHANGE SERVER 2019 SETUP AND MIGRATION

SETUP AND INSTALL EXCHANGE SERVER 2019



• Prerequisites for Exchange 2013 to 2019 Migration

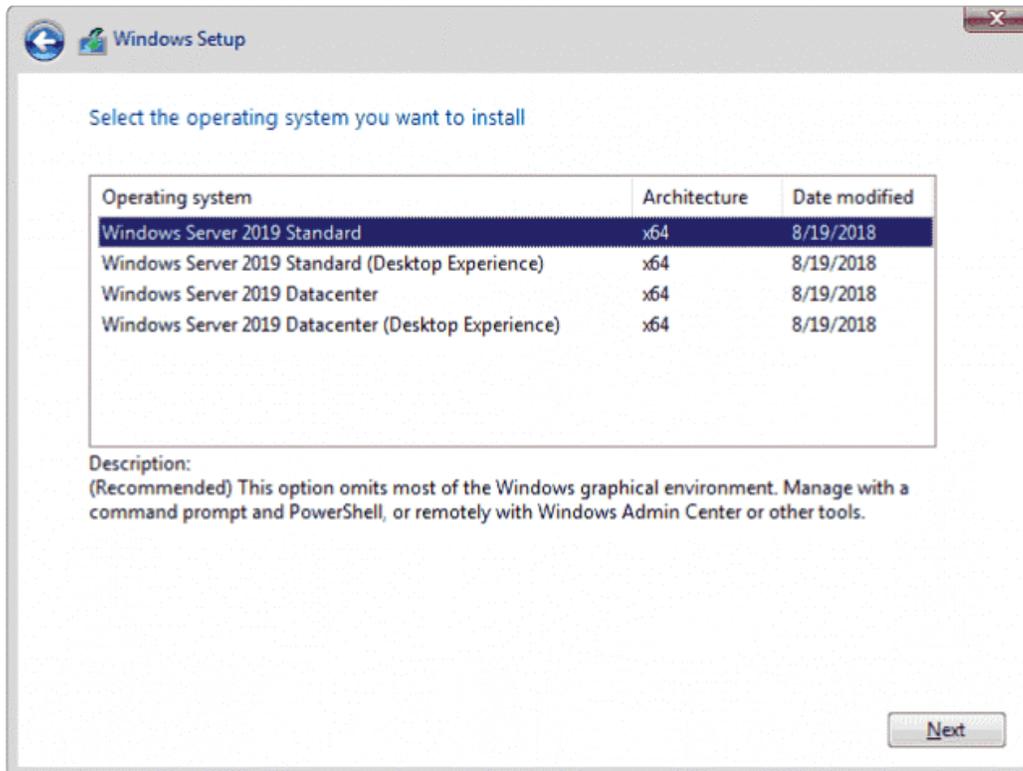
To migrate from Exchange 2013 to Exchange 2019, you need to ensure the following,

- Update Exchange 2013 with the latest Cumulative Update 23 (CU23) released in July 2021 or later.
- Active Directory Servers must be hosted on Windows 2012 R2 Standard or Datacenter and higher with Windows Server 2012 R2 or higher Active Directory Forest functionality.
- If you still host Windows 2008 R2 domain controllers, you need to make sure that these are decommissioned before the installation and migration of Exchange 2013 to Exchange 2019.
- Exchange 2019 supports Outlook 2013 and higher.

• Deploy Exchange Server 2019

Install Windows Server 2019 on a VM or Physical Machine

Start by installing Windows Server 2019 Standard or Datacenter on a Virtual or physical machine. Microsoft recommends installing Exchange 2019 on Windows Server 2019 Core, but the Desktop Experience feature is still supported. So, it's your choice at this stage. You cannot install it on any other operating system.

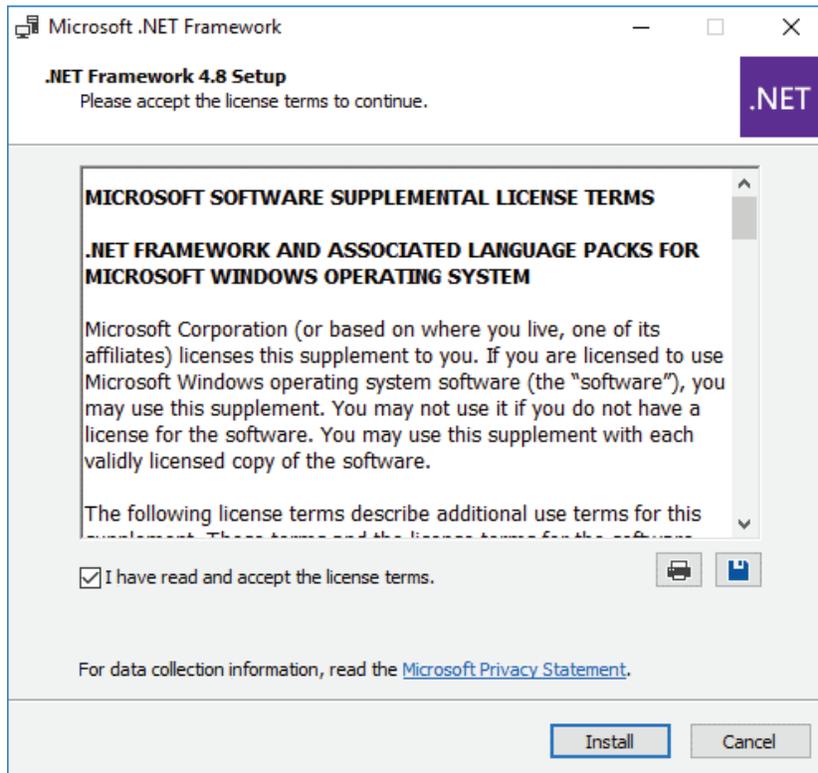


If you install Management Tools on another machine, you need to install them on a Windows 10 64-bit edition. After installing and setting up Windows Server 2019, install the OS updates and the following software.

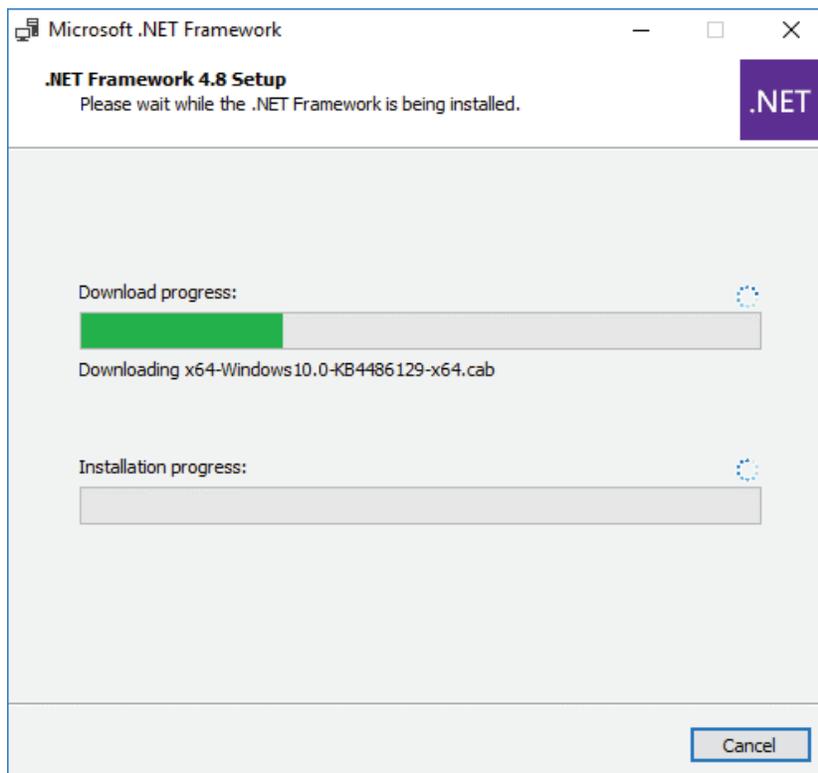
INSTALL EXCHANGE 2019 PREREQUISITES

- **.NET Framework 4.8 or later**

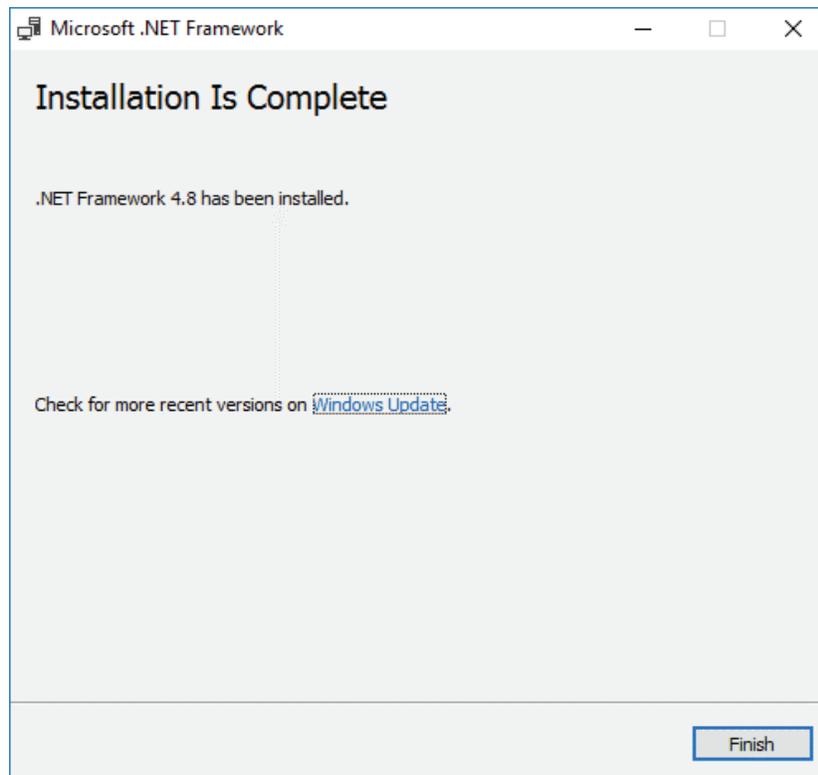
Download the .NET 4.8 on your Windows Server 2019 machine and run the software package as an administrator.



