

# AIO-13 LAB SETUP

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## Overview

### References:

- Exchange 2013 prerequisites: Exchange 2013 Help | Microsoft Docs
- Prepare Active Directory and domains

### **EX13\_AIO**

Host	shgbsvmas	<a href="#">VMAS - Workspaces</a>
Host Name	AIO-13	
Role	DC & CAS & MBX & Outlook	
OS Version	Windows Server 2012 R2 Datacenter	
Original OS Language	English (en-us)	
Additional Language Packs	Simplified Chinese (zh-cn) Traditional Chinese (zh-tw)	
Exchange Build Number	CU23	Exchange Server build numbers and release dates <a href="https://docs.microsoft.com/en-us/exchange/new-features/build-numbers-and-release-dates?view=exchserver-2019">https://docs.microsoft.com/en-us/exchange/new-features/build-numbers-and-release-dates?view=exchserver-2019</a>
Password Complexity	1	
Certificate created and configured	Exchange self-generated	
Outlook Version	Microsoft 365 2019	
Outlook Language Packs	Simplified Chinese (zh-cn) English (en-us) Traditional Chinese (zh-tw)	

**EX13\_AIO**

Outlook		
Anywhere enabled	Y	
OAB and EWS enabled	Y	
Network		
Monitor installed	Y	<a href="https://aka.ms/wxex">https://aka.ms/wxex</a>
Fiddler installed	Y	<a href="https://aka.ms/wxex">https://aka.ms/wxex</a>
Telnet25	Y	<a href="https://aka.ms/wxex">https://aka.ms/wxex</a>
ExTRA	Y	<a href="https://aka.ms/wxex">https://aka.ms/wxex</a>
Disable CRL check		<p>Exchange 2010 Management Console (EMC) is very slow  <a href="https://blogs.technet.microsoft.com/nawar/2011/06/03/exchange-2010-management-console-emc-is-very-slow/">https://blogs.technet.microsoft.com/nawar/2011/06/03/exchange-2010-management-console-emc-is-very-slow/</a></p> <p>Configuring Exchange Servers Without Internet Access  <a href="https://techcommunity.microsoft.com/t5/exchange-team-blog/configuring-exchange-servers-without-internet-access/ba-p/593692">https://techcommunity.microsoft.com/t5/exchange-team-blog/configuring-exchange-servers-without-internet-access/ba-p/593692</a></p>
NIC		Private IP
ActiveSync device connectivity	Y	
Additional disk for Backup issue	Y	
Enable Windows Server Backup	Y	
Backup	Y	
Snap Shot	Y	
Lab known issue		If EMC and EMS does not work properly, please clean the credential manager in the Control Panel. It is because Outlook user credential cache.
FAQ		

**Deployment Step by step**

The following steps are required in the deployment of AIO-13. The same steps on AIOS are not mentioned here, for more information about parent documentation, see [General Deployment of AIO Step by step](#).

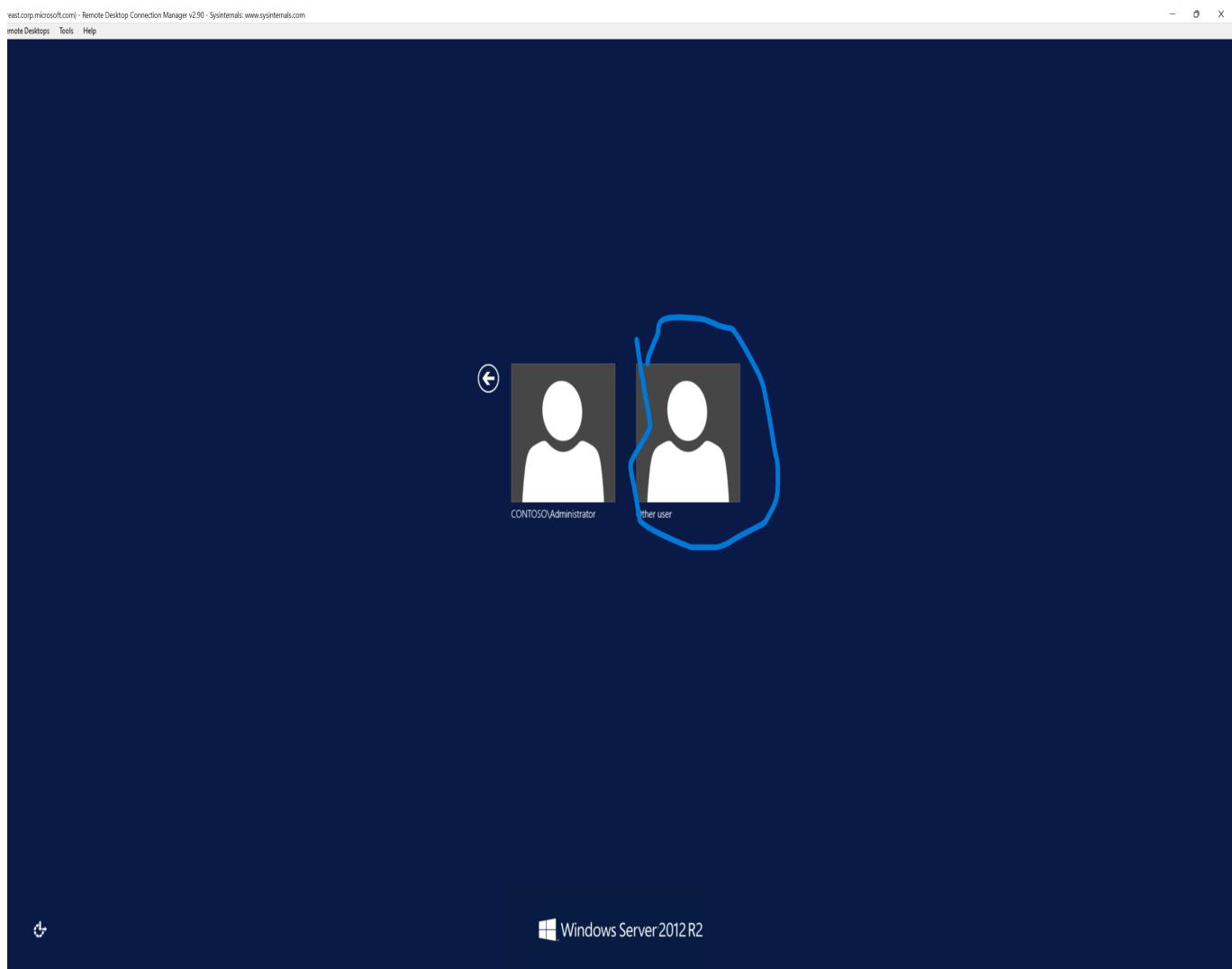
Step 1: configure the all-in-one virtual machine on VMAs.

