Windows 10 IoT Enterprise for Dell Wyse Thin Clients

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.**

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

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Contents

Introduction

This document provides the steps to update the BIOS on Windows 10 IoT Enterprise for Dell Wyse thin clients. You can update the BIOS by using one of the following methods:

- Wyse Management Suite
- Wyse Device Manager Server (WDM)

   ⓘ **NOTE: You cannot update the BIOS using WDM on Wyse 5070 Thin Client, Wyse 5470 Thin Client, and Wyse 5470 All-in-One Thin Client.**

- System Center Configuration Manager (SCCM) server
- 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.**

Supported thin clients

The following are the list of thin clients that run on Windows 10 IoT Enterprise:

- Wyse 5470 Thin Client
- Wyse 5470 All-in-One Thin Client
- Wyse 5070 Thin Client with Celeron processor
- Wyse 5070 Thin Client with Pentium processor
- Wyse 5070 Extended Thin Client with Pentium processor
- Wyse 5060 Thin Client
- Wyse 7040 Thin Client
- Latitude 3480 mobile Thin Client
- Latitude 5280 mobile Thin Client

(i) **NOTE: The Wyse 7040 Thin Client support Windows 10 IoT Enterprise Threshold 1 operating system and the remaining thin clients support Windows 10 IoT Enterprise Redstone 1 operating system.**

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**.
11. 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.
15. 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.

    (i) **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 WDM server

Prerequisites

Ensure that you are using WDM server setup v5.7.2 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**.

   ⓘ **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. Extract and store the file in your local repository or the WDM server.
7. Log in to the WDM server.
8. Click **Applications** > **Other Packages**, and then click the plus icon.
   The Dell Wyse Device Manager screen is displayed.

Figure 1. Dell Wyse Device Manager

9. Click **Download**.
10. Double-click the downloaded package.
    The **WDM Package Registration Utility** screen is displayed.
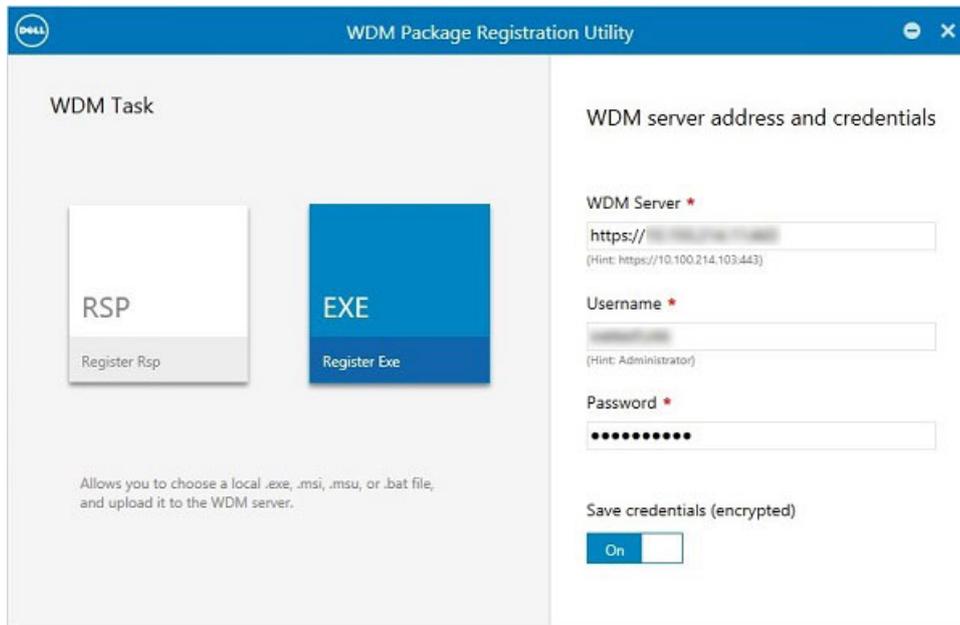
Figure 2. WDM Package Registration Utility