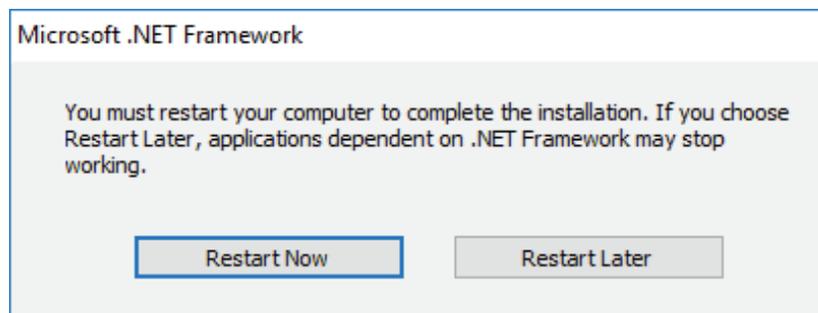
Accept the Terms and Conditions and then click 'Install.'



After the installation, click **'Finish.'**

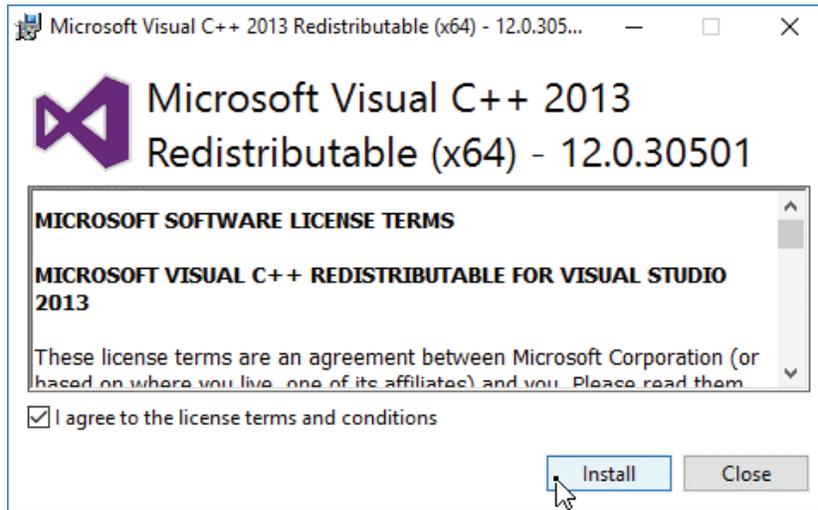


Then click **'Restart Now.'**



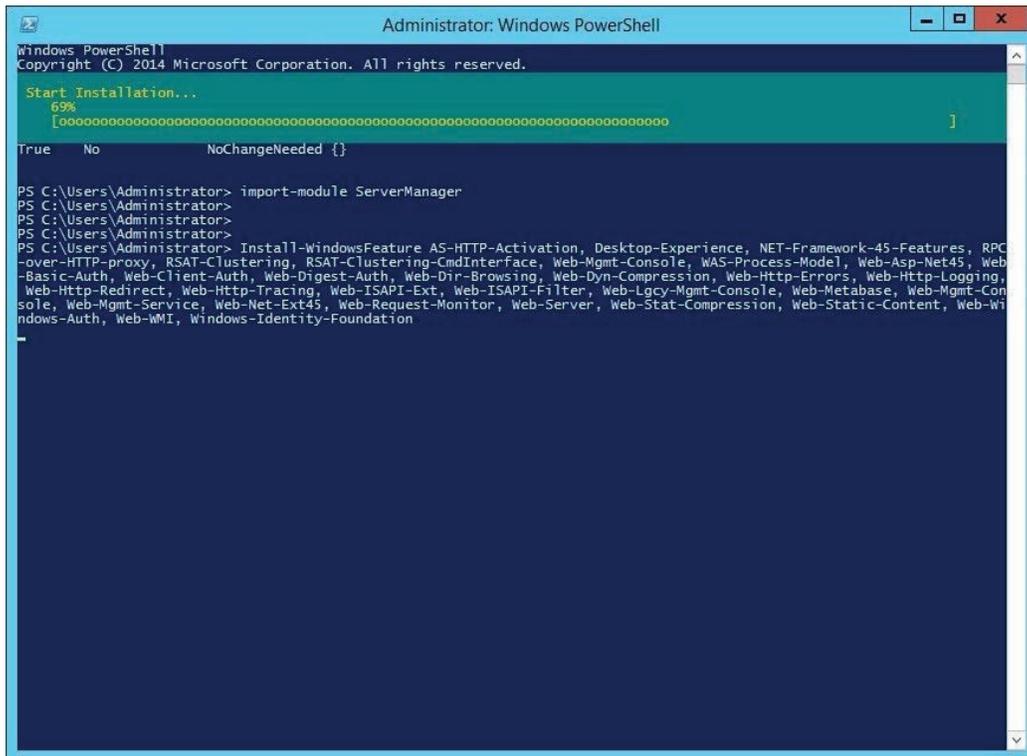
- **Visual C++ Redistributable Package for Visual Studio 2012 and 2013**

Download Visual C++ Redistributable Package for Visual Studio 2012 and 2013 packages and install them as administrators.



- **Install Remote Tool, Administration Pack, and Windows Features**

```
Install-WindowsFeature NET-Framework-45-Features, RSAT-ADDS, RPC-over-HTTP-proxy, RSAT-Clustering, RSAT-Clustering-CmdInterface, RSAT-Clustering-Mgmt, RSAT-Clustering-PowerShell, Web-Mgmt-Console, WAS-Process-Model, Web-Asp-Net45, Web-Basic-Auth, Web-Client-Auth, Web-Digest-Auth, Web-Dir-Browsing, Web-Dyn-Compression, Web-Http-Errors, Web-Http-Logging, Web-Http-Redirect, Web-Http-Tracing, Web-ISAPI-Ext, Web-ISAPI-Filter, Web-Lgcy-Mgmt-Console, Web-Metabase, Web-Mgmt-Console, Web-Mgmt-Service, Web-Net-Ext45, Web-Request-Monitor, Web-Server, Web-Stat-Compression, Web-Static-Content, Web-Windows-Auth, Web-WMI, Windows-Identity-Foundation
```



- **Install Exchange Server 2019 Setup**

To install Exchange Server 2019, connect the Exchange Server 2019 media to the server machine and mount the ISO. Then open the Command Prompt window to navigate to the Setup.exe location using the cd (change directory) command.

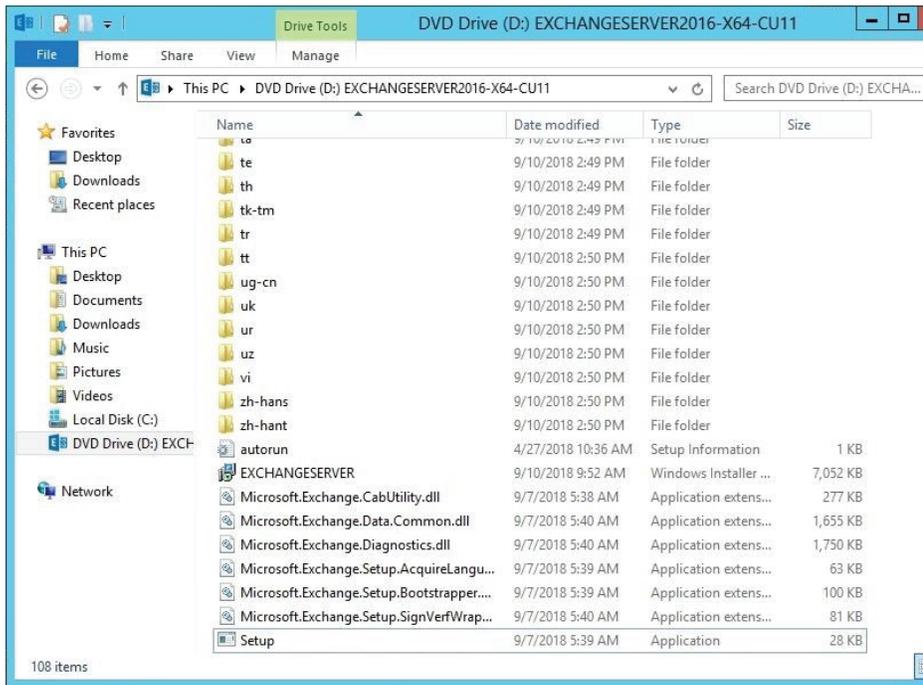
Then run the below command in Command Prompt window to prepare the Schema and the AD.

```
Setup.exe /PrepareSchema /IAcceptExchangeServerLicenseTerms
```