**Attention:** the OS version is Windows Server 2012 R2 Datacenter.

The screenshot shows a 'New Workspace' configuration screen. At the top, there's a blue header bar with the title 'New Workspace'. Below it, a navigation bar contains four items: 'Step 1' (which is selected and highlighted in grey), 'Step 2', 'Step 3', and 'Done!'. A main instruction text reads: 'You may either create a workspace from a template or you may build a custom workspace. Choose one.' Underneath, there are two tabs: 'Template' (selected) and 'Custom'. A search input field contains the text '2012 r2', and to its right, it says '2 results'. Two workspace options are listed: 'Windows 2012 R2 Standard' and 'Windows 2012 R2 Datacenter'. Each option has a green circular badge with the number '1' next to it, followed by three small icons: a plus sign, a minus sign, and a heart. At the bottom right, there are three buttons: 'Back', 'Next', and 'Cancel'.

Step 2: log on to the AIO with RDCMan.exe.

**Attention:** login "other user". Username: contoso\administrator; Password: 1.



### Step 3: install the necessary applications.

There are other necessary applications should be installed on AIO-13 after the apps mentioned in **Step 3** of [General Deployment of AIO Step by step](#).

### 3.1 Install Windows Management Framework 5.1.

Important: Selecting a language below will dynamically change the complete page content to that language.

Language: English [Download](#)

Windows Management Framework 5.1 includes updates to Windows PowerShell, Windows PowerShell Desired State Configuration (DSC), Windows Remote Management (WinRM), Windows Management Instrumentation (WMI). Release notes: <https://go.microsoft.com/fwlink/?linkid=839460>

[Details](#) [System Requirements](#) [Install Instructions](#)

Activate Windows  
Go to System in Control Panel to activate Windows.

#### 3.1.1 Select "Win8.1AndW2K12R2-KB3191564-x64.msu" and click Next.

File Name	Size
W2K12-KB3191565-x64.msu	20.6 MB
Win7AndW2K8R2-KB3191566-x64.zip	64.9 MB
Win7-KB3191566-d05.zip	42.7 MB
<input checked="" type="checkbox"/> Win8.1AndW2K12R2-KB3191564-x64.msu	19.0 MB
Win8.1-KB3191564-x64.msu	145 MB

Download Summary:  
KBMBGB  
1. Win8.1AndW2K12R2-KB3191564-x64.msu  
  
Total Size: 19.0 MB

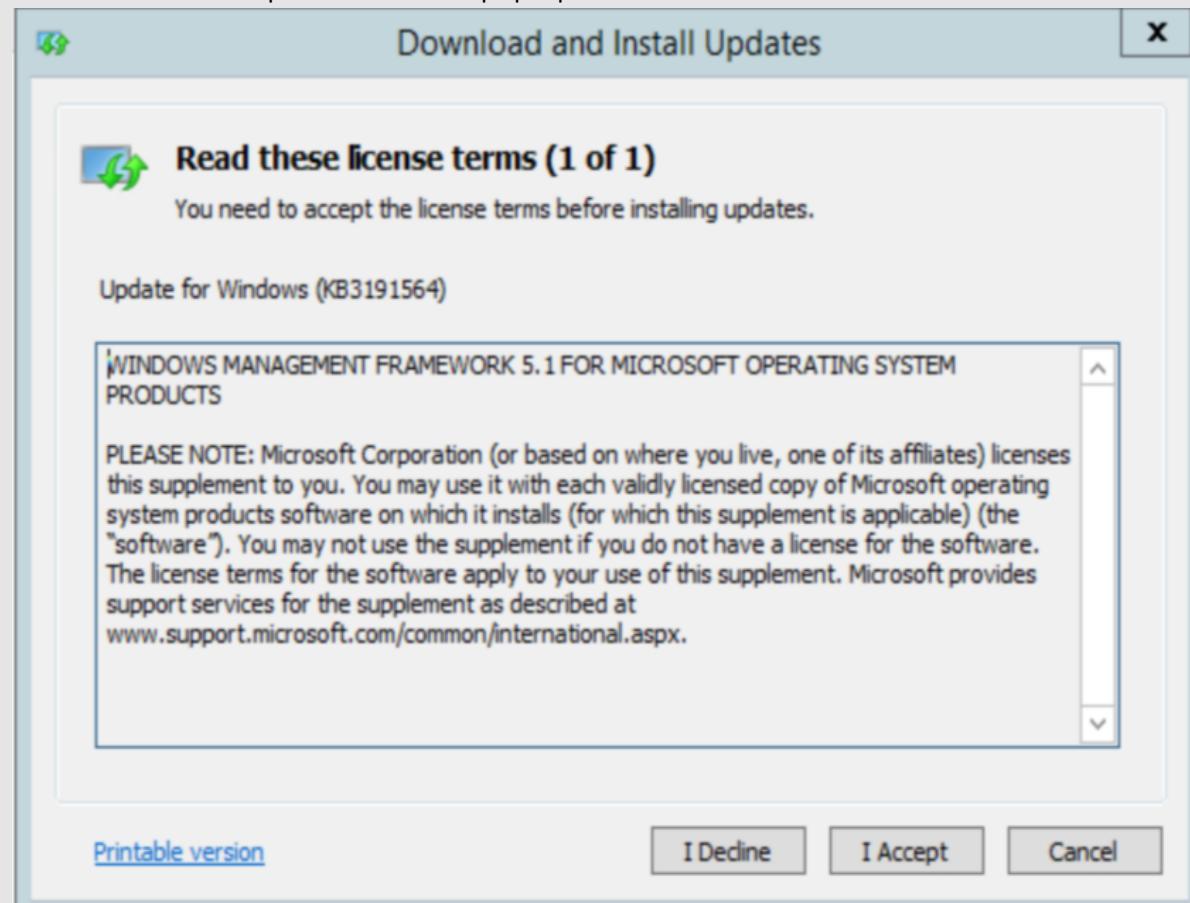
[Next](#) [Cancel](#)

Windows Management Framework 5.1 includes updates to Windows PowerShell, Windows PowerShell Desired State Configuration (DSC), Windows Remote Management (WinRM), Windows Management Instrumentation (WMI). Release notes: <https://go.microsoft.com/fwlink/?linkid=839460>

