

Windows 10 IoT Enterprise LTSC 2021

Deployment Guide



Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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Introduction

This document provides information about installing Dell Application Store and deploying Microsoft Security Patches for Windows 10 IoT Enterprise LTSC 2021.

Dell Application Store is a bundle of Edge Device software consisting of third-party applications and Dell value-added applications. This document introduces different procedures for installing Dell Application Store on the thin clients running Windows 10 IoT Enterprise LTSC 2021 operating system.

Microsoft offers important, recommended, and optional updates. The updates provide significant benefits, such as improved security and reliability. This document is intended to download applicable security patches and create and deploy a Microsoft update stand-alone package (.msu package) or an executable (.exe package) using Wyse Management Suite.

 **NOTE:** The screenshots depict an example version number. The version information differs based on the application that you use to install. For reference of the applications versions, see the Release Notes at dell.com/support.

Topics:

- [Support matrix](#)

Support matrix

Table 1. Support matrix

Operating system	Supported platforms
Windows 10 IoT Enterprise LTSC 2021	OptiPlex 3000 Thin Client OptiPlex All-in-One 7410 Latitude 3440 Latitude 5440 OptiPlex Micro Plus 7010

Table 2. Management server details

Management server	Version
Wyse Management Suite	4.1 and later versions

Dell Application Store User Interface Installation Instructions

1. Log in to the device as admin and disable the **Unified Write Filter**.
2. Copy the DellApplicationStore.exe installer file to the local path C:\Users\Admin\Desktop.
3. Run the DellApplicationStore.exe as administrator and click **Next** to continue.



Figure 1. Welcome screen

4. Read the **Licensing Agreement**. Select **I accept the terms of the license agreement** and click **Next**.

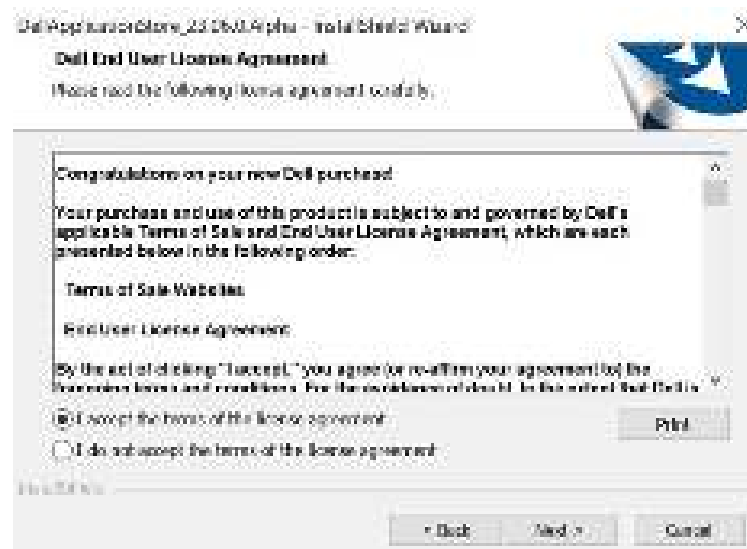


Figure 2. License agreement

5. On **Dell Value Apps Installation Window**, click on **Install**.



Figure 3. Dell Application Store

6. Installation progress bar appears.

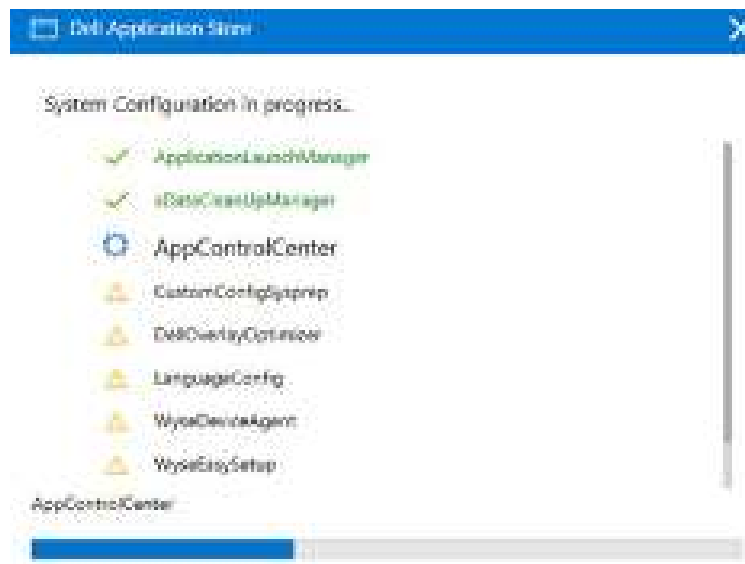


Figure 4. Dell Application Store

7. After the installation is complete, click **OK** on the caution window.

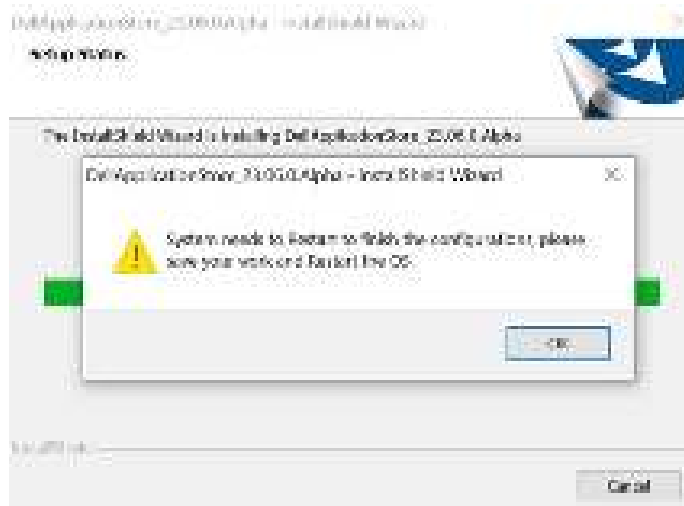


Figure 5. End User Licensing Agreement

8. Now click **Finish** and restart the device.
9. Log in to the admin account and enable the **Unified Write Filter**.

Topics:

- [Citrix Workspace Add-On User Interface Installation Instructions](#)
- [VMware Horizon Client Add-On User Interface Installation Instructions](#)
- [Amazon Workspace Add-On User Interface Installation Instructions](#)
- [List of Plugins](#)
- [Manual Installation of Plugins](#)
- [Silent Installation Method of Required Add-On Applications or Plugins](#)
- [Silent Installation of Add-On Application or Plugin Through Command Prompt](#)
- [Applications installation procedure from Wyse Management Suite](#)
- [Applications Installation procedure through Microsoft Endpoint Configuration Manager](#)
- [Client side](#)
- [Server side](#)

Citrix Workspace Add-On User Interface Installation Instructions

This application installation is supported only on Windows 10 IoT Enterprise LTSC 2021 Dell Clients image. Before installing the package, ensure that the Write Filter is disabled.