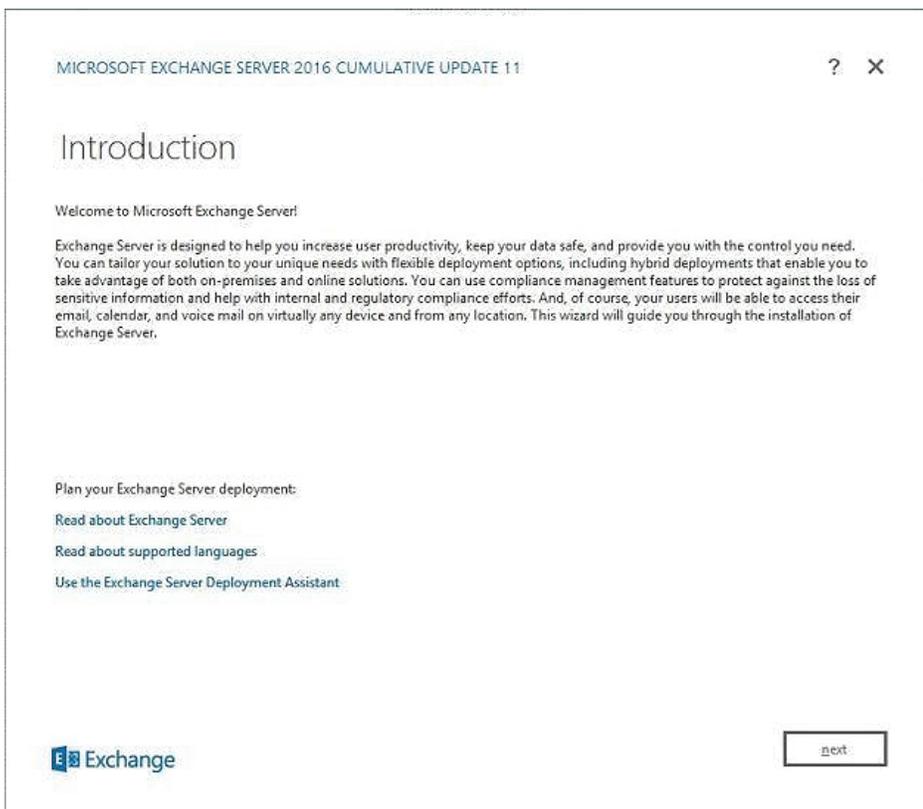
```
Setup.exe /PrepareAD /OrganizationName:"Contoso" /IAcceptExchangeServerLicenseTerms
```

Here you have prepared the Active Directory to be Exchange 2019 friendly, and now you can start the installation. Before starting, make sure that no new updates are available for the prerequisites you've installed.

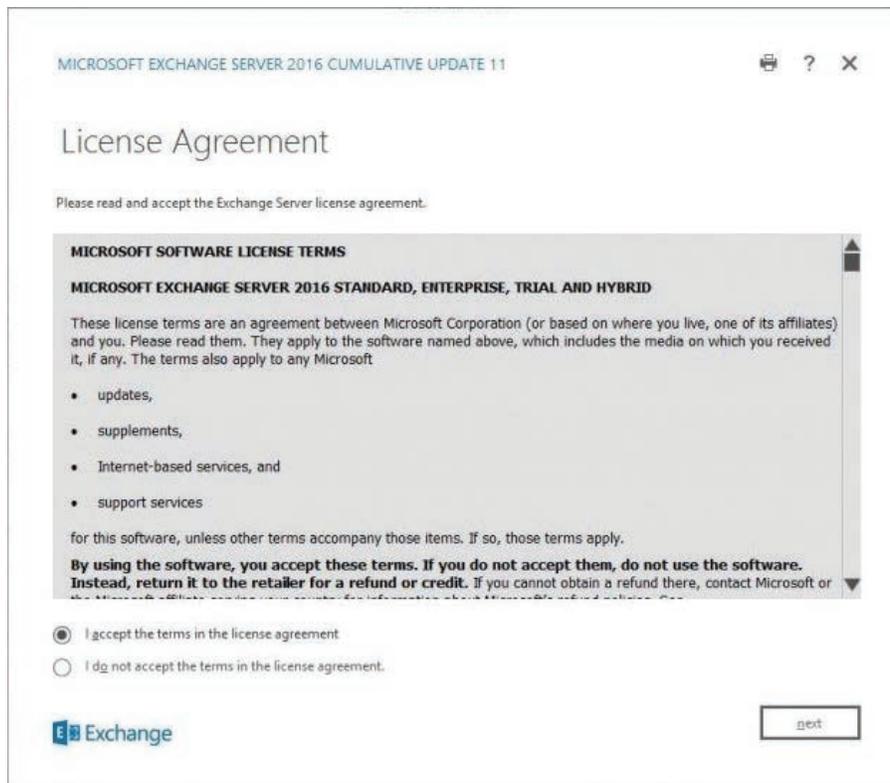
Now launch the Setup.exe.



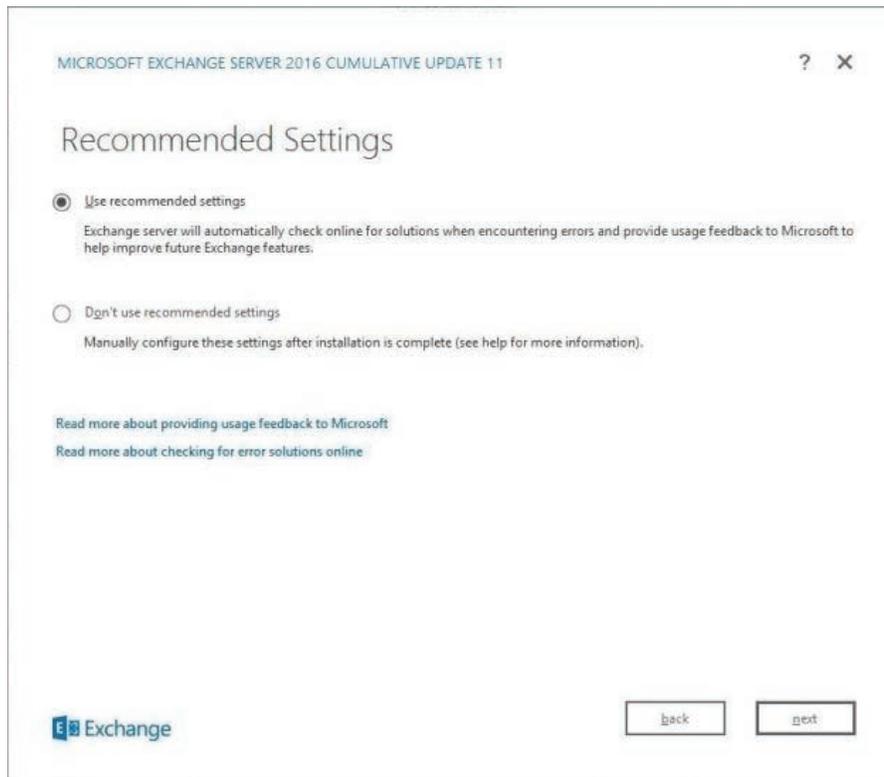
click 'Next'.



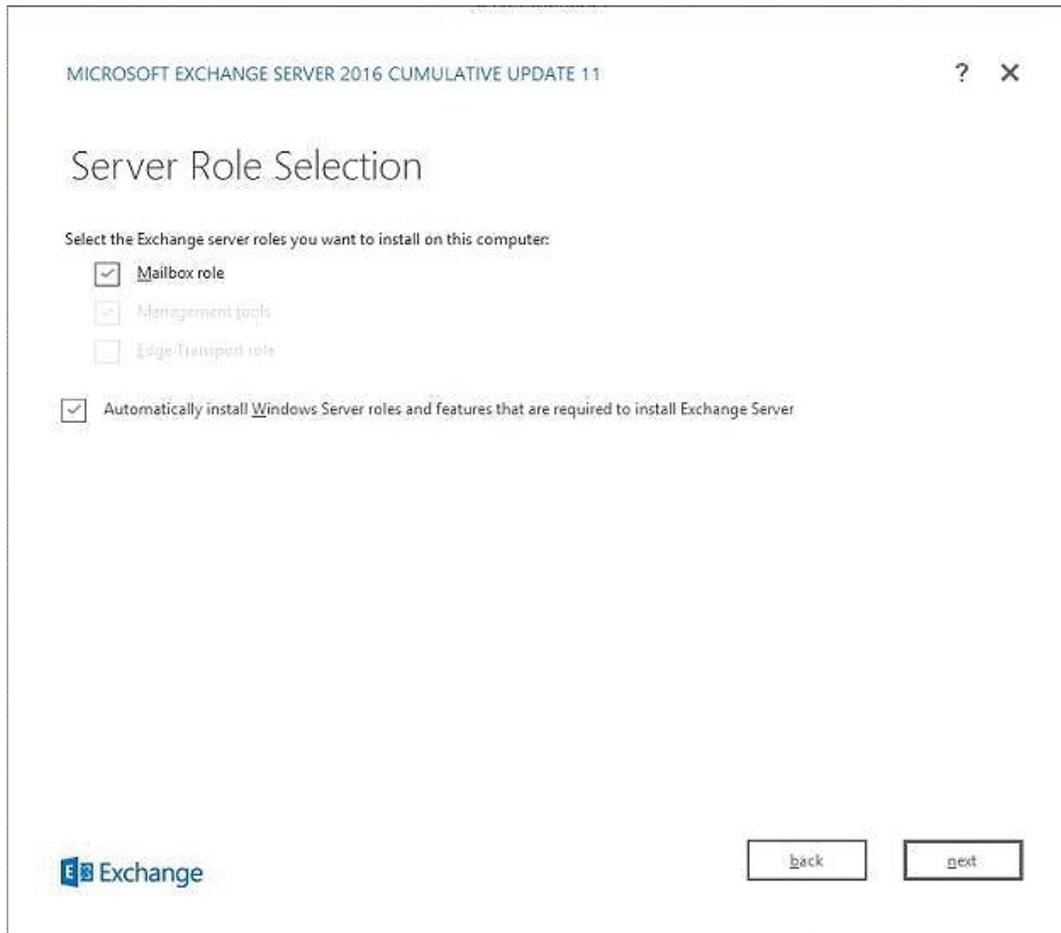
Accept the license agreement and click 'next.'