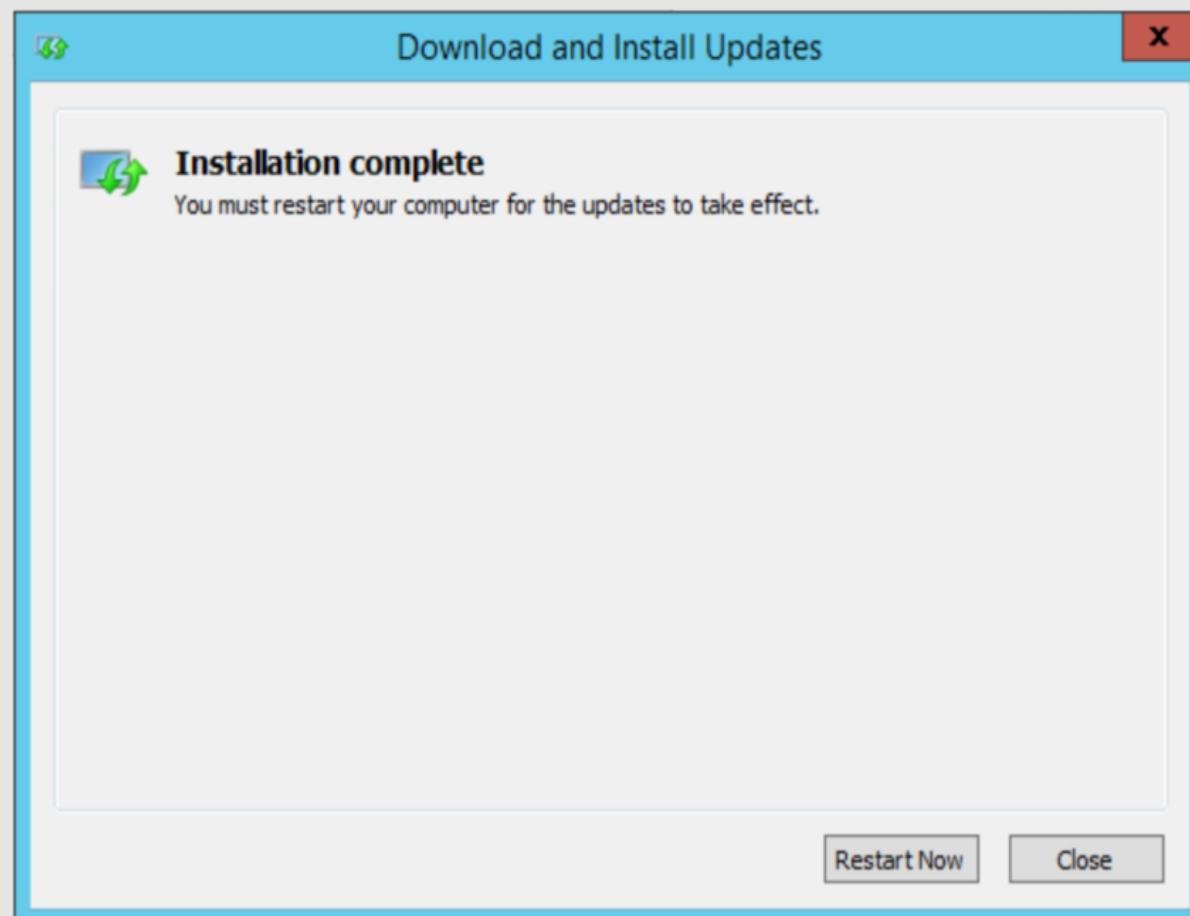
[Details](#) [System Requirements](#) [Install Instructions](#)

Activate Windows  
Go to System in Control Panel to activate Windows.

3.1.2 Click on "I Accept" button in the pop-up.



3.1.3 Click on **Restart Now** button.



3.2 Install [Microsoft Filter Pack 2.0](#).

### 3.2.1 Click on Download button.

The screenshot shows a Microsoft download page with the following elements:

- Header:** The Microsoft logo, "Download Center", and navigation links for Windows, Office, Web browsers, Developer tools, Xbox, and Windows Phone.
- Cartoon Header:** A large cartoon illustration of several Microsoft Surface devices (laptops and tablets) arranged in a cluster.
- Text:** "Surface devices" and "Original by design".
- Buttons:** A black "Shop now >" button.
- Section:** "Microsoft Office 2010 Filter Packs".
- Text:** "Important! Selecting a language below will dynamically change the complete page content to that language."
- Select Language:** A dropdown menu set to "English".
- Download Button:** A prominent red "Download" button.
- Details:** Three expandable sections: "Details", "System Requirements", and "Install Instructions".
- Follow Microsoft:** Social media links for Facebook and Twitter.
- Footer:** Navigation links for "What's new", "Microsoft Store", "Education", "Business", "Developer & IT", and "Community".
- System Tray:** Shows icons for calendar, file explorer, task manager, and system status, with the time "5:46 PM" and date "9/9/2022".

### 3.2.2 Select **filterpack64bit.exe** and click on **Next**.

The screenshot shows a Microsoft Download Center page for Surface devices. At the top, there's a navigation bar with links like Microsoft, Download Center, Windows, Office, Web browsers, Developer tools, Xbox, and Windows Phone. On the right, there are icons for Sign in, Cart, and Search. The main content area has a dark background with a blue wave pattern and the text "Surface devices" and "Original by design". Below this, a section titled "Choose the download you want" lists two files:

File Name	Size
FilterPack32bit.exe	3.5 MB
FilterPack64bit.exe	3.9 MB

To the right of the file list is a "Download Summary" box containing the following information:

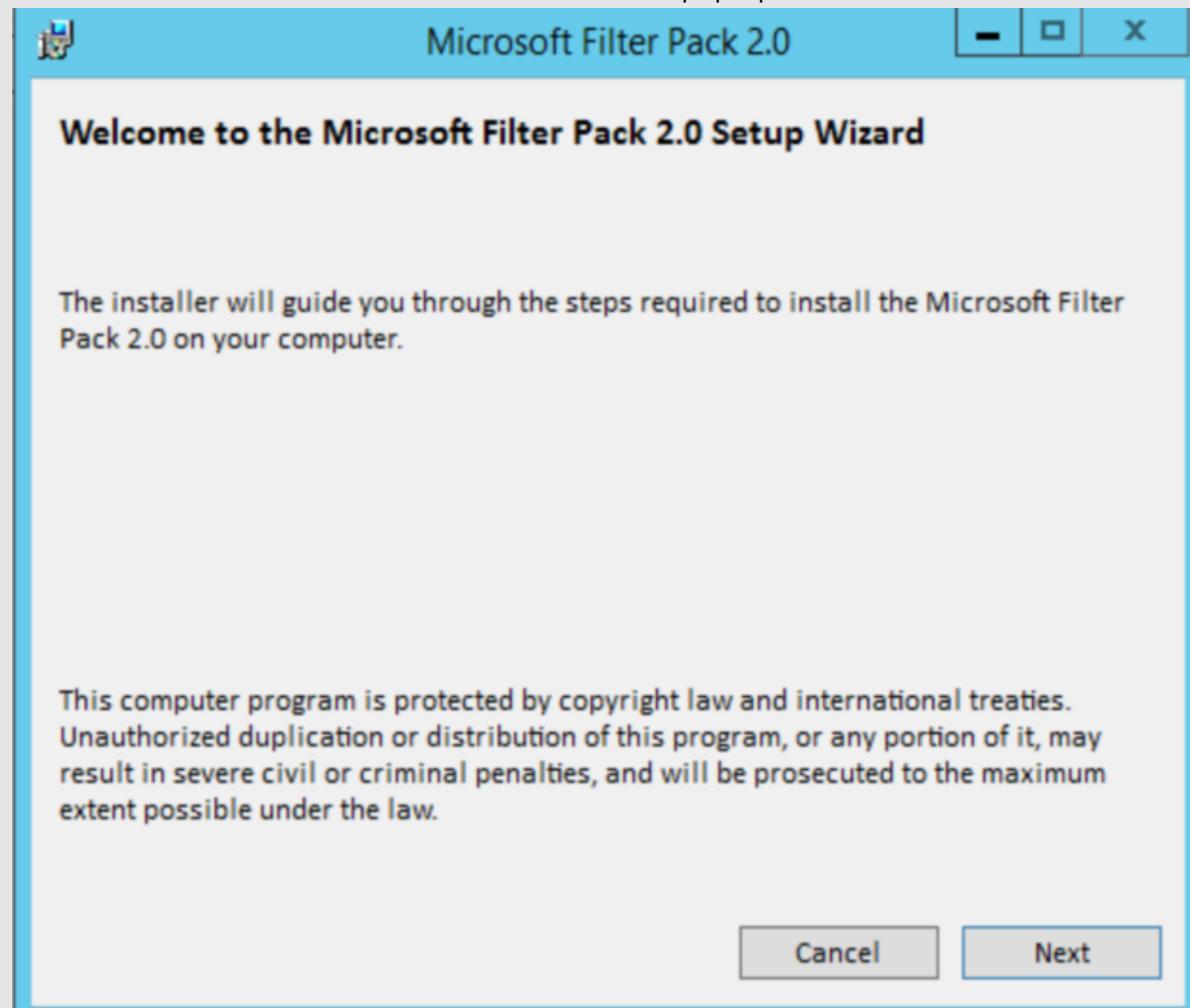
- Download Summary: KBMB08
- 1. FilterPack64bit.exe
- Total Size 3.9 MB