11. Click **EXE**, and navigate to the folder where the BIOS package is located.

12. Select the target client operating system, and enter the command line parameters `/s/r`.

13. Click **Upload**.
The BIOS package is registered in the **Other Packages** section.
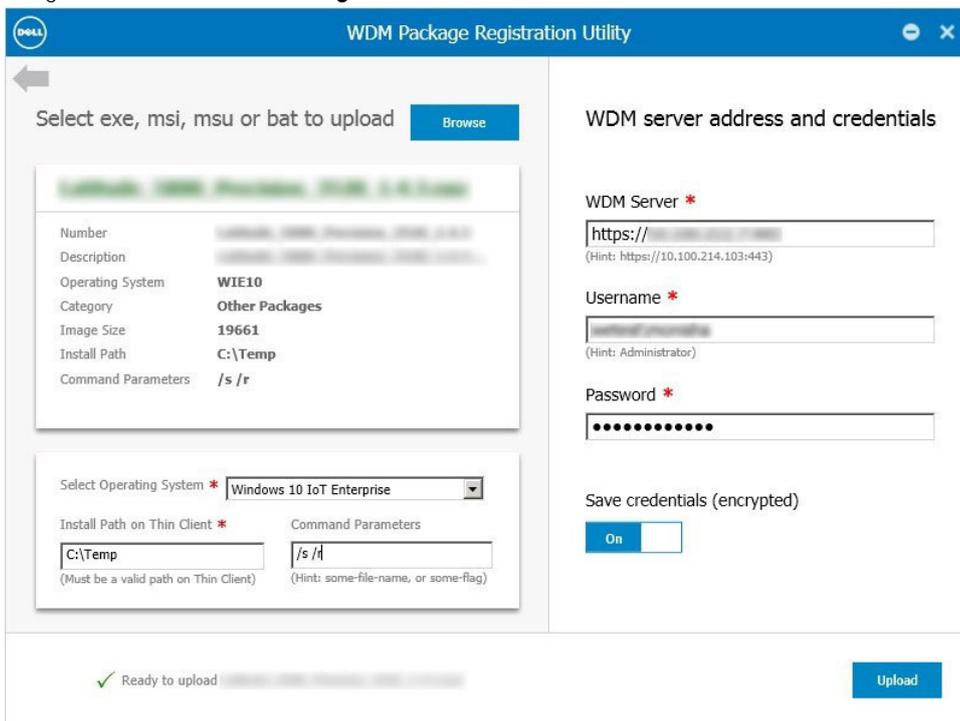
Figure 3. EXE file selected

14. After the upload process is complete, close the window.
The **Package details** screen is displayed.
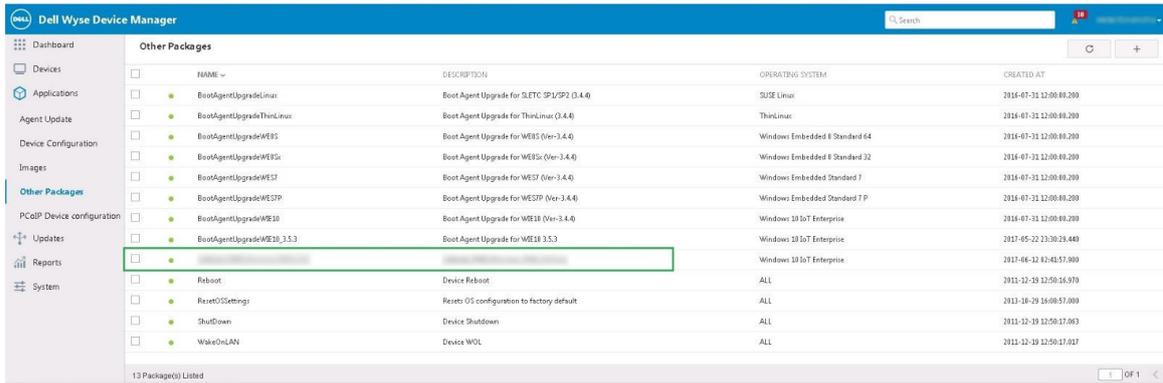
Figure 4. Package details