1. Login as Administrator in Windows 10 IoT Enterprise LTSC 2021 Dell Client.
2. Copy the **CitrixWorkspaceApp_2303** installer file to a local folder. Example: C:\Users\Admin\Desktop.

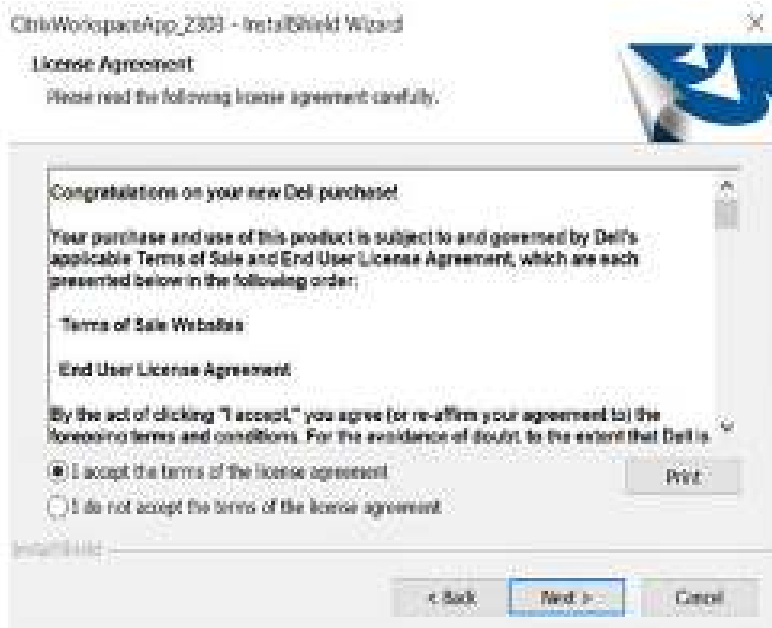
NOTE: CitrixWorkspaceApp_2303.exe is available for download from [Dell Support](#) page.

NOTE: The application version of the binary depends on the version that you choose to install. The version that is referenced is an example.

3. Right-click the **CitrixWorkspaceApp_2303** installer and Run as administrator, click **Next** to continue.



4. Read the **Dell Licensing Agreement** and select **I accept the terms of the license agreement**. Then, click **Next**.



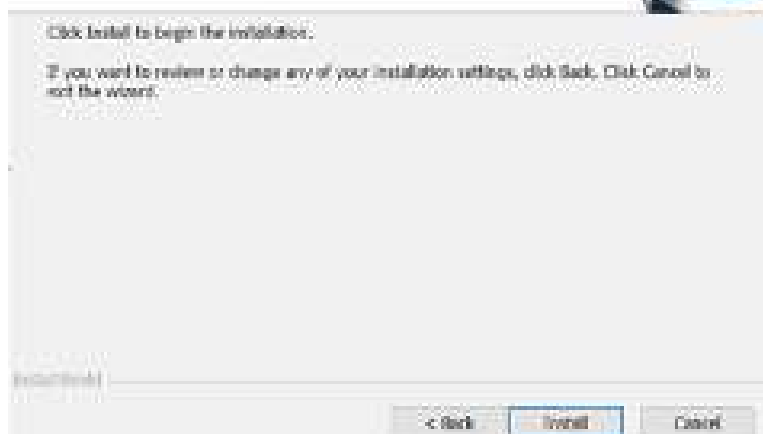
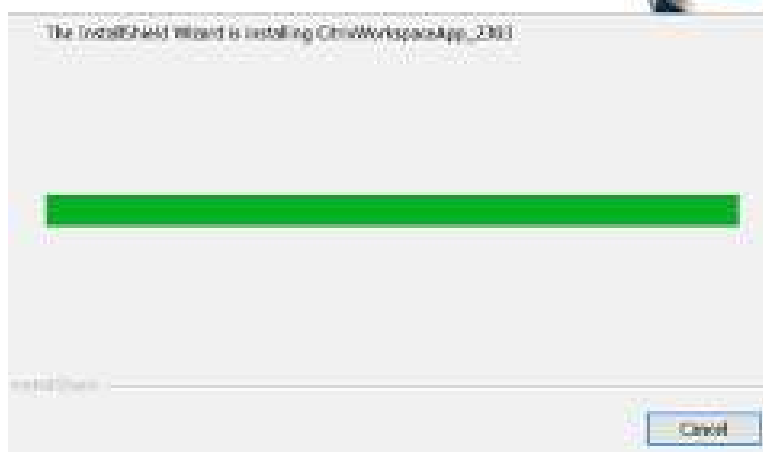
5. Read the **Citrix Licensing Agreement** and select **I accept the terms of the license agreement**. Then, click **Next**.

License Agreement

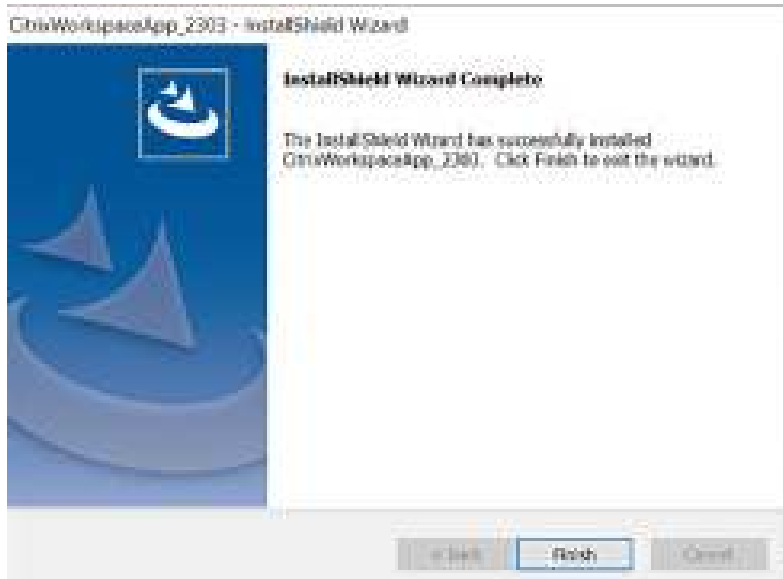
Please read the following license agreement carefully.