At the bottom of the page, there are sections for "Details" and "System Requirements", and a note about supported operating systems:

**Supported Operating System**  
Windows 7, Windows Server 2003 Service Pack 2, Windows Server 2008 R2, Windows Server 2008 Service Pack 2, Windows Vista Service Pack 1, Windows XP Service Pack 2, Windows XP Service Pack 3  
The Microsoft Filter Pack requires the Microsoft Search service.

A "Net" button is located at the bottom right of the download summary box.

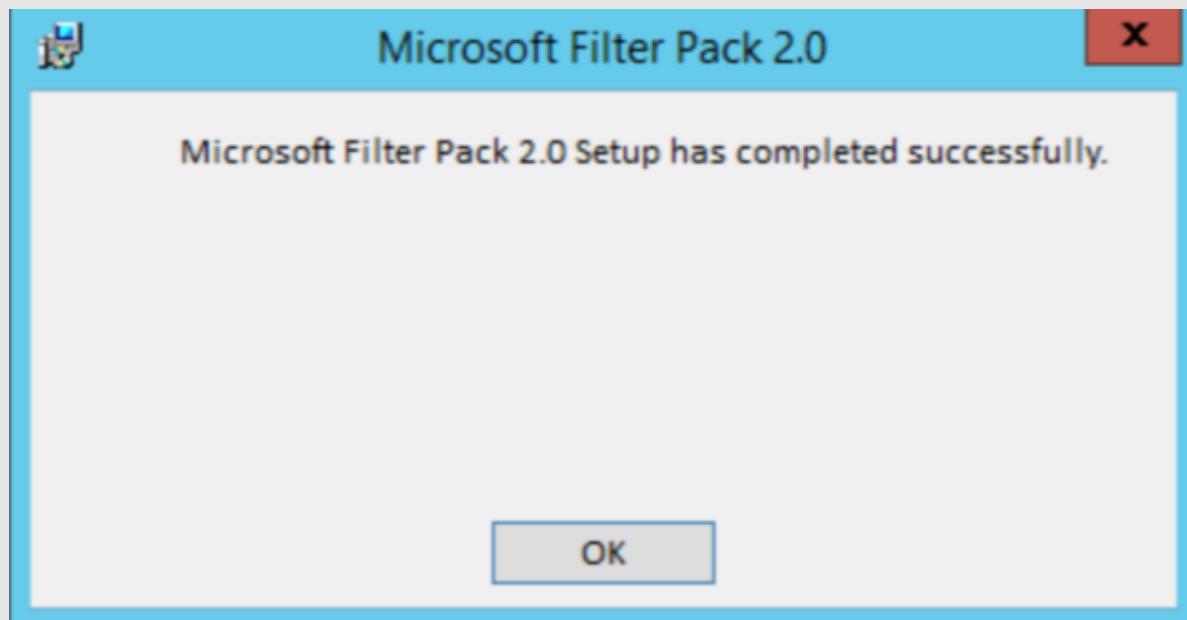
3.2.3 Double-click on the exe and click on **Next** in the pop-up.