15. Click **Devices**, and select the devices that require an update.

16. Click **Update**.
    The **Devices** screen is displayed.
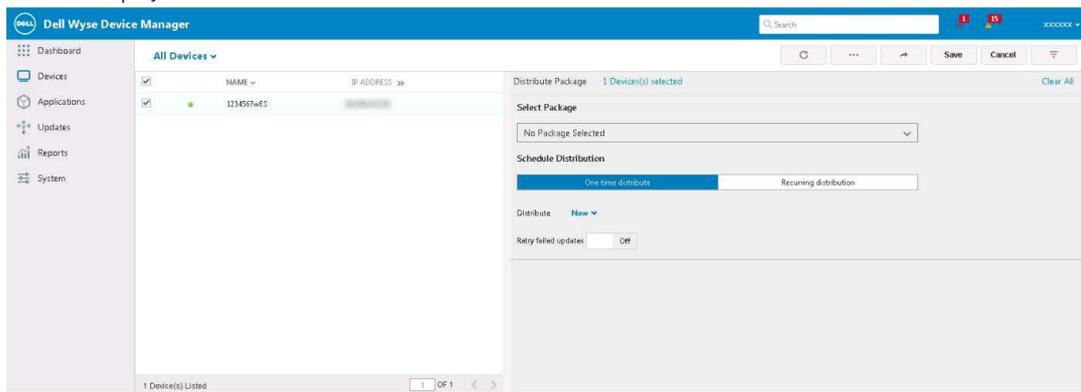
Figure 5. Devices

17. In **Select package**, click **Other Packages**, and then select the registered BIOS package.

18. Click **Save**.
    The **BIOS Flash Package** screen is displayed.
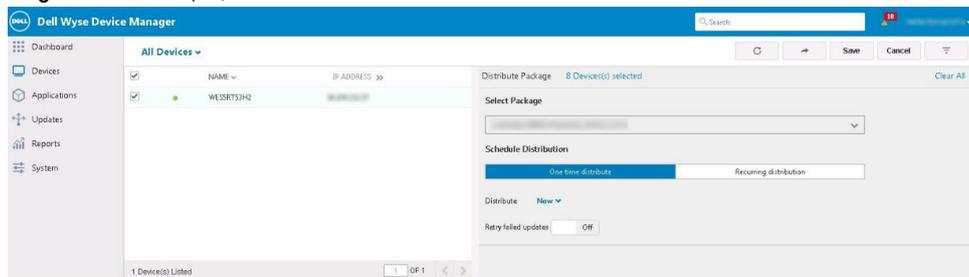
Figure 6. BIOS Flash Package

Results

The client restarts and upgrades the BIOS.

Upgrading BIOS by using SCCM server

Prerequisites

Ensure that you are using SCCM 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**.

   ⓘ **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.
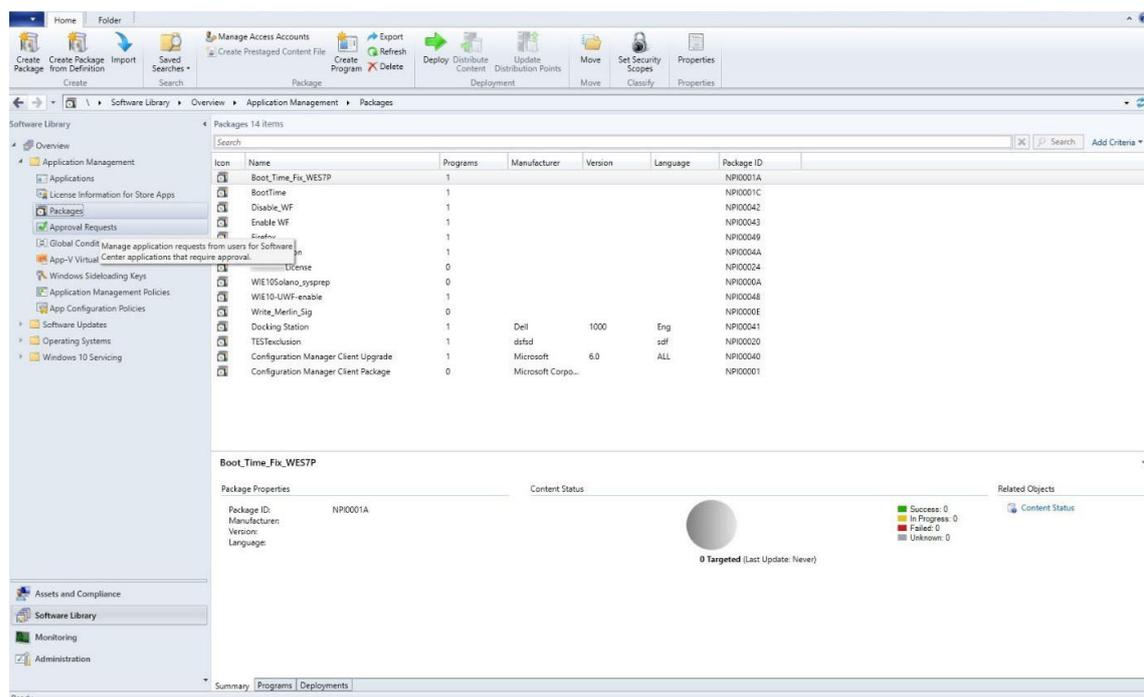
Figure 7. SCCM console

