Windows 10 IoT Enterprise LTSC 2021 for OptiPlex 3000 Thin Client

BIOS Upgrade Guide



Notes, cautions, and warnings

(i) 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.

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

© 2022 Dell Inc. or its subsidiaries. All rights reserved. Dell, EMC, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

Contents

Chapter 1: Introduction	4
Supported thin clients	. 4
Chapter 2: Upgrading BIOS by using Wyse Management Suite	5
Chapter 3: Upgrading BIOS by using Microsoft Endpoint Configuration Manager server	6
Chapter 4: Upgrading BIOS by using USB drive	12

Introduction

This document provides the steps to update the BIOS on Windows 10 IoT Enterprise LTSC 2021 for OptiPlex 3000 Thin Client. You can update the BIOS by using one of the following methods:

- Wyse Management Suite
- Microsoft Endpoint Configuration Manager
- USB drive—Manual update
- () NOTE: The build number of the BIOS is represented as x.x.x. The value of x is not constant and changes with every update to the build. The build number that is displayed in the images is for reference only, and the build number on your system may vary.

Topics:

• Supported thin clients

Supported thin clients

The following thin client runs on Windows 10 IoT Enterprise LTSC 2021:

• OptiPlex 3000 Thin Client

Upgrading BIOS by using Wyse Management Suite

Prerequisites

Wyse Device Agent version 14.1.0.3 or later must be installed.

Steps

- 1. Go to support.dell.com.
- 2. Click Product Support, enter the Service Tag of your thin client, and then click Submit.

(i) NOTE: If you do not have Service Tag, manually browse for your thin client model.

- 3. Click Drivers and Downloads.
- 4. From the **Operating system** drop-down menu, select the appropriate operating system.
- 5. Scroll down the page and download the BIOS package (.exe file) to your system.
- 6. Copy the downloaded .exe file (raw installer file) to the Wyse Management Suite server repository. For example, copy the downloaded file to <drive C>\Share\repository\thinClientApps.
- 7. Log in to Wyse Management Suite.
- 8. Click Portal Administration, and then click File Repository under Console Settings.
- 9. Select the Local Repository check box.
- 10. Click Sync Files.

Wait for the synchronization process to complete. The synchronization process copies the package from the repository to **Apps and Data**.

- Click Apps and Data. The Apps and Data page is displayed.
- 12. Verify the copied package in the Applications list.
- **13.** To create a group in the Wyse Management Suite server, click **Groups & Configs**. The **Groups & Configs** page is displayed.
- 14. Click the Plus sign (+) button and enter the required details to register your client in the same group.
- Click Apps and Data.
 The Apps and Data page is displayed.
- 16. Click Thin Clients under App Policies.
- 17. Click Add Policy to add the policy to the required group.

() NOTE:

- The silent installation parameter is /s /r /p=<Password>, and the default password is Fireport.
- For the WDA 14.x.exe files, .msi files, and .msu files, the silent installation parameter is not required.
- 18. Update the required fields, and then click Save.
 - An **Alert** window is displayed.
- 19. Click Yes.

(i) NOTE: The lock screen is displayed during the package installation process on all the thin clients.

The package is deployed immediately.

Upgrading BIOS by using Microsoft Endpoint Configuration Manager server

Prerequisites

Ensure that you are using Microsoft Endpoint Configuration Manager server 2016 or later.

Steps

- **1.** Go to support.dell.com.
- 2. Click **Product Support**, enter the **Service Tag** of your thin client, and then click **Submit**.

(i) NOTE: If you do not have Service Tag, manually browse for your thin client model.

- 3. Click Drivers and Downloads.
- 4. From the **Operating system** drop-down menu, select the appropriate operating system.
- 5. Scroll down the page and download the respective .exe file.
- 6. In Configuration Manager Content Source Share, create a folder with the name Packages.
- 7. Copy the installation package to the Packages folder.
- 8. Open the System Center Configuration Manager console, and go to Software Library > Application Management > Packages.
- **9.** Click **Packages**, and select **Create Package**. The **SCCM** screen is displayed.