3.2.4 Click on **Next**.

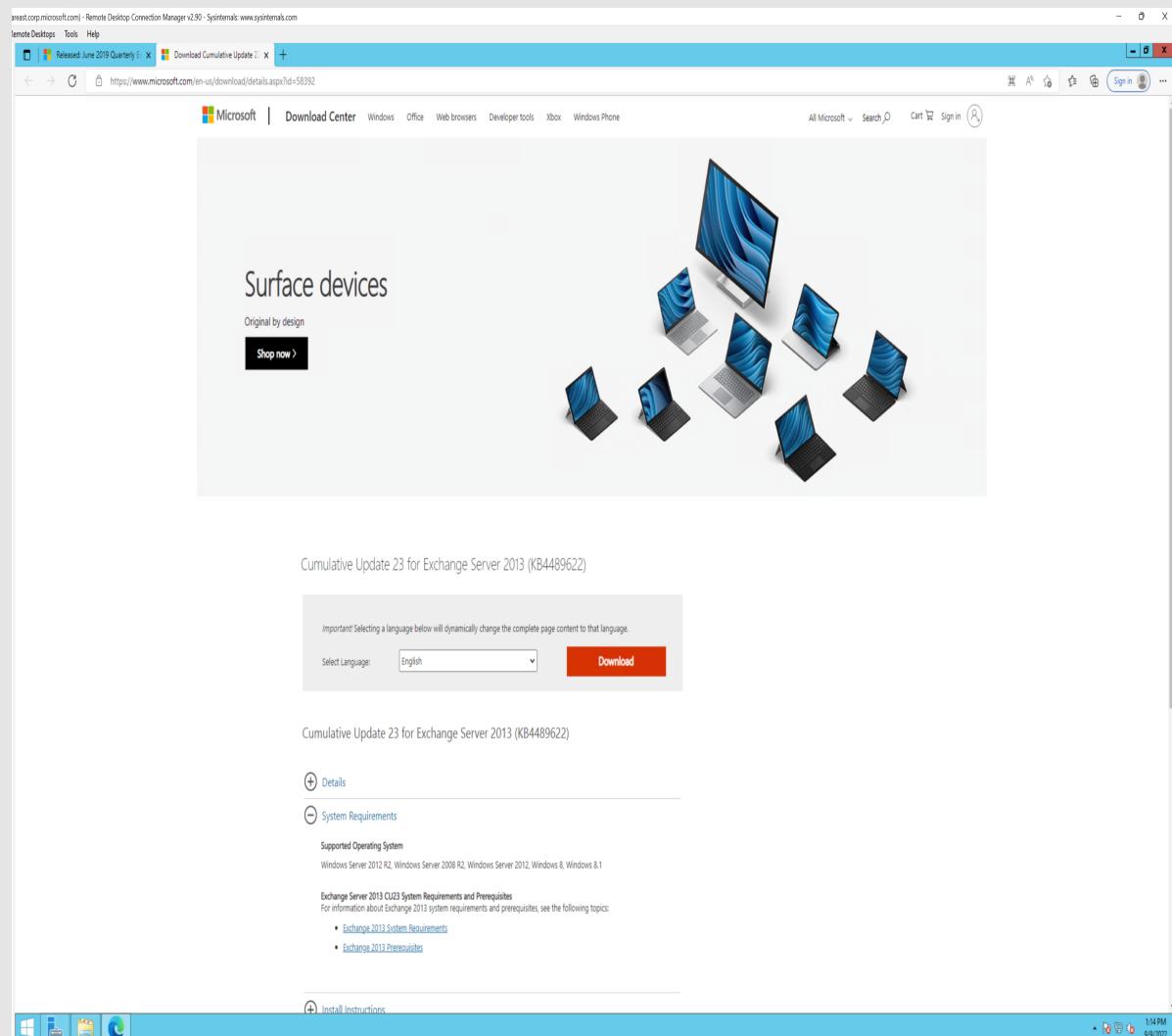


3.2.5 Click on **Ok**.

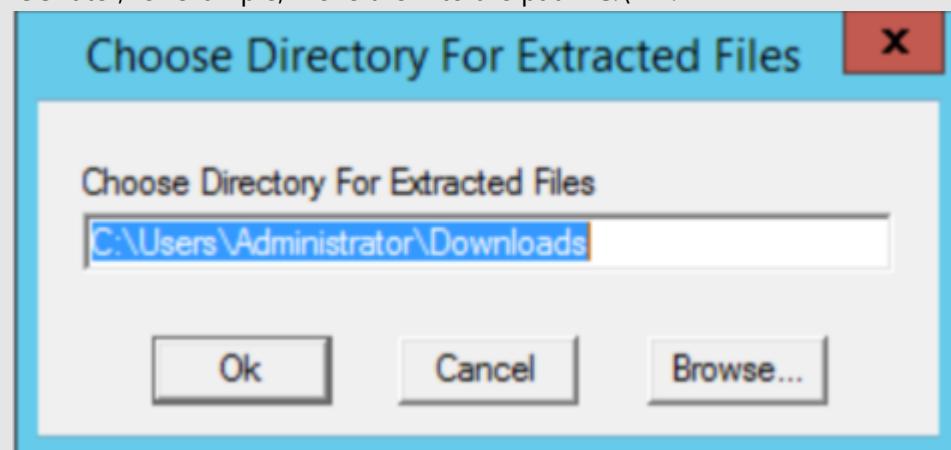


3.3 Install [Cumulative Update 23 for Exchange Server 2013 \(KB4489622\)](#).

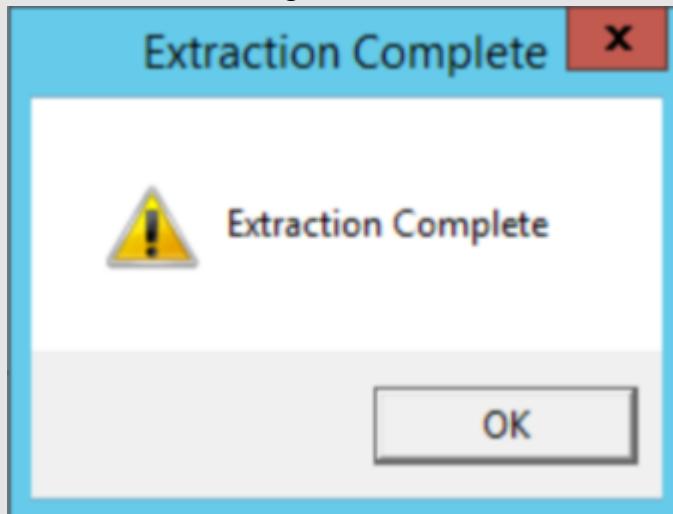
### 3.3.1 click on **Download** button.



3.3.2 Double-click on the ISO and in the pop-up, click on **OK**. You can change the folder path of ISO later, for example, move them to the path "C:\EX".



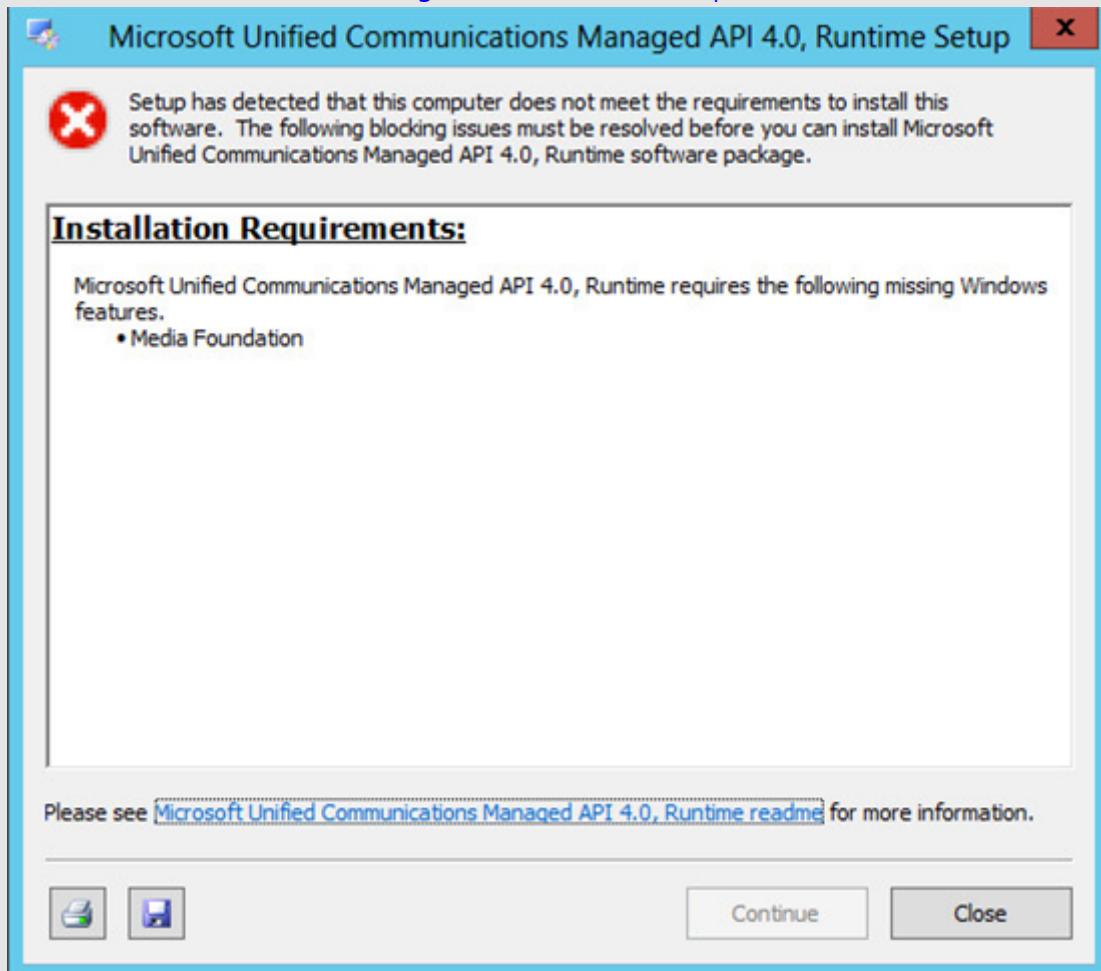
3.3.3 Wait for extracting.