The **Create Package and Program Wizard** screen is displayed.
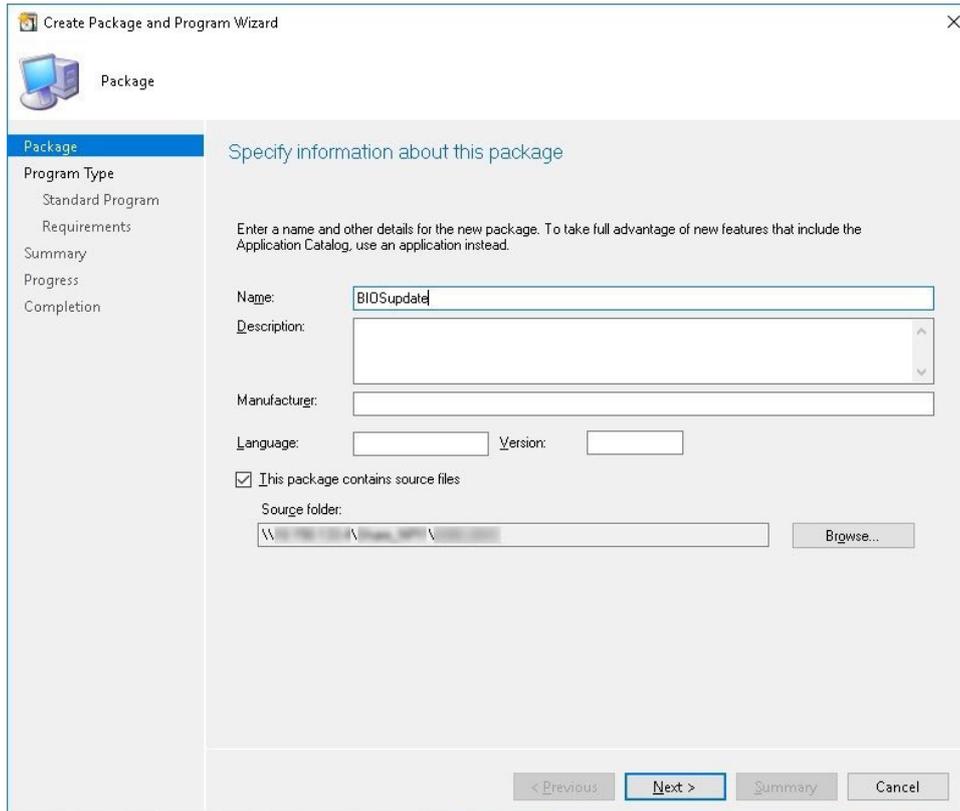
Figure 8. Create Package and Program Wizard