Home Folder									^ 🔞
Create Create Package Import Package from Definition Create Searches	Manage Access Accounts Create Prestaged Content File Create Program Package		Update Distribution Points pyment		Security copes Classify Proper	ties			
🗲 -> - 👩 \ + Software Library + C	Verview + Application Management + Packages								• 2
Software Library	Packages 14 items								
4 🗇 Overview	Search							X P Search	Add Criteria *
A Deplication Management	lcon Name	Programs	Manufacturer	Version	Language	Package ID			
Applications	Boot_Time_Fix_WES7P	1			- 0 D	NPI0001A			
License Information for Store Apps	BootTime	1				NPI0001C			
Packages	Disable_WF	1				NPI00042			
Approval Requests	Enable WF	1				NPI00043			
[4] Global Condit Manage application reque	Carofree Lizative	1				NP100049			
App-V Virtual Center applications that re	sts from users for software on approval.	1				NP10004A			
Windows Sideloading Keys	Ucense Ucense	0				NPI00024			
	WIE10Solano_sysprep	0				NPICOCOA			
E Application Management Policies	WIE10-UWF-enable	1				NP100048			
App Configuration Policies	Write_Merlin_Sig	0				NPICOCOE			
Software Updates	Docking Station	1	Dell	1000	Eng	NPI00041			
Operating Systems	TESTexclusion	1	dsfsd		sdf	NPI00020			
Windows 10 Servicing	Configuration Manager Client Upgrade	1	Microsoft	6.0	ALL	NPI00040			
	Configuration Manager Client Package	0	Microsoft Corpo	hari		NPI00001			
	Boot_Time_Fix_WES7P Package Properties		Content Sta					Related Objects	*
			Content sta	tus					
	Package ID: NPICOOTA Manufacturer: Version: Language:					0 Targeted (Last Update: Never)	Success: 0 In Progress: 0 Failed: 0 Unknown: 0	G Content Status	
🐖 Assets and Compliance									
Software Library									
Monitoring									
Administration									
Ready	Summary Programs Deployments								
(action 1									



The Create Package and Program Wizard screen is displayed.

🗑 Create Package and Pro	ıgram Wizard		×
Package Program Type Standard Program Requirements Summary Progress	Enter a name an	mation about this package d other details for the new package. To take full advantage of new features that include the og, use an application instead.	
Completion	Na <u>m</u> e: <u>D</u> escription:	BIOSupdate	^
	Manufactur <u>e</u> r: Language:		
	Sour <u>c</u> e folde	e contains source files r: <u>V V</u> Br <u>o</u> wse	
		< <u>Previous</u> <u>Next</u> > <u>Summary</u> Car	ncel

Figure 2. Create Package and Program Wizard

10. Click Next.

The **Program Type** screen is displayed.

Create Package and Pro		×
Package Program Type Standard Program Requirements Summary Progress Completion	Choose the program type that you want to create Standard program Create a program for a clent computer. Program for device Create a program for a device. Do not create a program	
	Create a package, but do not create a program. You can use the Create Program Wizard to add a program later.	

Figure 3. Program Type

11. Select Standard Program, and click Next.

The Standard Program screen is displayed.

Standard Pro	ogram		
Package Program Type Standard Program	Specify informati	on about this standard program	
Requirements	Na <u>m</u> e:	BIOSupdate	
Summary	Command line:	Brows	e
Progress	S <u>t</u> artup folder:		
Completion	<u>B</u> un:	Normal	~
	Program can r <u>u</u> n:	Only when a user is logged on	~
	Run mod <u>e</u> :	Run with user's rights	~
	Drive mode:	and interact with the program installation	
	Reconnect to distri	oonion p⊵nin on nog on	

Figure 4. Standard Program

- 12. In the Standard Program package, enter the package name.
- 13. In the Command Line field, navigate to the folder where the BIOS executable file is located, and select it.
- 14. Click Next.

The **Requirements** screen is displayed.

Create Package and Prog	gram Wizard		×
Package Program Type Standard Program	Specify the requirements for this	standard program	
Requirements Summary	Bun another program first		
Progress	Package:		Browse
Completion	Program:		\sim
	Always run this program first		
	Platform requirements		
	This program can run on any platform		
	O This program gan run only on specified plat	forms	
	Al Windows RT		^
	All Windows 10 (32-bit)		
	Al Windows 10 (64-bit) Al Windows 7 (64-bit)		
	Al Windows 8 (64-bit) Al Windows 8.1 (64-bit)		
	Windows Embedded 8 Industry (64-bit)		
	Windows Embedded 8 Standard (64-bi		<u> </u>
	Estimated disk space:	Unknown	~ MB ~
	Maximum allowed run time (minutes):	120	
	maanian alonoo larano yanatooj.	120	~
		< Previous Next > S	ummary Cancel

Figure 5. Requirements

15. Click Next.

The **Summary** screen is displayed.