The installation of necessary apps is complete.

When you install [Unified Communications Managed API 4.0 Runtime] (<https://www.microsoft.com/en-us/download/details.aspx?id=34992>) on AIO-13, you may meet the following problem.

**Problem:** If you met the pop-up like the below pic, you can follow the solution with this link:  
[Microsoft Communications Managed API 4.0 Install Error | PeteNetLive](#)



**Solution:**

Run the cmdlet and then restart the system:

```
Install-WindowsFeature Server-Media-Foundation

Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) 2016 Microsoft Corporation. All rights reserved.

PS C:\windows\system32> Install-WindowsFeature Server-Media-Foundation
Success Restart Needed Exit Code      Feature Result
----- -----           -----
True   Yes          SuccessRest... {Media Foundation}
WARNING: You must restart this server to finish the installation process.

PS C:\windows\system32>
PS C:\windows\system32>
```

Step 4: pending the ISO.

Same as [Step 4](#) in [General Deployment of AIO Step by step](#).

Step 5: prepare Windows Features.

#### 5.1 Install the RSAT Feature.

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

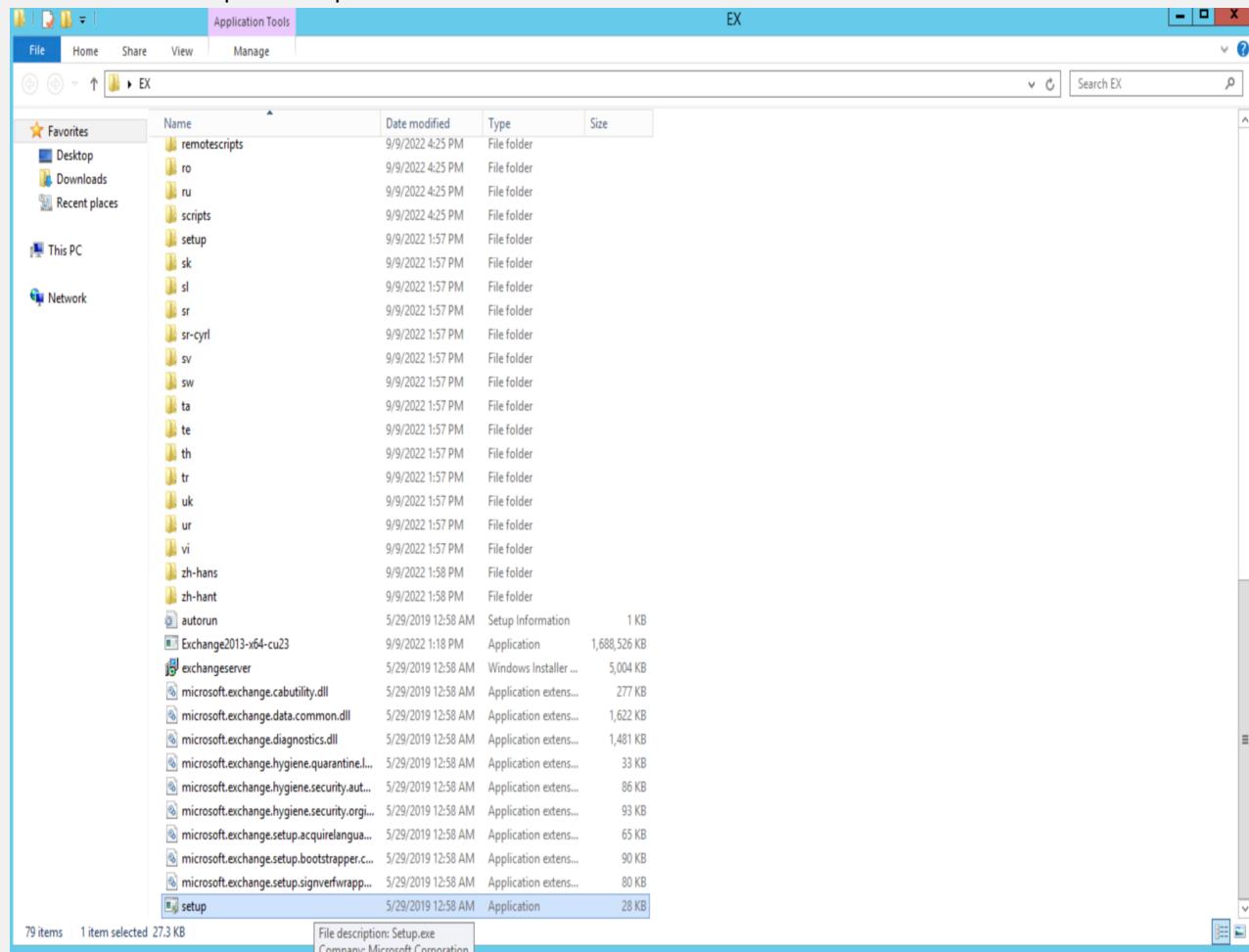
#### 5.2 Install Exchange roles.

Install-WindowsFeature AS-HTTP-Activation, Desktop-Experience, NET-Framework-45-Features, 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

### 5.3. Restart the system.

Step 6: use wizard to install exchange server 2013.

#### 6.1. Click on "setup" in the path of CU.



#### 6.2. Click on "Don't check for updates right now" and click on next. Then take the following steps as the pics display.