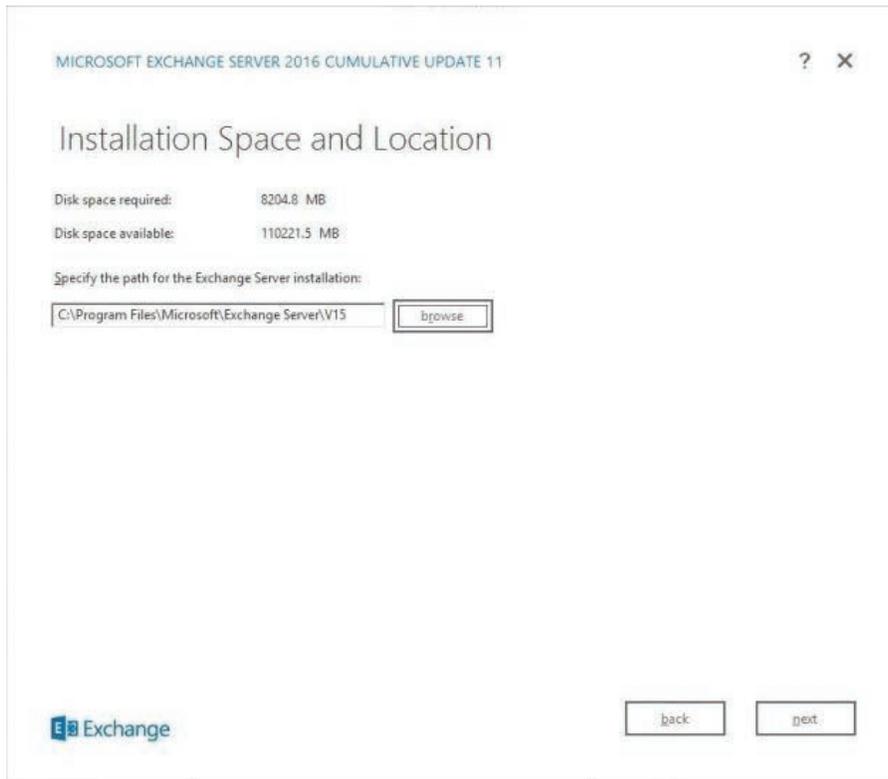
Select 'Recommended settings' and click 'next.'



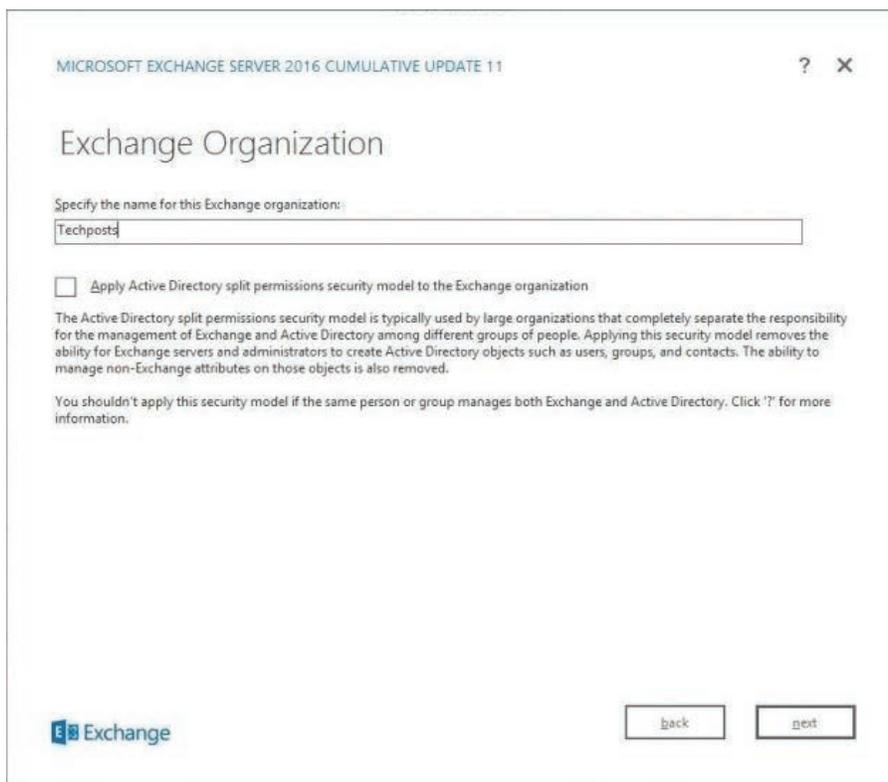
On the **Server Role Selection** page, make sure to tick **Mailbox Role** and Management Tools and check '**Automatically install Windows Server roles and features required to install Exchange Server**'. Click '**next**'.



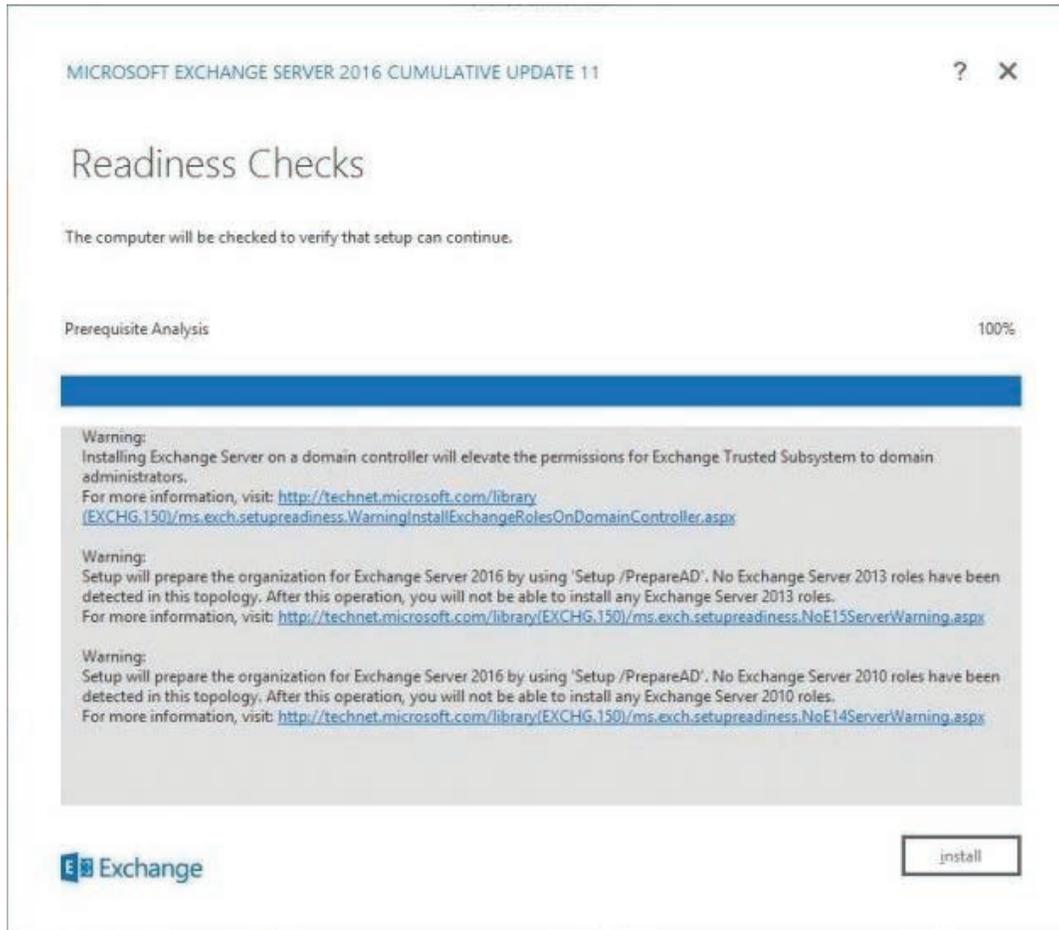
Choose the location of the installation of the Exchange Server and click '**next**' (Make sure not to install Exchange on the system drive).