10. Click **Next**.
    The **Program Type** screen is displayed.
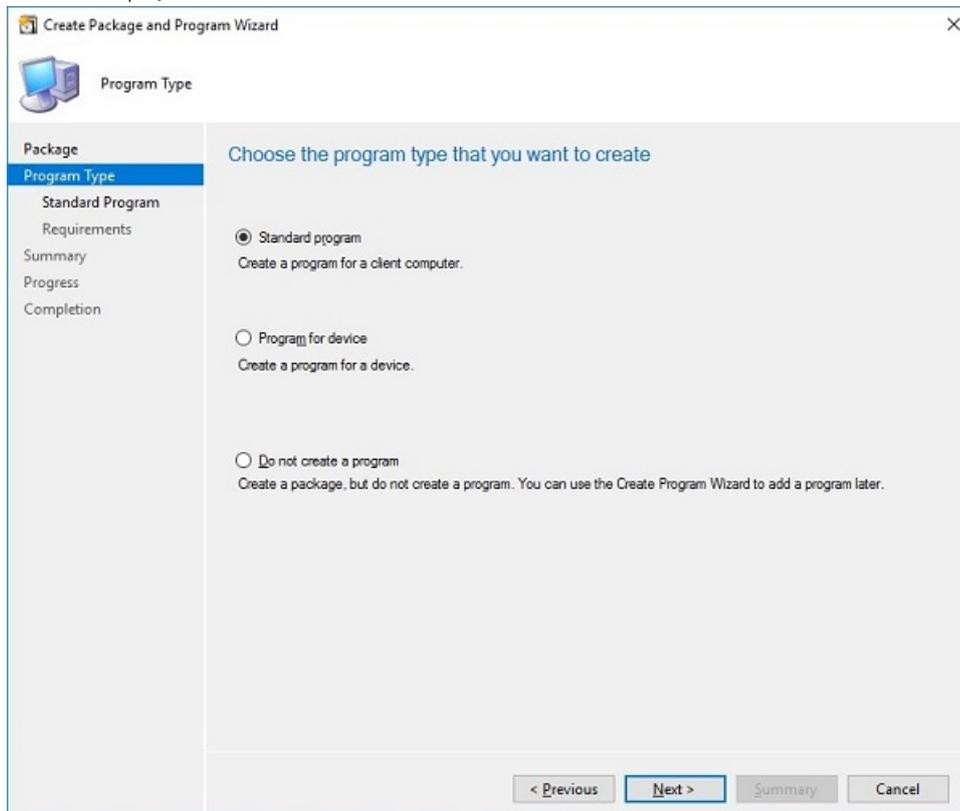
Figure 9. Program Type

11. Select **Standard Program**, and click **Next**.
    The **Standard Program** screen is displayed.
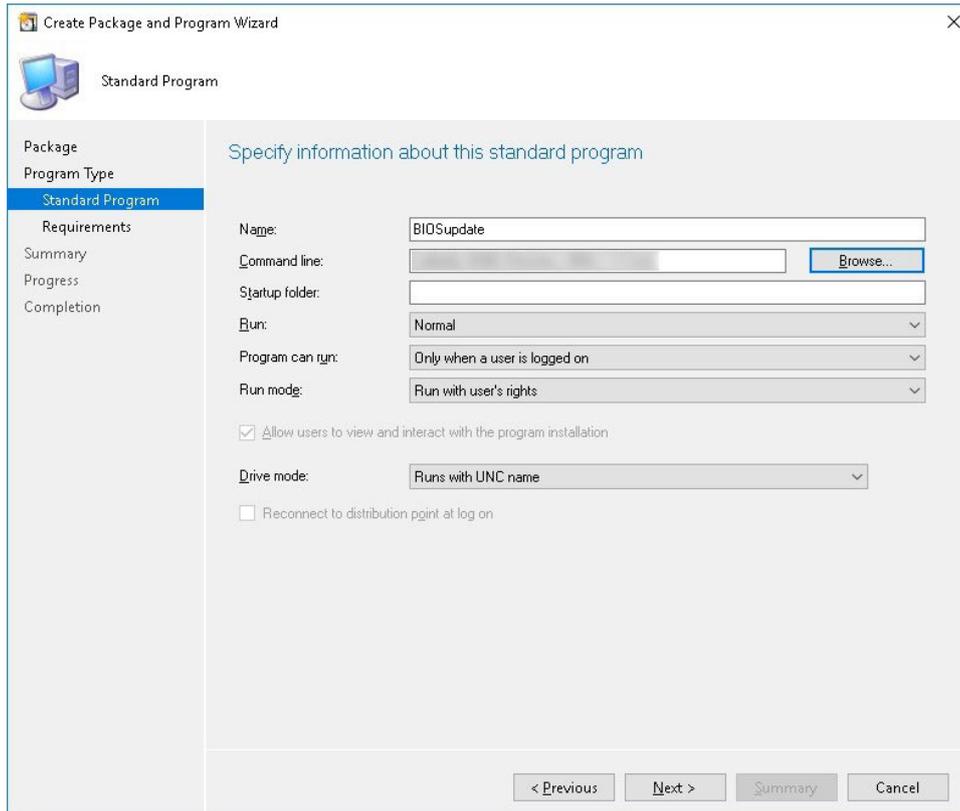
Figure 10. Standard Program