## MICROSOFT EXCHANGE SERVER 2013 CUMULATIVE UPDATE 23

[?](#) [X](#)

## Check for Updates?

You can have Setup download Exchange Server updates from the Internet before you install Exchange. If updates are available, they'll be downloaded and used by Setup. By downloading updates now, you'll have the latest security and product updates. If you don't want to check for updates right now, or if you don't have access to the Internet, skip this step. If you skip this step, be sure to download and install any available updates after you've completed Setup.

Select one of the following options:

- Connect to the Internet and check for updates
- Don't check for updates right now

[next](#)

## MICROSOFT EXCHANGE SERVER 2013 CUMULATIVE UPDATE 23

[?](#) [X](#)

## Introduction

Welcome to Microsoft Exchange Server 2013!

Exchange Server is designed to help you increase user productivity, keep your data safe, and provide you with the control you need. You can tailor your solution to your unique needs with flexible deployment options, including hybrid deployments that enable you to take advantage of both on-premises and online solutions. You can use compliance management features to protect against the loss of sensitive information and help with internal and regulatory compliance efforts. And, of course, your users will be able to access their email, calendar, and voice mail on virtually any device and from any location. This wizard will guide you through the installation of Exchange Server 2013.

Plan your Exchange Server 2013 deployment:

[Read about Microsoft Exchange Server 2013](#)

[Read about supported languages](#)

[Use the Exchange Server 2013 Deployment Assistant](#)



MICROSOFT EXCHANGE SERVER 2013 CUMULATIVE UPDATE 23



## License Agreement

Please read and accept the Exchange Server 2013 license agreement.

### MICROSOFT SOFTWARE LICENSE TERMS

#### MICROSOFT EXCHANGE SERVER 2013 STANDARD, ENTERPRISE, TRIAL AND HYBRID

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft

- updates,
- supplements,
- Internet-based services, and
- support services

for this software, unless other terms accompany those items. If so, those terms apply.

**By using the software, you accept these terms. If you do not accept them, do not use the software. Instead, return it to the retailer for a refund or credit.** If you cannot obtain a refund there, contact Microsoft or

- I accept the terms in the license agreement  
 I do not accept the terms in the license agreement.



next

## MICROSOFT EXCHANGE SERVER 2013 CUMULATIVE UPDATE 23

[?](#) [X](#)

## Recommended Settings

 [Use recommended settings](#)

Exchange server will automatically check online for solutions when encountering errors and provide usage feedback to Microsoft to help improve future Exchange features.

 [Don't use recommended settings](#)

Manually configure these settings after installation is complete (see help for more information).

[Read more about providing usage feedback to Microsoft](#)

[Read more about checking for error solutions online](#)

[back](#)[next](#)

## MICROSOFT EXCHANGE SERVER 2013 CUMULATIVE UPDATE 23

[?](#) [X](#)

## Server Role Selection

Select the Exchange server roles you want to install on this computer:

- Mailbox role
- Client Access role
- Management tools
- Edge Transport role
- Automatically install Windows Server roles and features that are required to install Exchange Server

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## MICROSOFT EXCHANGE SERVER 2013 CUMULATIVE UPDATE 23

[?](#) [X](#)

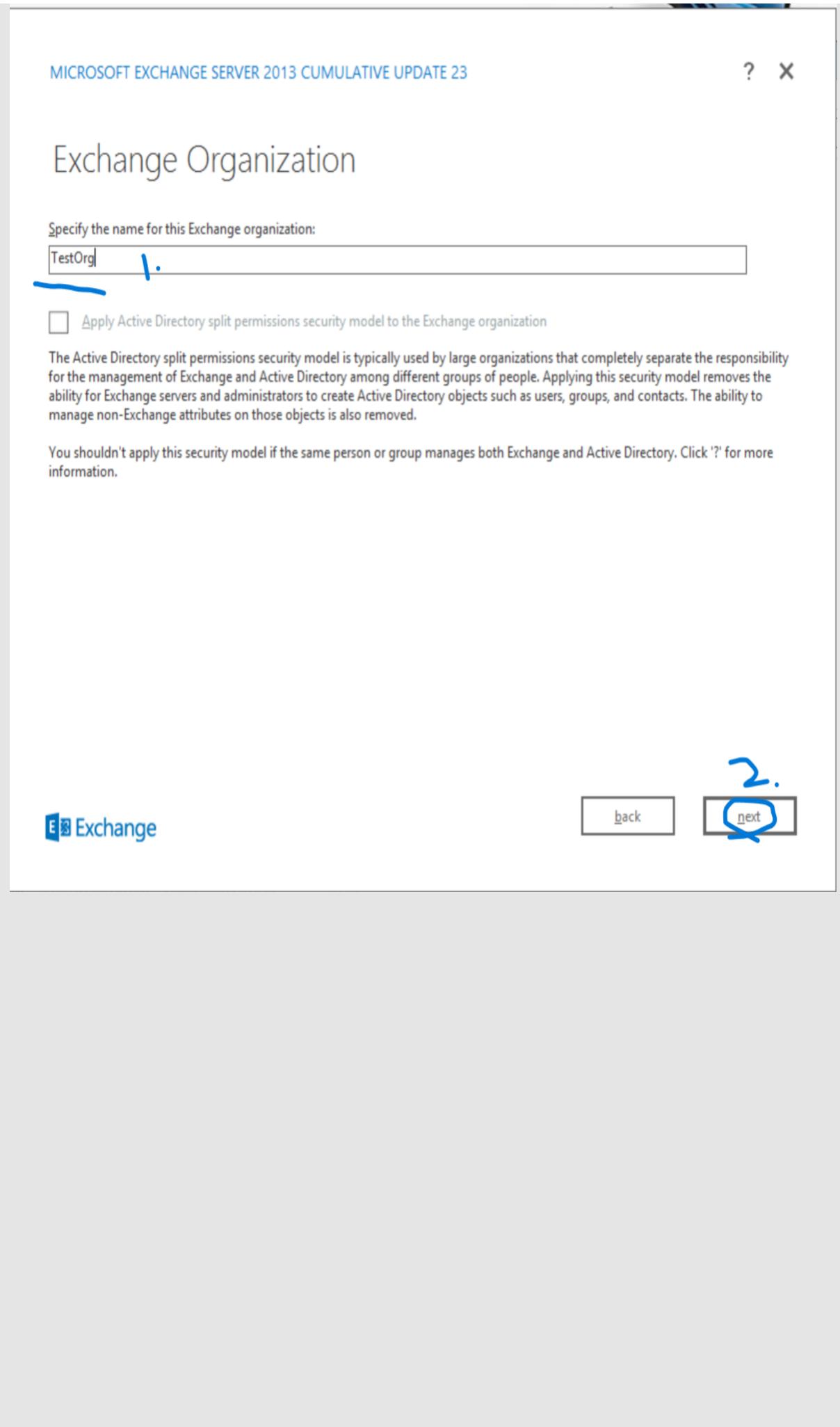
## Installation Space and Location

Disk space required: 8494.3 MB

Disk space available: 174570.8 MB

Specify the path for the Exchange Server installation:





## MICROSOFT EXCHANGE SERVER 2013 CUMULATIVE UPDATE 23

[?](#) [X](#)

## Malware Protection Settings

Malware scanning helps protect your messaging environment by detecting messages that may contain viruses or spyware. It can be turned off, replaced, or paired with other premium services for layered protection.