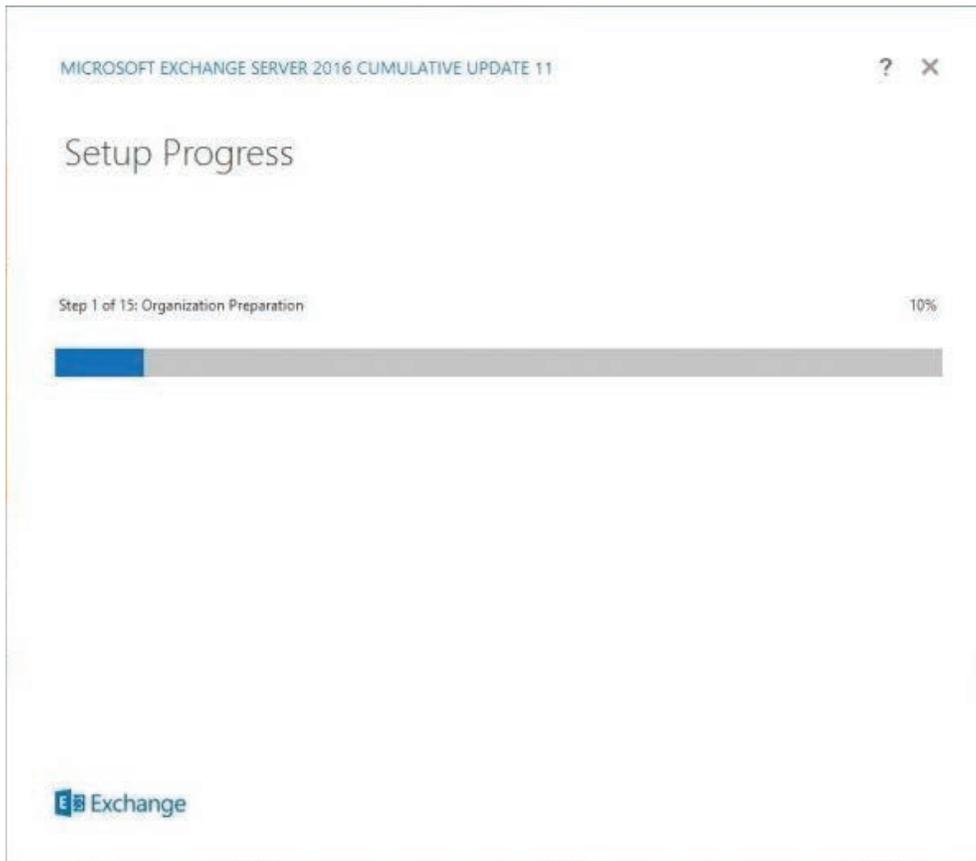
Enter the organization's name and click '**next**'.



On the Malware protection setting, click '**No**' for now as this can be enabled in the future. You don't need it for now.



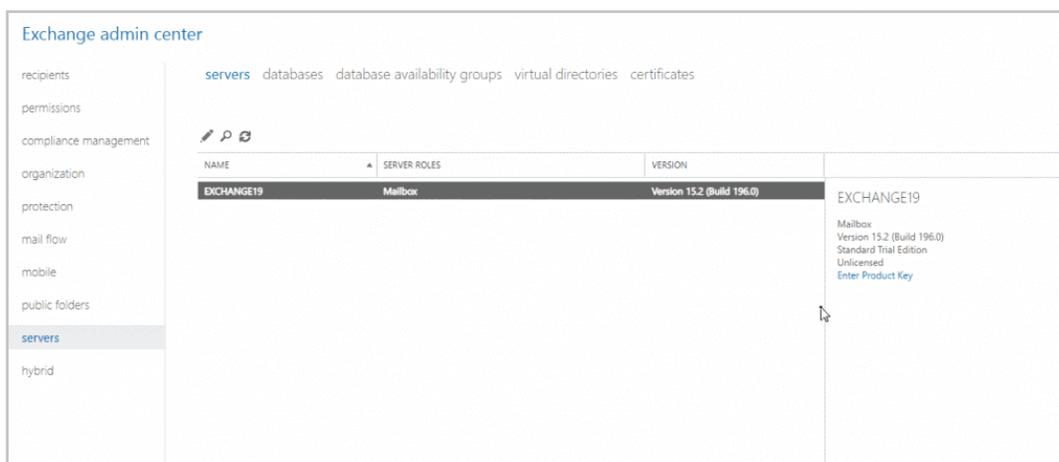
After the Readiness screen, the installation will start. After finishing, make sure again to see if any updates are available.



PREPARE FOR MIGRATION

- Setup Outlook Anywhere

Login to Exchange Admin Center and click '**servers**'.



Select the Exchange 2019 Server and click the **edit** icon.

EXCHANGE19

general
databases and database availability groups
POP3
IMAP4
unified messaging
DNS lookups
transport limits
transport logs
▶ Outlook Anywhere

Outlook Anywhere allows your users to connect to their Exchange mailboxes via Outlook. [Learn more](#)

Specify the external host name (for example, contoso.com) that users will use to connect to your organization.

exchange19.test.local

*Specify the internal host name (for example, contoso.com) that users will use to connect to your organization.

exchange19.test.local

*Specify the authentication method for external clients to use when connecting to your organization:

Negotiate

Allow SSL offloading

Save Cancel

Click '**Outlook Anywhere**' and update the internal and external FQDN (Fully Qualified Domain Name). Click '**Save**'.

- **Setup Service Connection Point**

The next step is to set up the Service Connection Point (SCP), an attribute on Exchange Server stored in the AD schema that directs domain-joined client computers using Outlook to the server using auto discover settings. By default, it will change to the new server. You need to stop the users from connecting to the new server due to issues with certificates, as the default with the installation is a self-signed one. This can be changed by running the following PowerShell cmdlet:

```
Set-ClientAccessService -Identity ExchangeServer2019 -AutoDiscoverServiceInternalUri https://mail.mydomainname.com/Autodiscover/Autodiscover.xml
```

This will point the users to the current server.

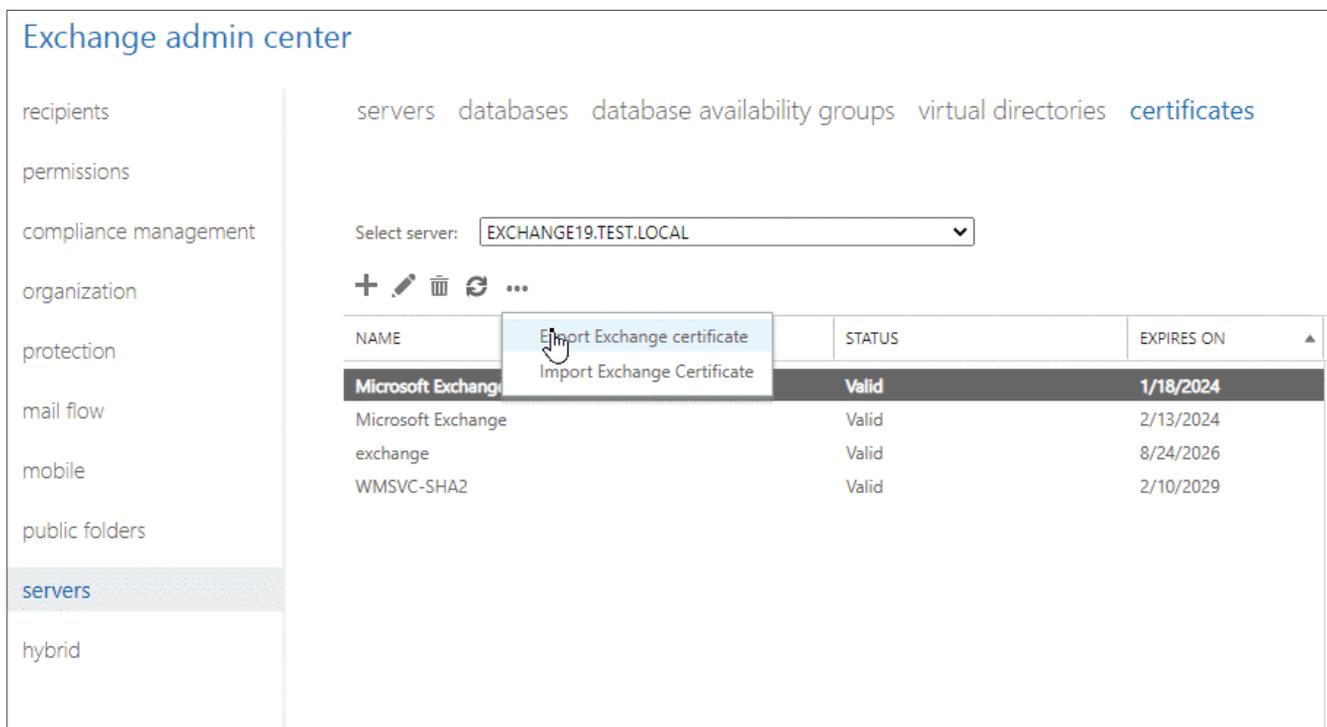
• Import Certificates from Exchange 2013 to Exchange 2019

Now you need to import the certificates into the new server. Again, you can use the PowerShell commands or Exchange Admin Center to import and export certificates from Exchange 2013 to Exchange 2019.

• Export and import Certificates using EAC

To export and import certificates from Exchange 2013 to 2019, follow these steps:

- Open Exchange Admin Center and navigate to **servers > certificate**.
- Select the certificate, click ... (three dots), and choose **'Export Exchange Certificate'**.



Exchange admin center

recipients permissions compliance management organization protection mail flow mobile public folders **servers** hybrid

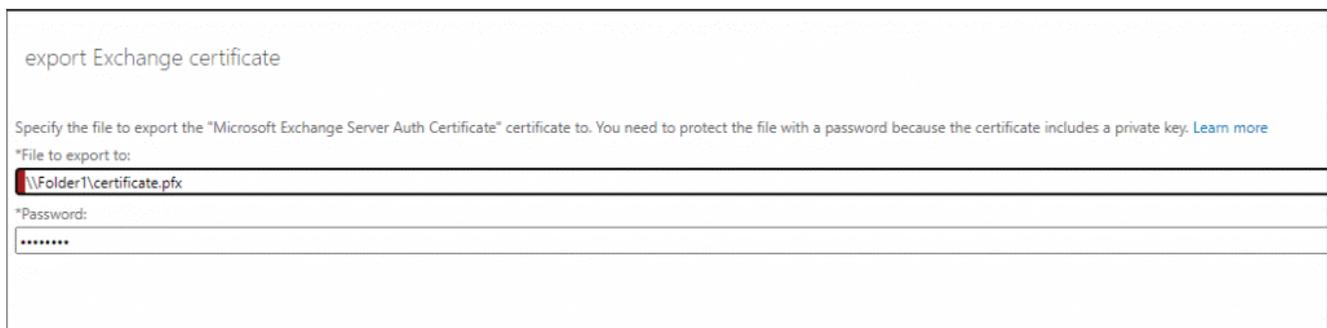
servers databases database availability groups virtual directories **certificates**

Select server: EXCHANGE19.TEST.LOCAL

+ ✎ 🗑️ ↺ ...