6. Click **Install**.**Ready to Install the Program**

The wizard is ready to begin installation.

7. Installation of **CitrixWorkspaceApp_2303.exe** starts.**Setup Status**

- Click **Finish**.



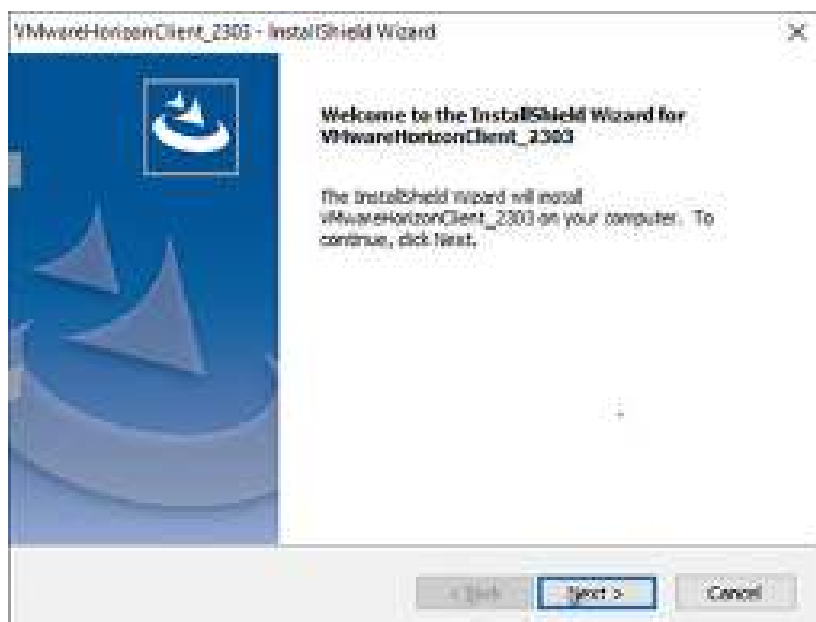
- Click **OK** and restart the device.



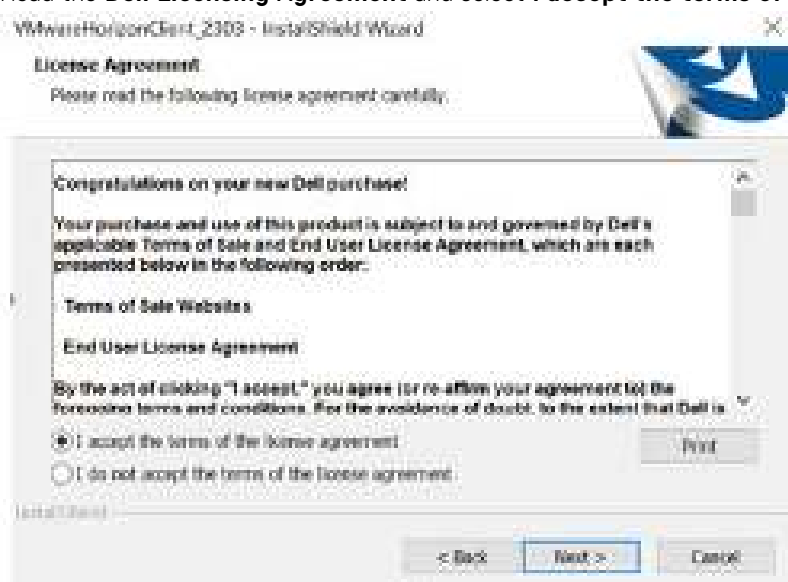
VMware Horizon Client Add-On User Interface Installation Instructions

This application installation is supported only on Windows 10 IoT Enterprise LTSC 2021 unified image. Before installing the package, ensure that the Write Filter is disabled. If the Write Filter is not disabled, it fills the Unified Write Filter Overlay and the updates that are made are not persistent across reboot.

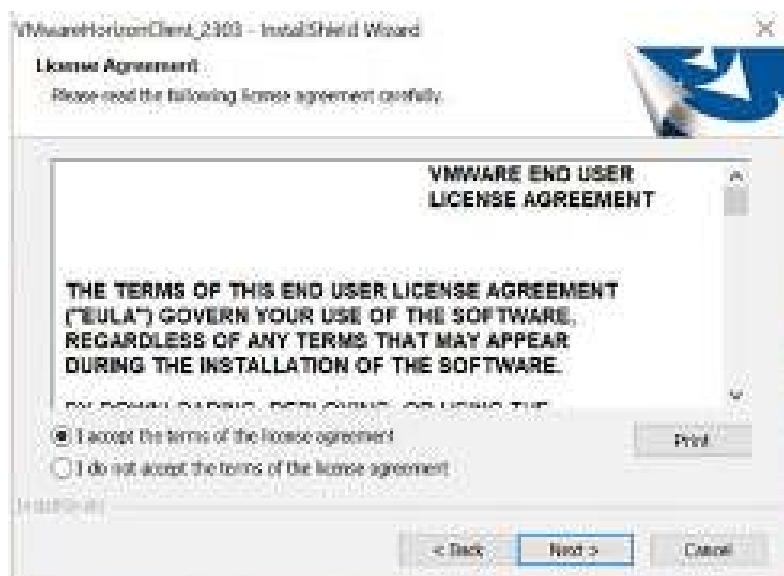
- Log in as an administrator in Windows 10 IoT Enterprise LTSC 2021 Dell Client.
- Copy the **VMwareHorizonClient_2303** installer file to a local folder. Example: C:\Users\Admin\Desktop.
 **NOTE:** The application version of the binary depends on the version that you choose to install. The version that is referenced is an example.
- Right-click the **VMwareHorizonClient_2303** installer and run as an administrator, click **Next** to continue.