Treate Package and Pro	gram Wizard	×
Package Program Type Standard Program Requirements Summary	Confirm the settings Details: General:	
Progress Completion	Name: BIOSupdate Description: Version: Publisher: Language: Source files: \\ Always obtain files from the source folder Program Type: Standard Program Program: Name: BIOSupdate Command line: Start in: Run: Normal Run mode: Run with user's rights Program can un: Only when a user is logged on Allow users to view and interact with the program installation Drive mode: Runs with UNC name Requirements: Platforms supported: Any Platforms supported: Any Maximum allowed runtime(minutes): 120	
	To change these settings, click Previous. To apply the settings, click Next. < Previous Next > Summary Cancel	

Figure 6. Summary

16. Verify the information that you have provided, and click $\ensuremath{\textit{Next}}.$

The **Completion** screen is displayed.

Create Package and Progr	rəm Wizərd	×
Package Program Type Standard Program Requirements Summary	The Create Package and Program Wizard completed successfully	
Progress Completion	 Success: General: Name: BIOSupdate Description: Version: Publisher: Language: Source files: \lambda Always obtain files from the source folder Success: Program Type: Standard Program Success: Program Type: Standard Program Success: Program: Name: BIOSupdate Command line: Start in: Run: Normal Run mode: Run with user's rights Program can run: Only when a user is logged on Allow users to view and interact with the program installation Drive mode: Runs with UNC name Success: Requirements: Platforms supported: Any 	E
	< <u>P</u> revious <u>N</u> ext > Summary	Close

Figure 7. Completion

17. Click Close.

18. Right-click the package, and select **Distribute Content**.

Create Create Package Import Saved Package from Definition Searches • Create Search	Menage Access Accounts Create Pressaged Content File Create Pressaged Content File Process Pr	Distribution Points	Move Set Security Scopes Move Classify	Properties Properties		- ¢
						* *
Software Elberry	Packages 15 fitms Exerch Lean BOS-pdate BOS-pdate BootTime Databook FitterSeadon FitterSeadon Witter-UVF-reable Databook Witter-UVF-reable Databook Satissing Docking Sation Configuration Manager Clean Configuration Manage	55 Delete Delete	Version Larg	NPI00020		X P Search Add Criteria *
Assets and Compliance Software Librery Monitoring Administration	BIOSupdate Peckage Properties Package ID Manufacture: Version: Language	Content Status	0	Targeted (Last Update: 4/24/2017 11:55 AM)	■ Success 0 In Pogras 0 ■ Failet 0 ■ Unknown: 0	Related Objects

Figure 8. Distribute Content

19. After the package content is distributed, check if the status of the package turns green.

20. Add the client to the domain, and verify if it is displayed on the SCCM server.

21. In the target client, go to **Assets and compliance** > **Devices** and check the MAC ID of the client.

- **22.** Add the device to the device collection.
- **23.** Deploy the BIOS package to the created device collection. The client restarts and upgrades the BIOS.

Upgrading BIOS by using USB drive

To upgrade the BIOS—by using the USB drive—from the operating system, do the following:

- 1. Download the BIOS binary file and copy it to a USB drive.
- 2. Run the file on the target thin client.
- 3. Click Ok.

The client restarts and upgrades the BIOS.

(i) NOTE: The executable file can also be downloaded and run directly on the target thin client.

To upgrade the BIOS—by using the USB drive—through the BIOS boot menu, do the following:

- 1. Copy the downloaded executable file to a USB drive.
- $\ensuremath{\textbf{2.}} \ensuremath{\text{Plug}} \ensuremath{\text{in the USB}} \ensuremath{\text{drive into a USB port.} \ensuremath{} \ensuremath{\textbf{2.}} \ensu$
- **3.** During system start-up, press **F12**.
 - The **Boot Menu** is displayed.
- 4. In Other Options, select BIOS Flash Update.
- 5. Navigate to the downloaded executable file, and click Ok.
- 6. Verify the existing system BIOS information, and the BIOS update information.
- 7. Click Begin Flash Update.
- 8. After you review the warning message, click Yes.

The client restarts and upgrades the BIOS.