NAME		STATUS	EXPIRES ON
Microsoft Exchange	Export Exchange certificate Import Exchange Certificate	Valid	1/18/2024
Microsoft Exchange		Valid	2/13/2024
exchange		Valid	8/24/2026
WMSVC-SHA2		Valid	2/10/2029

- Enter the UNC path where the certificate will be exported and enter a password to protect the certificate. Remember this password or note it down somewhere safe. Click **'ok'**.



export Exchange certificate

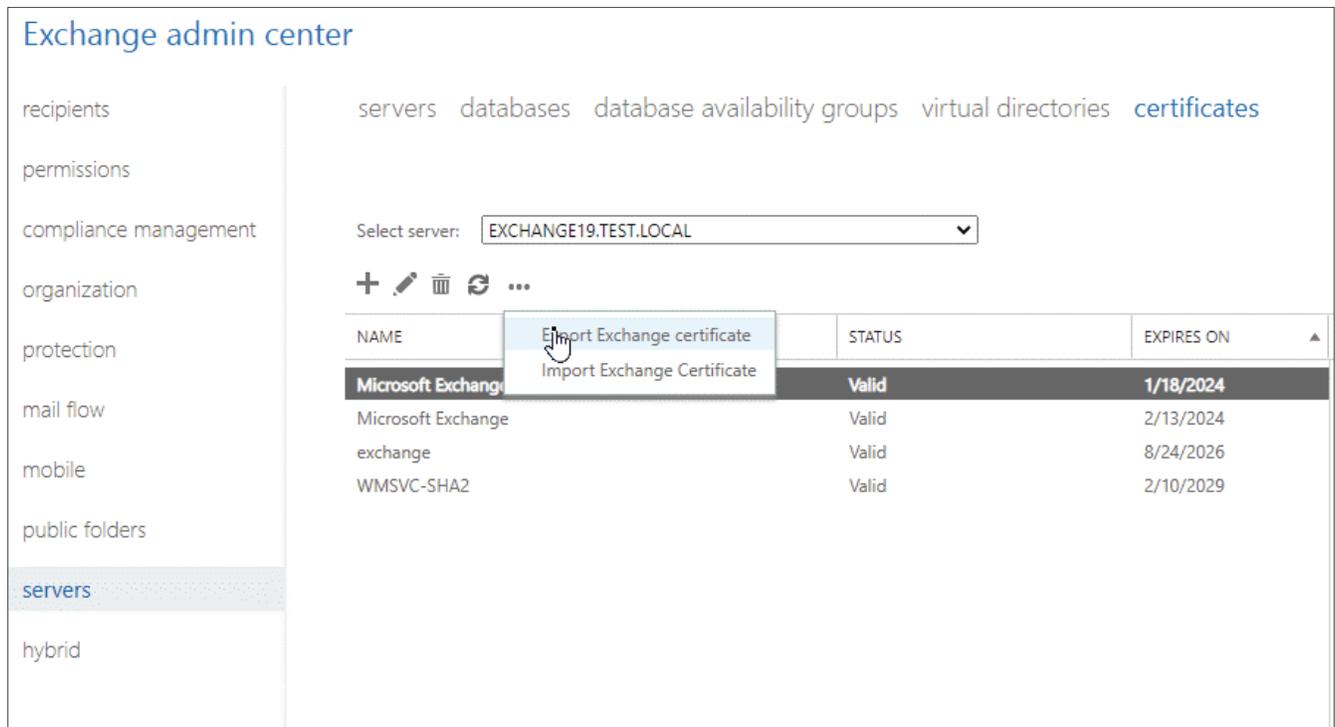
Specify the file to export the "Microsoft Exchange Server Auth Certificate" certificate to. You need to protect the file with a password because the certificate includes a private key. [Learn more](#)

*File to export to:
\\Folder1\certificate.pfx

*Password:

Copy the exported certificate from the UNC path on Exchange 2013 Server to an external storage device and transfer it to a UNC folder path on the Exchange 2019. Then open the Exchange Admin Center in Exchange 2019 and follow these steps to import the certificate:

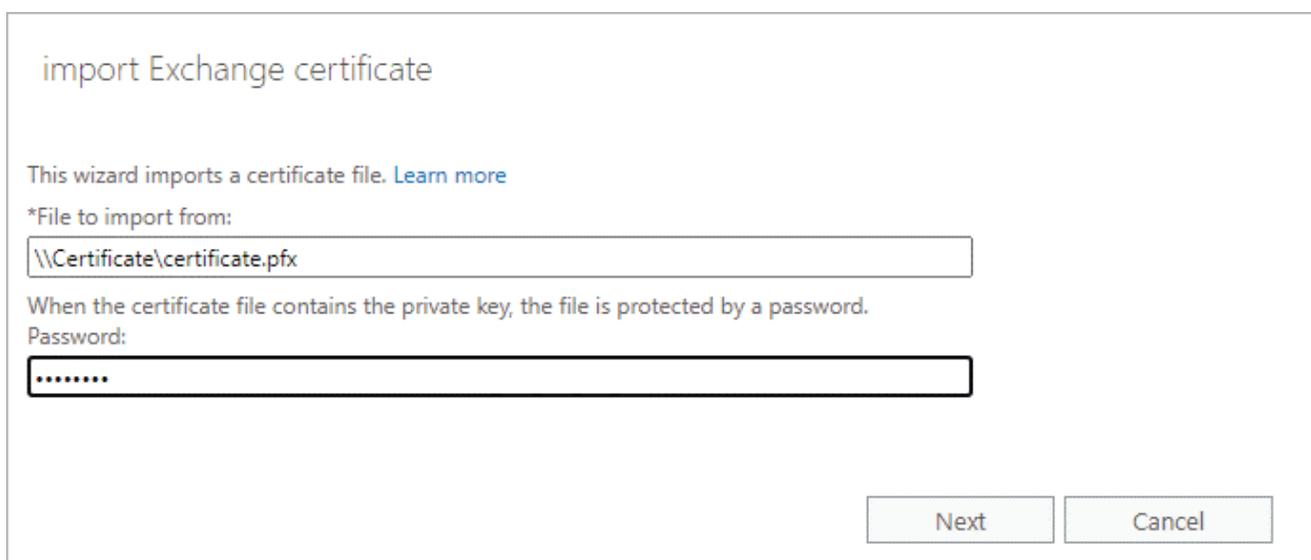
- Go to servers > certificate. Click on three dots (...) and choose **'Import Exchange Certificate'**.



The screenshot shows the Exchange Admin Center interface. On the left is a navigation pane with categories like recipients, permissions, compliance management, organization, protection, mail flow, mobile, public folders, servers, and hybrid. The 'servers' category is selected. The main area shows a breadcrumb trail: servers > databases > database availability groups > virtual directories > certificates. Below this is a 'Select server:' dropdown menu with 'EXCHANGE19.TEST.LOCAL' selected. A toolbar with icons for adding, editing, deleting, refreshing, and a context menu icon is visible. The context menu is open, showing 'Import Exchange certificate' as the selected option. Below the menu is a table of certificates.

NAME	STATUS	EXPIRES ON
Microsoft Exchange	Valid	1/18/2024
Microsoft Exchange	Valid	2/13/2024
exchange	Valid	8/24/2026
WMSVC-SHA2	Valid	2/10/2029

- Enter the UNC path where the certificate is stored and enter the password. Click **'next'**.

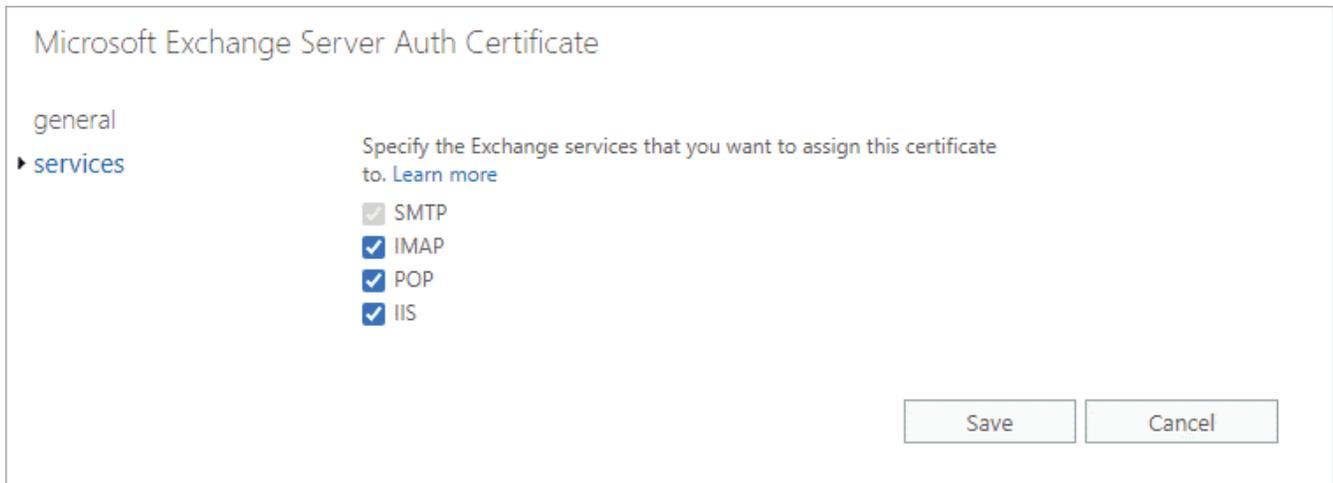


The screenshot shows the 'import Exchange certificate' wizard dialog box. It has a title bar and a main area with the following text: 'This wizard imports a certificate file. [Learn more](#)'. Below this is a label '*File to import from:' followed by a text input field containing '\\Certificate\certificate.pfx'. Below that is a note: 'When the certificate file contains the private key, the file is protected by a password.' followed by a label 'Password:' and a password input field with masked characters. At the bottom right are two buttons: 'Next' and 'Cancel'.