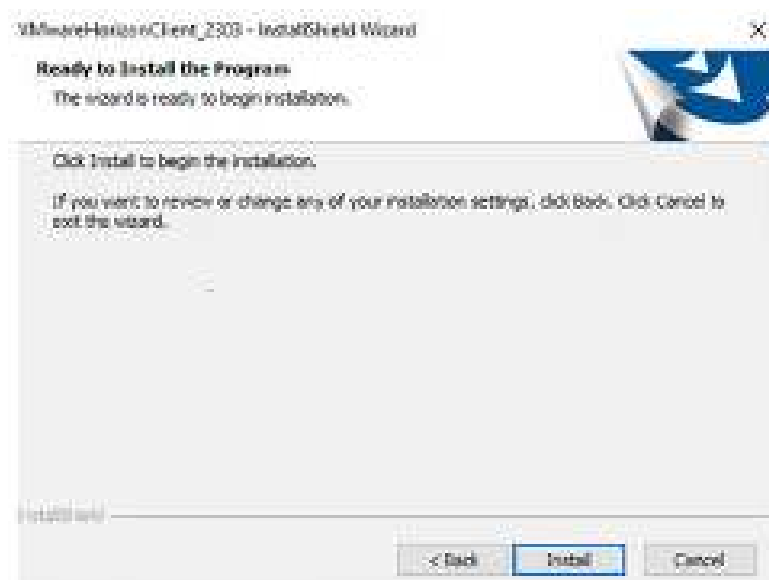
4. Read the **Dell Licensing Agreement** and select **I accept the terms of the license agreement**. Then, click **Next**.



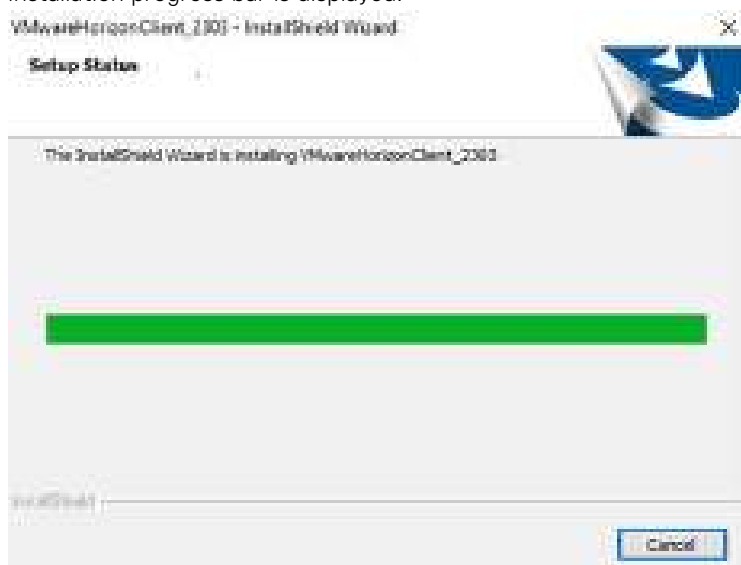
5. Read the **VMware Licensing Agreement** and select **I accept the terms of the license agreement**. Then, click **Next**.



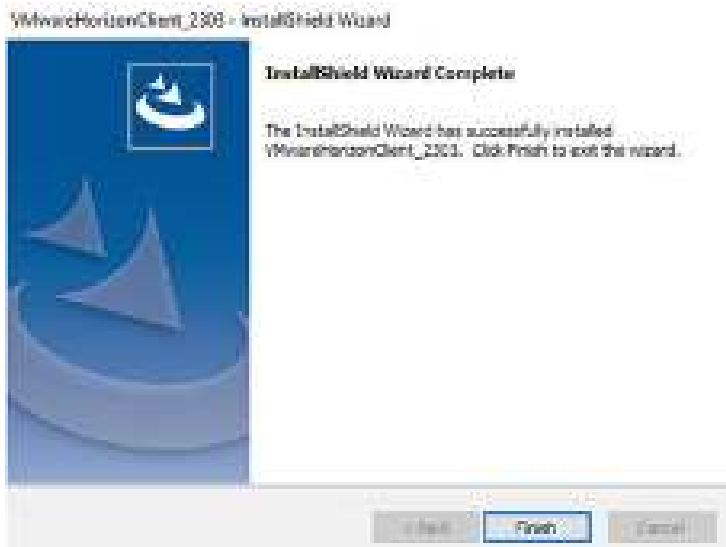
6. Click **Install**.



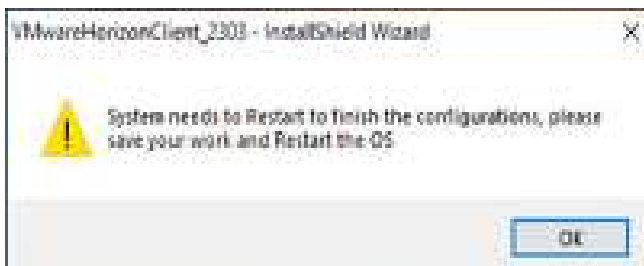
7. Installation progress bar is displayed.



8. Click the **Finish** Button.



9. Click **OK** and restart the device.



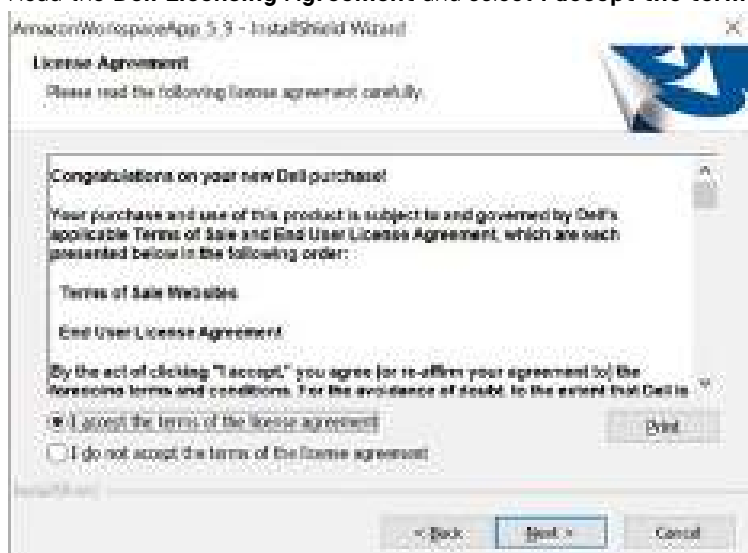
Amazon Workspace Add-On User Interface Installation Instructions

This application installation is supported only on Windows 10 IoT Enterprise LTSC 2021 unified image. Before installing the package, ensure that the Write Filter is disabled. If the Write Filter is not disabled, it fills the Unified Write Filter Overlay and the updates that are made are not persistent across reboot.