Malware scanning is enabled by default. However, you can disable it if you're using another product for malware scanning. If you choose to disable malware scanning now, you can enable it at any point after you've installed Exchange.

Disable malware scanning.

- Yes  
 No

Internet access is required to download the latest anti-malware engine and definition updates.

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## MICROSOFT EXCHANGE SERVER 2013 CUMULATIVE UPDATE 23

[?](#) [X](#)

## Readiness Checks

The computer will be checked to verify that setup can continue.

Configuring Prerequisites

0%

[back](#)[install](#)

## MICROSOFT EXCHANGE SERVER 2013 CUMULATIVE UPDATE 23

[?](#) [X](#)

## Readiness Checks

The computer will be checked to verify that setup can continue.

Prerequisite Analysis

100%

## Warning:

Installing Exchange Server on a domain controller will elevate the permissions for Exchange Trusted Subsystem to domain administrators.

For more information, visit: [http://technet.microsoft.com/library\(EXCHG.150\)/ms.exch.setupreadiness.WarningInstallExchangeRolesOnDomainController.aspx](http://technet.microsoft.com/library(EXCHG.150)/ms.exch.setupreadiness.WarningInstallExchangeRolesOnDomainController.aspx)

## Warning:

Setup will prepare the organization for Exchange 2013 by using 'Setup /PrepareAD'. No Exchange 2007 server roles have been detected in this topology. After this operation, you will not be able to install any Exchange 2007 servers.

For more information, visit: [http://technet.microsoft.com/library\(EXCHG.150\)/ms.exch.setupreadiness.NoE12ServerWarning.aspx](http://technet.microsoft.com/library(EXCHG.150)/ms.exch.setupreadiness.NoE12ServerWarning.aspx)

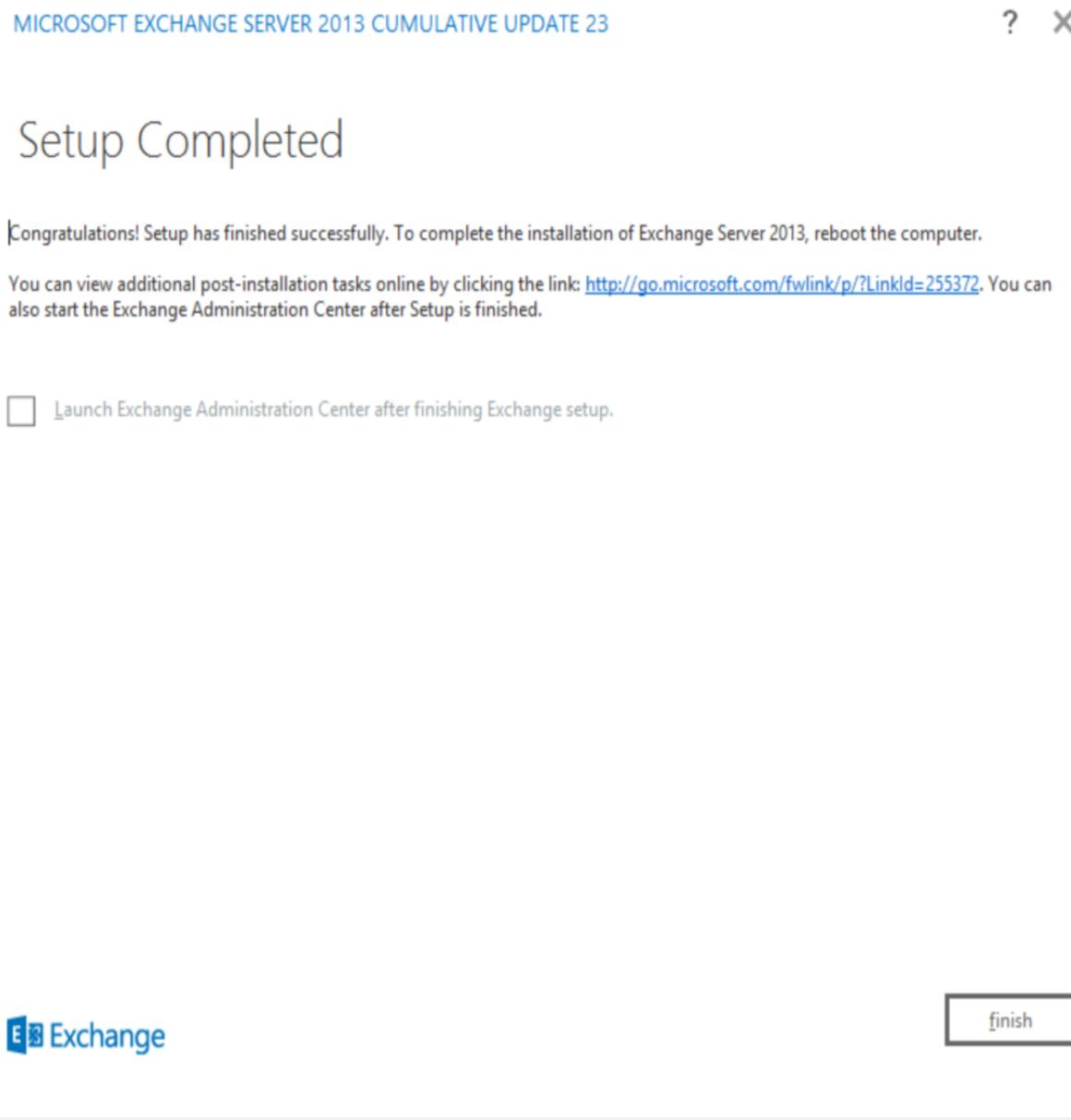
## Warning:

Setup will prepare the organization for Exchange 2013 by using 'Setup /PrepareAD'. No Exchange 2010 server roles have been detected in this topology. After this operation, you will not be able to install any Exchange 2010 servers.

For more information, visit: [http://technet.microsoft.com/library\(EXCHG.150\)/ms.exch.setupreadiness.NoE14ServerWarning.aspx](http://technet.microsoft.com/library(EXCHG.150)/ms.exch.setupreadiness.NoE14ServerWarning.aspx)



6.3. Then wait for the installation.



Step 7: install o365.

Same as **Step 8** in [General Deployment of AIO Step by step](#).

Preparation mentioned in Overview.

Same as **Preparation mentioned in Overview** in [General Deployment of AIO Step by step](#)