- Select the server where you want to apply the certificate and click **'finish'**.

Now assign the POP, IMAP, IIS, & SMTP services to the imported certificates by following these steps:

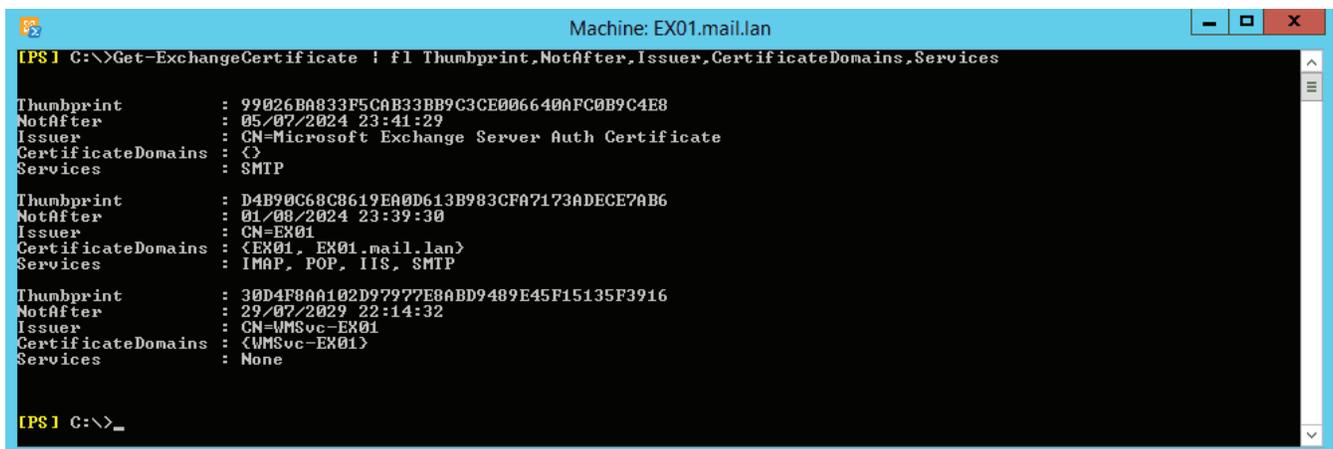
- Select the imported certificate and click the **'Edit'** button.
- Click **'services'** and check the POP, IMAP, IIS, and SMTP options.



- Click **'Save'**.
- **Export and Import Certificates via PowerShell Cmdlets**

First, you need to identify the certificates to move by using the below PowerShell cmdlet:

```
Get-ExchangeCertificate | fl Thumbprint,NotAfter,Issuer,CertificateDomains,Services
```





This will give you a list of certificates and the thumbprint and the services they are used for so you know the certificates and what services to assign them to. On the Exchange 2013 Server, use the following PowerShell cmdlet to export the certificate for the Exchange 2019 Server.

```
$CertPass = ConvertTo-SecureString "LetMeIn" -AsPlainText -Force
```

```
Export-ExchangeCertificate -Thumbprint C87C1CBA43733D177B2679BC825808C7BECC659B  
-FileName C:\temp\Exchange2013Certificate.pfx -Password $CertPass | Out-Null
```

Once done, keep a note of the password. If you forget it, you can always redo the above and use a new password. Copy the file to the Exchange Server 2019 and run the below command in PowerShell:

```
$CertPass = ConvertTo-SecureString "LetMeIn" -AsPlainText -Force
```

```
Import-ExchangeCertificate -FileName C:\temp\Exchange2013Certificate.pfx  
-PrivateKeyExportable $true -
```

```
Password $CertPass | Enable-ExchangeCertificate -Services POP,IMAP,IIS,SMTP  
-DoNotRequireSsl
```

This will import the certificate and assign it to POP, IMAP, IIS, and SMTP services.

• **Configure Exchange 2019 Virtual Directories**

The next step is to set the internal and external access URLs using Outlook Anywhere. On Exchange Admin Center,

- Go to **servers > virtual directories**.
- From **Select type**, choose **OWA**.
- Double click on **OWA** and go to authentication.
- Select '**Use forms-based authentication**' and choose **Domain\user name**. You may choose another option based on your preference.

owa (Default Web Site)

general

authentication

features

file access

Use one or more standard authentication methods
 Integrated Windows authentication
 Digest authentication for Windows domain servers
 Basic authentication

Use forms-based authentication
 Logon format:
 Domain\user name
 User principal name (UPN)
 User name only

Logon domain:

- Click '**Save**'.

Now set and update the internal and external URL of virtual directories for Outlook Anywhere, OWA, ECP, Web Services, ActiveSync, Offline Address Book, and MAPI. Again, you can use the CLI interface or Exchange Admin Center to configure the virtual directories.

- **Configure Virtual Directories on Exchange 2019 using EAC**

The steps are as follows:

- In EAC, under **server > virtual directories**, double-click on **OWA**.
- Paste or enter the FQDN in **Internal URL** and **External URL** section.



owa (Default Web Site)

- general
- authentication
- features
- file access

Server: EXCHANGE19

Server version: Version 15.2 (Build 196.0)

Website: Default Web Site

Outlook Web App version: Exchange2013

Last modified time: 2/13/2019 4:46 PM

Internal URL: https://exchange19.test.local/owa

External URL:

The ExternalURL is the URL that clients will use to connect outside your firewall.

Save Cancel

- Repeat the steps and update the Internal URL and External URL fields for ECP, oab, ActiveSync, webservices, mapi.

- **Configure Virtual Directories on Exchange 2019 using EMS**

On Exchange 2019, run the below command.

```
Get-OutlookAnywhere -Server srvexc2019 | Set-OutlookAnywhere -InternalHostname ex02.mydomain.com -InternalClientAuthenticationMethod Ntlm -InternalClientsRequireSsl $true -ExternalHostname ex02.mydomain.com -ExternalClientAuthenticationMethod Basic -ExternalClientsRequireSsl $true -IISAuthenticationMethods Negotiate,NTLM,Basic
```

```
Get-EcpVirtualDirectory -Server srvexc2019 | Set-EcpVirtualDirectory -InternalUrl https://ex02/mydomain.com/ecp -ExternalUrl https://ex02.mydomain.com/ecp
```

```
Get-OwaVirtualDirectory -Server srvexc2019 | Set-OwaVirtualDirectory -InternalUrl https://ex01.mydomain.com/owa -ExternalUrl https://ex02.mydomain.com/owa
```

```
Get-WebServicesVirtualDirectory -Server srvexc2019 | Set-WebServicesVirtualDirectory -InternalUrl https://ex02.mydomain.com/EWS/Exchange.asmx -ExternalUrl https://ex02.mydomain.com/EWS/Exchange.asmx
```

```
Get-ActiveSyncVirtualDirectory -Server srvexc2019 | Set-ActiveSyncVirtualDirectory -InternalUrl https://ex02.mydomain.com/Microsoft-Server-ActiveSync -ExternalUrl https://ex02.mydomain.com/Microsoft-Server-ActiveSync
```

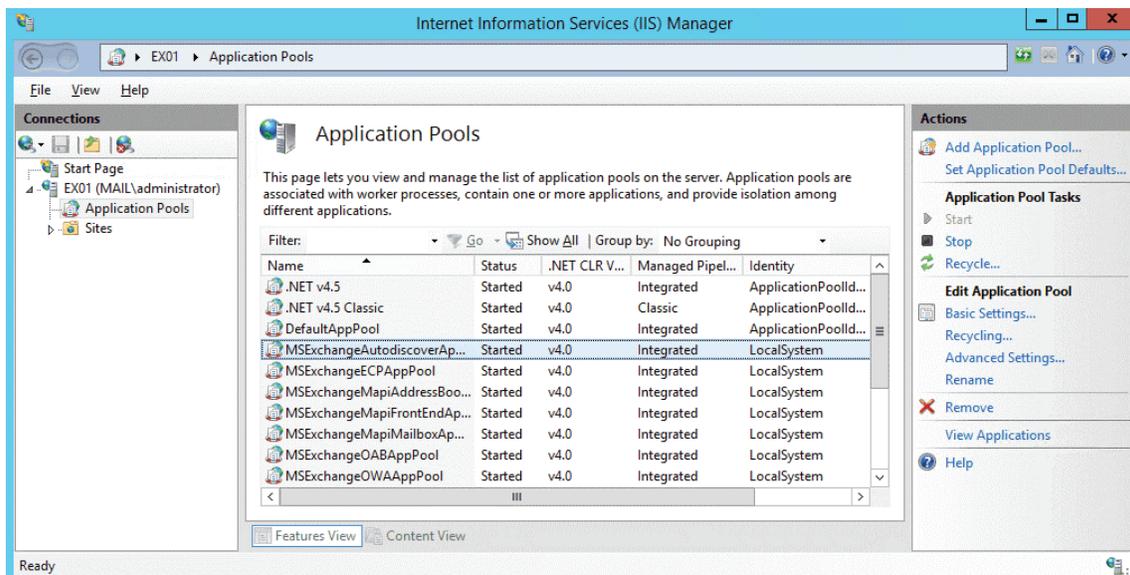
```
Get-OabVirtualDirectory -Server srvexc2019 | Set-OabVirtualDirectory -InternalUrl https://ex01.mydomain.com/OAB -ExternalUrl https://ex02.mydomain.com/OAB
```

```
Get-MapiVirtualDirectory -Server srvexc2019 | Set-MapiVirtualDirectory -InternalUrl https://ex02.mydomain.com/mapi -ExternalUrl https://ex02.mydomain.com/mapi
```

- Replace the URL in the command with your domain name (URL).