1. Login as Administrator in Windows 10 IoT Enterprise LTSC 2021 Dell Client.
2. Copy the **AmazonWorkspaceApp_5_9.exe** installer file to a local folder. Example: C:\Users\Admin\Desktop.
 (i) **NOTE:** The application version of the binary depends on the version that you choose to install. The version that is referenced is an example.
3. Right Click on the **AmazonWorkspaceApp_5_9.exe** installer and Run as administrator, click **Next** to continue.



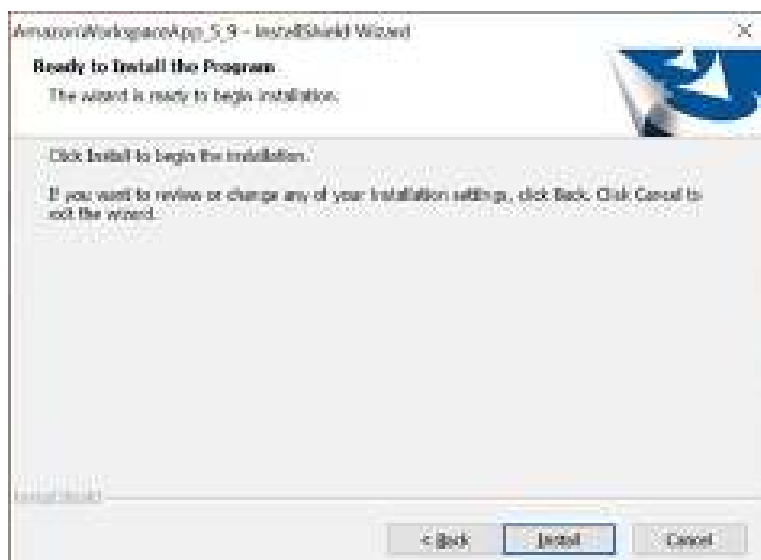
4. Read the **Dell Licensing Agreement** and select **I accept the terms of the license agreement**. Then, click **Next**.



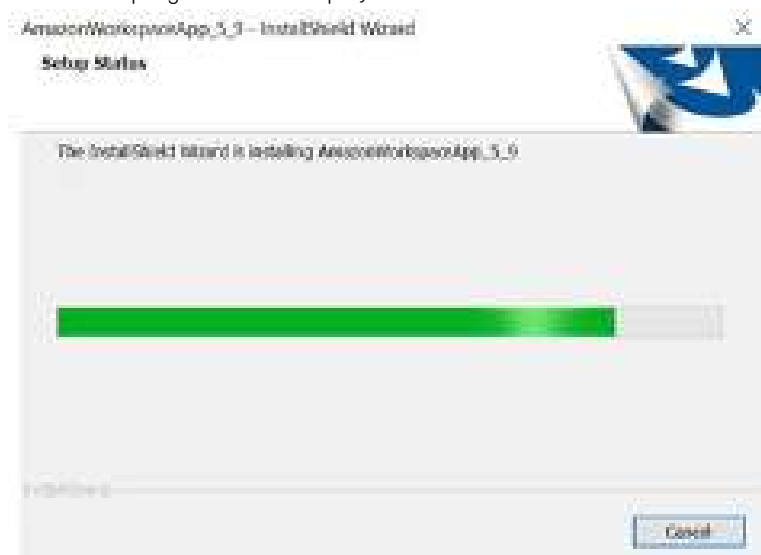
5. Read the **Amazon Licensing Agreement** and select **I accept the terms of the license agreement**. Then, click **Next**.



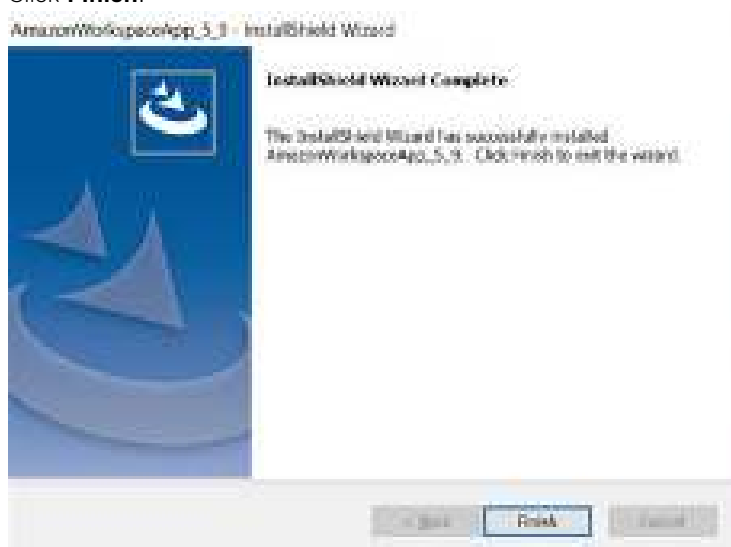
6. Click **Install**.



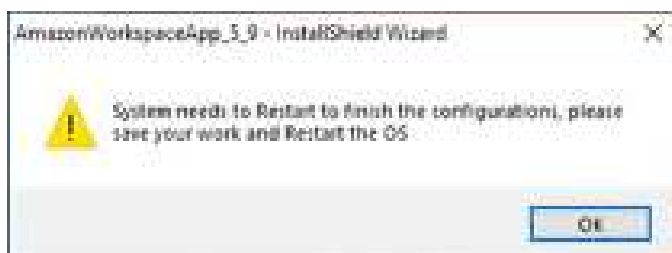
7. Installation progress bar is displayed.



8. Click **Finish**.



9. Click **OK** and restart the device.



List of Plugins

The below list of plugins can be downloaded from [Dell Support](#) page:

- Cisco Jabber Softphone for VDI (Virtual Desktop Infrastructure) Client.
- Cisco WebEx VDI ((Virtual Desktop Infrastructure) Meetings Plugin.
- Cisco WebEx VDI (Virtual Desktop Infrastructure) Plugin.
- Zoom VDI (Virtual Desktop Infrastructure) Plugin.

Manual Installation of Plugins

This application installation is supported only on Windows 10 IoT Enterprise LTSC 2021 unified image. Before installing the package, ensure that Write Filter is disabled. If Write Filter is not disabled, it fills the Unified Write Filter Overlay and the updates made are not persistent across reboot.

1. Login as Administrator in Windows 10 IoT Enterprise LTSC 2021 Dell Client.
2. Copy the **respective plugin** installer file to a local folder. Example: C:\Users\Admin\Desktop.
3. Click on the **respective plugin** installer to start the installation.
4. Follow the UI instructions and complete the installation.

Silent Installation Method of Required Add-On Applications or Plugins

Below is the list of silent parameters of the respective add-on applications or plugins which needs to be called along with the application when executed from command prompt or deployed through any management server.

Table 3.

Add-On Application / Plugin Name	Silent Installation parameters
Dell Application Store	--silent
Citrix Workspace Application	--silent
VMware Horizon Client	--silent
Amazon WorkSpaces	--silent
Cisco Jabber Softphone for VDI (Virtual Desktop Infrastructure) Client	/qn
Cisco WebEx VDI ((Virtual Desktop Infrastructure) Meetings Plugin	/qn
Cisco WebEx VDI (Virtual Desktop Infrastructure) Plugin	ALLUSERS=1 ENABLEVDI=2 AUTOUPGRADEENABLED=0 ACCEPT_EULA=1 /qn
Zoom VDI (Virtual Desktop Infrastructure) Plugin	/quiet /norestart

Silent Installation of Add-On Application or Plugin Through Command Prompt

IMPORTANT NOTE

- The below list of the steps are common for any application which shall be installed through command prompt silently.
 - The screen shots in the below listed steps of installation depicts an application file name which is just a reference or an example. You may need to ensure to add appropriate application file name and also use the appropriate application (.exe / .msi) when you choose to install.
 - The silent parameters mentioned as in the snapshot of the below steps depicts the parameter of the application which is chosen as an example. You shall use the appropriate silent installation parameters for the respective application as listed in the above table.
1. Login as Administrator in Windows 10 IoT Enterprise LTSC 2021 Dell Client.
 2. Copy the **VMwareHorizonClient_2303.exe** installer file to a local folder. Example: C:\Users\Admin\Desktop.
 3. Open Command prompt as elevated Administrator.
 4. Navigate to the copied **VMwareHorizonClient_2303.exe** installation folder in command prompt.
 5. Run the command **VMwareHorizonClient_2303.exe --silent** (the copied installer name).

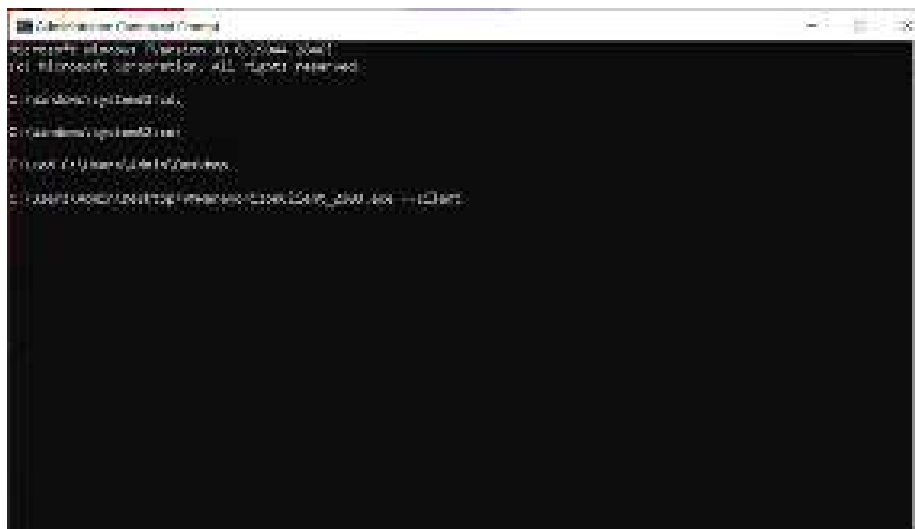


Figure 6.

6. Restart the device once installation is complete.

Applications installation procedure from Wyse Management Suite

IMPORTANT NOTE

- The steps that are mentioned below are common for any application which shall be deployed through Wyse Management Suite.
 - The screenshots in the below listed steps of deployment depict an application name which is a reference or an example. You must ensure to add the appropriate application name and also select the appropriate application when you choose to install.
 - The silent parameters mentioned as in the snapshot of the below steps depicts the parameter of the application which is chosen as an example. You shall use the appropriate silent installation parameters for the respective application.
 - After installing Quarterly release 2308 and later versions, you need not add the silent parameters in the **Installation Parameter** option for Dell Application Store and third-party applications.
1. Register the device to the **Wyse Management Suite** server and add to the respective group.
 2. Log in to the Wyse Management Suite server.
 3. Go to **Apps & Data>App Inventory>Thin Client** and click **Add WinIoT Package file**.
 4. Click **Browse** and select the **Amazon Workspace** file then click **Upload**.

5. Go to **Apps & Data>App Policies >Thin Client>Add Policy**.
6. Enter **Policy Name** and go to **Group**. Under task, select **Install Application** and select **WinIoT** as **operating system type**.

NOTE: AmazonWorkspace_Addon is an example for the policy name. You can name the policy as per your choice.

Figure 7. Standard App Policy

7. Click **Add app** in Application option and add the **AmazonWorkspaceApp_5_9.exe** file in the Apps dropdown list.
8. Enter a required time in the Install Timeout field and ' **--silent** 'as install parameter.
9. Check the check box **Enable app dependency** and WinIoT as operating system Subtype Filter.
10. Click **Save** and then click **Yes** to schedule as per the requirement.

Applications Installation procedure through Microsoft Endpoint Configuration Manager

IMPORTANT NOTE

- The below list of the steps are common for any application which shall be deployed through Wyse Management Suite.
- The screen shots in the below listed steps of deployment depicts an application name which is just a reference or an example. You may need to ensure to add appropriate application name and also select the appropriate application when you choose to install.
- The silent parameters mentioned as in the snapshot of the below steps depicts the parameter of the application which is chosen as an example. You shall use the appropriate silent installation parameters for the respective application.