To ensure these changes are in effect, recycle the **Application Pool** for **MSExchangeAutodiscoverAppPool**. To do this,

- Open IIS, expand the server, and click on Application Pools.
- Find the Application Pool and click on Recycle.



• Update DNS Records

Now that the URLs are changed, it's time to point the DNS records to the new Exchange 2019 Server. For this, contact your network team to see that any ports open and forwarded with NAT to the current Exchange 2013 are replicated to also point to Exchange 2019.

All open ports to Exchange 2013 should be opened for Exchange 2019. Any forwarding from outside to the inside should be changed to point to the Exchange 2019 Server instead. It's now the time to point the SCP record you set before, to point to the Exchange 2019 rather than 2013.

Now the users should be able to work by accessing the Exchange 2019 as their Exchange Server while being redirected to the Exchange 2013 Server as the location of their mailbox. Next, it's time to go round and work on the multi-function devices to point to the new Exchange 2019 Server. Then, from the server, set up the transport rules to allow the devices to pass through it.

You need to make sure that the URL used internally is also changed and propagated. Then connect one Outlook and check that it's connecting to the right Exchange Server by opening the Outlook Connection status.

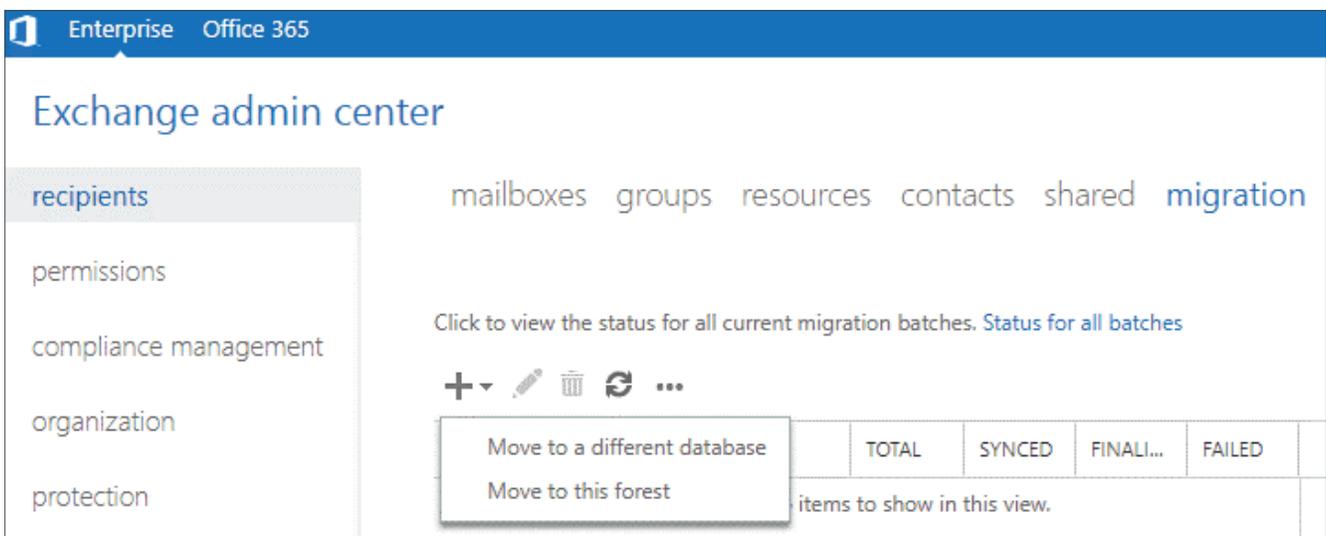
MOVE MAILBOXES FROM EXCHANGE 2013 TO EXCHANGE SERVER 2019

The next step is to move the mailboxes from your current Exchange Server 2013 to Exchange Server 2019. This is done by creating a migration batch job. You can create the migration batch via Exchange Admin Center or Exchange Management Shell.

• Move Mailboxes using EAC

The steps are as follows:

- Open the Exchange Admin Center and click on **Recipients**. Next, click on **Migration**, click the + sign, and select **Move to a different database**.



The screenshot shows the Exchange Admin Center (EAC) interface. The top navigation bar includes "Enterprise" and "Office 365". The main heading is "Exchange admin center". On the left, a sidebar menu lists "recipients", "permissions", "compliance management", "organization", and "protection". The "recipients" menu item is selected. The main content area shows "mailboxes", "groups", "resources", "contacts", "shared", and "migration". The "migration" link is highlighted. Below the navigation, there is a link: "Click to view the status for all current migration batches. Status for all batches". Below this link are icons for adding (+), editing (pencil), deleting (trash), refreshing (refresh), and a more options menu (three dots). A dropdown menu is open, showing two options: "Move to a different database" and "Move to this forest". Below the dropdown, there is a table with columns: "TOTAL", "SYNCED", "FINALI...", and "FAILED". At the bottom, there is a text field: "items to show in this view."

- Select the mailboxes you want to move and click **'Next'**.

new local mailbox move

Select the users

You can either use a CSV file to specify the users you'd like to move, or you can select mailboxes individually. [Learn more](#)

Select the users that you want to move

+ -

DISPLAY NAME	EMAIL ADDRESS
User2	user2@mail.lan

Specify the users with a CSV file

No file chosen

1 mailboxes to migrate

- Then you can select to move everything or select a specific mailbox only or the archive mailbox only.
- Select the **Target database** for mail and archive and click **next**. Depending on the volume and size, you can select multiple mailboxes at once in a job.

• Move Mailboxes Using EMS

The steps are as follows:

- Open the Exchange Management Shell and execute the following PowerShell command:

```
Get-Mailbox -Database MBX-DB-2013 | New-MoveRequest -TargetDatabase DB19
-BatchName "DB13toDB19"
```

- Also, move the Arbitration mailboxes to complete the mailbox move.

```
Get-Mailbox -server ExchangeServer2013 -Arbitration | New-MoveRequest
```

- You can check the progress using the following command:

```
Get-MoveRequest | Get-MoveRequestStatistics
```

The process is slow and requires you to manually export and import the mailboxes.

For faster mailbox move, download and install Stellar Converter for EDB. With this EDB to PST converter software, you can scan and migrate mailboxes from online or offline Exchange databases to PST. In addition, you may also directly export the mailboxes from your Exchange 2013 offline database (EDB) directly to Exchange 2019 or Office 365.

Unlike EMS or EAC, the software does not impact the server resources or performance and moves the mailboxes from one Exchange Server to another at up to 4x speed. You can download it for free to evaluate yourself.

DECOMMISSION EXCHANGE 2013/2016 SERVER

Proper decommissioning of the Exchange Server is critical. Login to EAC and follow these steps:

- Go to **mail flow > send connector**.

Exchange admin center

recipients rules delivery reports accepted domains email address policies receive connectors **send connectors**

permissions

compliance management + ✎ 🗑️ 🔄 ⋮

NAME	STATUS
INTERNET	Enabled

INTERNET

Last modified: 2/13/2019 5:12:11 PM

Connector status - Enabled

[Disable](#)

Logging - Off

[On](#)

Maximum send message size (MB): 35

- Double-click on send connector name and go to **scoping**.

INTERNET

general
delivery
▶ **scoping**

*Address space:
Specify the address space or spaces to which this connector will route mail.

+ ✎ -

TYPE	DOMAIN	COST
SMTP	*	1

Scoped send connector

*Source server:
Associate this connector with the following servers containing transport roles. You can also add Edge Subscriptions to this list.

+ - ✎

SERVER	ROLE	VERSION
EXCHA... TEST.LOCAL/C...	Mailbox	Version ...

Remove

Save Cancel

- Remove the server's name.

Once all mailboxes are moved, you can go ahead and remove the mailboxes from the Exchange Server 2013 using EAC or EMS command (as given below).

```
Get-MailboxDatabase -Server ExchangeServer2013 | Remove-MailboxDatabase
```

Finally, uninstall Exchange 2013 from the current server from the Control Panel. Then shut down the Exchange 2013 Server.

This completes the decommissioning of the Exchange Server. At this stage, your Exchange Server migration is complete.



SUMMARY

This is a comprehensive eBook on migrating Exchange 2010 to Exchange 2019. From deploying Exchange Server 2013 and 2019 to decommissioning Exchange 2010 and 2013, this eBook covers every step in detail to help IT, & Exchange administrators migrate Exchange 2010 infrastructure to Exchange 2019 without any hiccups.



Stellar Converter for EDB

DOWNLOAD FROM:

<https://www.stellarinfo.com/email-repair/edb-pst-converter.php>



+1-877-778-6087 (Tollfree)



support@stellarinfo.com



www.stellarinfo.com