Client side

1. Log in to the device as admin and disable the **Unified Write Filter**.
2. Join Thin client to the required Microsoft Endpoint Configuration Manager Domain (Set DNS if client is on another domain).
3. Login as domain user and change the Domain Administrator Time zone to Microsoft Endpoint Configuration Manager Server Time zone.
4. Go to **Control Panel > Configuration Manager > Site > Configure Settings > Find Button** where the Site CODE is displayed. Click **Apply**.



5. Select **Actions** tab and run the action item.

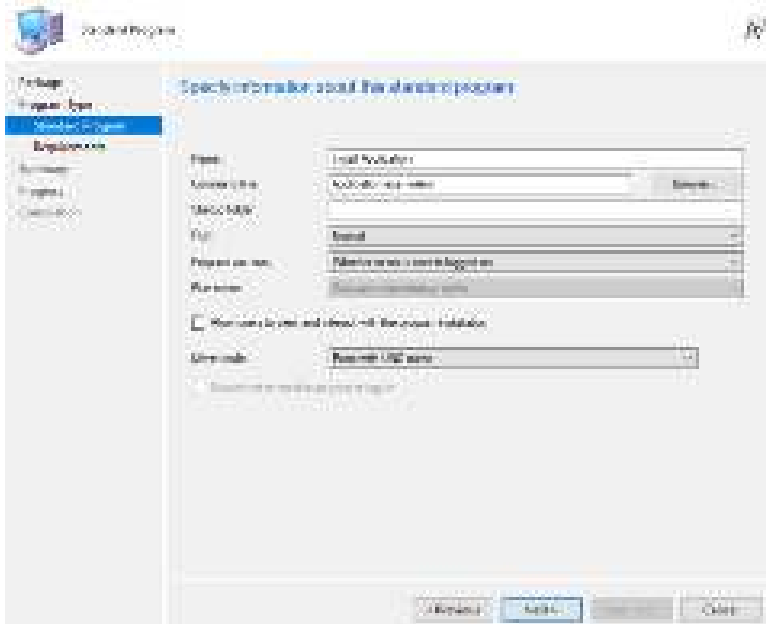
NOTE:

Run the actions items again until you get the install notification from Microsoft Endpoint Configuration Manager server.

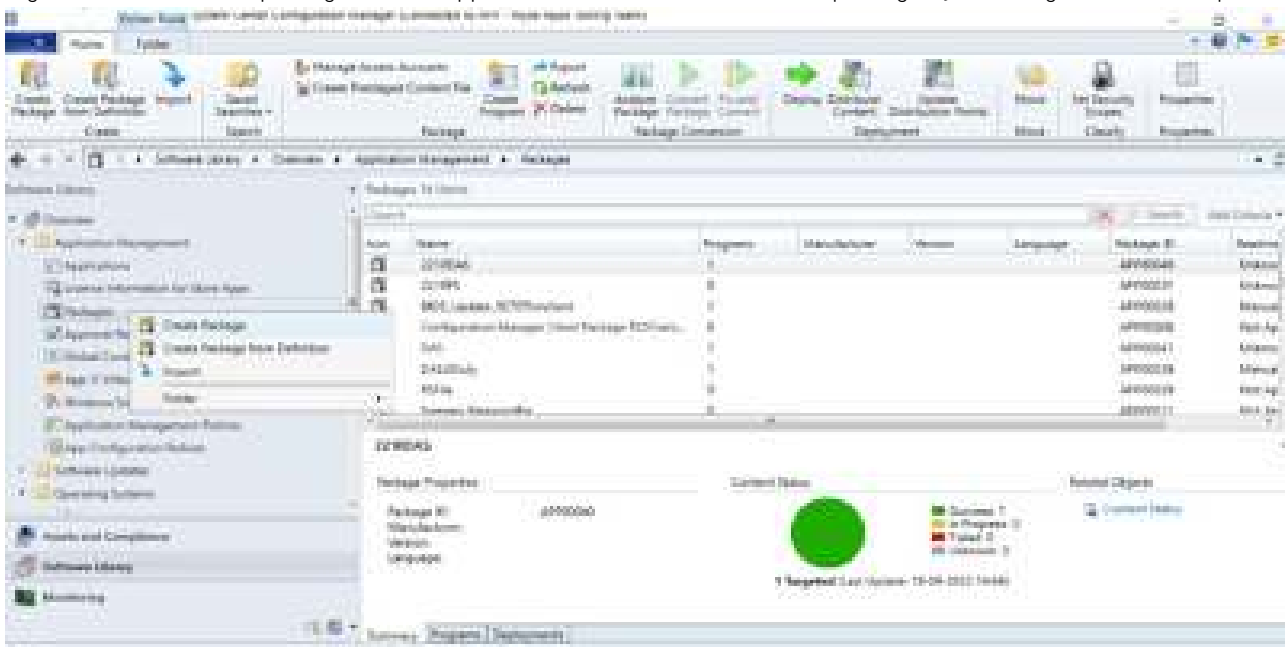
Server side

Create a folder in Microsoft Endpoint Configuration Manager share path and then copy DellApplicationStore.exe

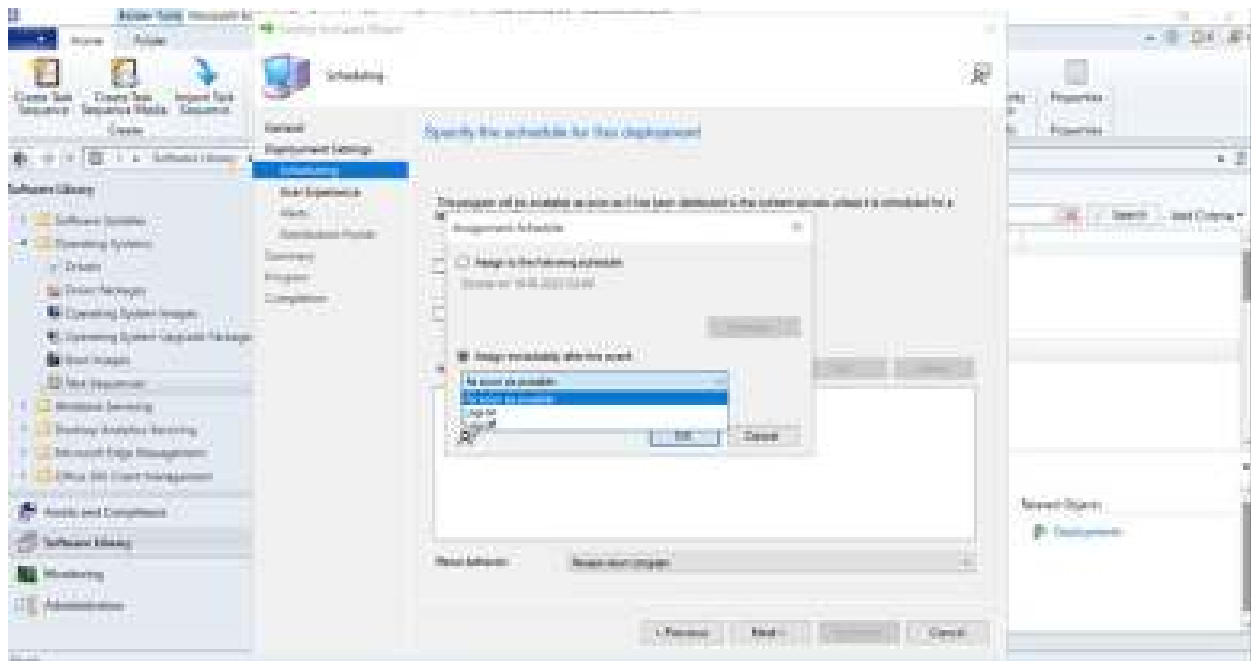
1. Launch Microsoft Endpoint Configuration Manager Server.
2. Click **Asset & Compliance > Device Collection**. Right-click and select **Create Device collection** and add registered thin client to the group.
3. Go to **Software Library > Application Management > Packages**. Right-click and create package for DellApplicationStore.exe with `--silent` as parameter in command line and Select **Whether or not a user is logged on** for Program can run as .



4. Right-click the created package for Dell Application Store and distribute the package by selecting the distribute point.



5. Go to **Software Library>Operating System>Task Sequence**. Right-click and create custom task sequence.
6. Right-click the Custom task sequence that is created and click **Edit**.
7. Click **add> Software> Install package** and provide a valid name.
8. Select **Created package** and click **OK**.
9. Right-click the **Task Sequence** and click **Deploy**.
10. Go to **Collection**, browse the collection where the device is registered and click **OK**. Then click **Next**.



11. Under purpose, select **Required**.
12. Click on **Next** and select **Enable the radio button of Assign Immediately**.
13. Under new, select **Assign immediately after this event** radio button and click **Next**. Click **Next** again.
14. Enable the **System Software Installation** check box.

Deploying security patches for Windows 10 IoT Enterprise LTSC 2021

Topics:

- Download Knowledge Base for Windows 10 IoT Enterprise LTSC 2021 from Microsoft Update Catalog
- Scheduling Unified Write Filter Servicing Mode for Windows 10 IoT Enterprise LTSC 2021 Updates Using Wyse Management Suite
- Install the MSU or EXE package using Wyse Management Suite

Download Knowledge Base for Windows 10 IoT Enterprise LTSC 2021 from Microsoft Update Catalog

This section describes the steps to download Knowledge Base files from the Microsoft Update Catalog site.

1. Go to www.catalog.update.microsoft.com.
2. In the search box, type the search terms.
For Windows 10 IoT Enterprise LTSC 2021, type the search string **21H2 + ltsb + x64**.
3. Click **Search** or press **Enter**.
4. Click **Last Updated** to sort the Knowledge Base files from newest to oldest.
5. Locate and download the following Knowledge Base files based on **Windows 10 LTSC**.

For example, Cumulative Updates for <Windows 10 LTSC> for x64-based systems <KB5013624>

 **NOTE:** Click the cumulative update to find more details on that update. Ensure to click the link under **More Information** to review the pre-requisites.

 **NOTE:** Install .NET Framework cumulative update as applicable.

 **NOTE:** When you download the latest Knowledge Base file for cumulative updates, it overrides the previous Knowledge Base files. To view the previous Knowledge Base files, click the latest Knowledge Base, and then click the **Package Details** tab.

6. After you download the Knowledge Base file, rename it by abbreviating the default name. For example, rename the file windows10.0-kb4346087-v3-x64_20f490a4493ec5ac99b6a4c357dca9d86b3ee96b.msu to windows10.0-kb4346087v3-x64.msu.

 **NOTE:** You may have to unblock the downloaded content to access the files.

Scheduling Unified Write Filter Servicing Mode for Windows 10 IoT Enterprise LTSC 2021 Updates Using Wyse Management Suite

1. Dell management software, Wyse Management Suite supports scheduled and managed unified write filter servicing mode. This will help administrators to schedule job as required for planned automatic update on the thin client.
2. Refer "Initiate Unified Write Filter servicing mode for Windows Embedded Standard device" section from Wyse Management Suite administrator guide.
 - Steps as in Wyse Management Suite administrators guide

- a. Click the Devices tab. The Device page is displayed.
 - b. Apply the filters to find the preferred device.
 - c. Select the check box of the device.
 - d. Click Initiate UWF servicing mode. An alert window is displayed.
 - e. Click Send Command.
3. For details on Wyse Management suite supporting Unified Write Filter servicing mode feature, refer "UWF Servicing mode" section in Wyse Management Suite 4.x release notes.

Install the MSU or EXE package using Wyse Management Suite

1. Copy the renamed Knowledge Base file to the Wyse Management Suite server repository.
For example, copy the downloaded file to <local-repo>\repository\thinClientApps.
2. Log in to Wyse Management Suite.
3. Click **Portal Administration**, and then click **File Repository** under **Console Settings**.
4. Select the **Local Repository** check box.
5. Click **Sync Files**.
Wait for the synchronization process to complete. The synchronization process copies the package from the repository to **Apps and Data**.
6. To verify the successful synchronization, Click **Apps and Data**.
The **Apps and Data** page is displayed.
7. Verify the copied package in the applications list.
8. Click **Add Policy** to add the policy to the required group.
 **NOTE:** If you use the .exe file that is downloaded from the Microsoft Update Catalog site, the silent parameter is /quiet/norestart. The default silent parameters are considered when you use the .msu file.
9. Update the required fields, and click **Save**.
10. Click **Yes** to deploy the policy immediately.
11. In the **App Policy** job, update the description.
12. Click **Run > Immediately**.
13. Click **Preview** and then click **Schedule**.