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.
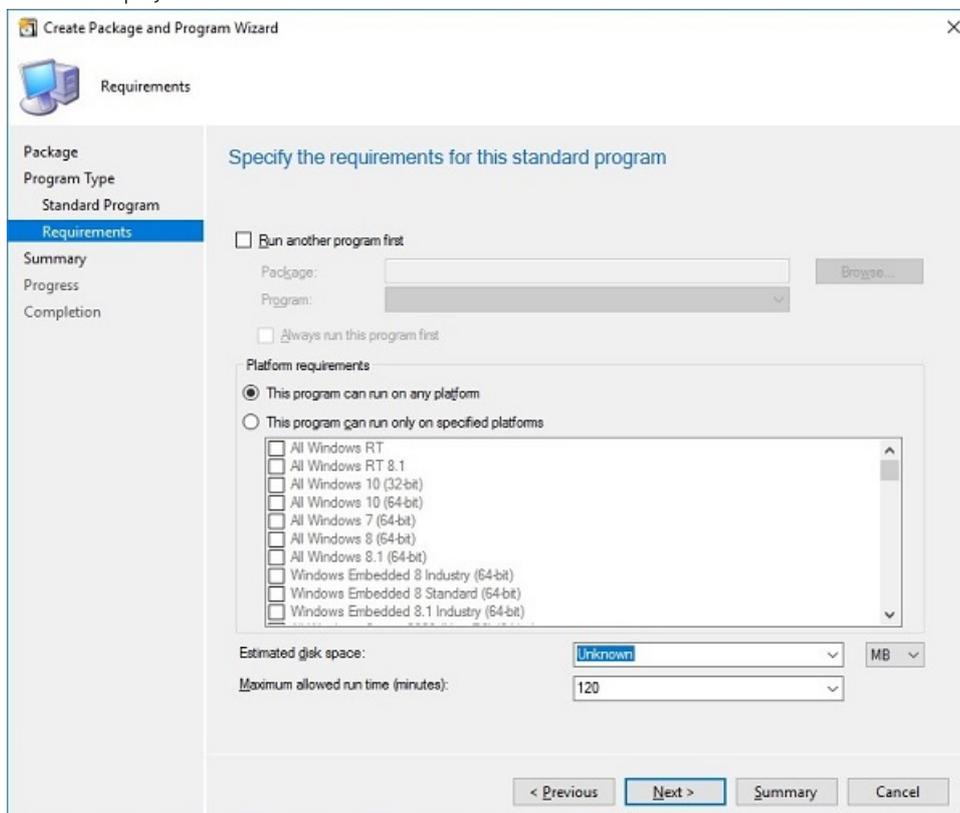
Figure 11. Requirements

15. Click **Next**.
    The **Summary** screen is displayed.

Figure 12. Summary

16. Verify the information that you have provided, and click **Next**.
    The **Completion** screen is displayed.

Figure 13. Completion

17. Click **Close**.
18. Right-click the package, and select **Distribute Content**.
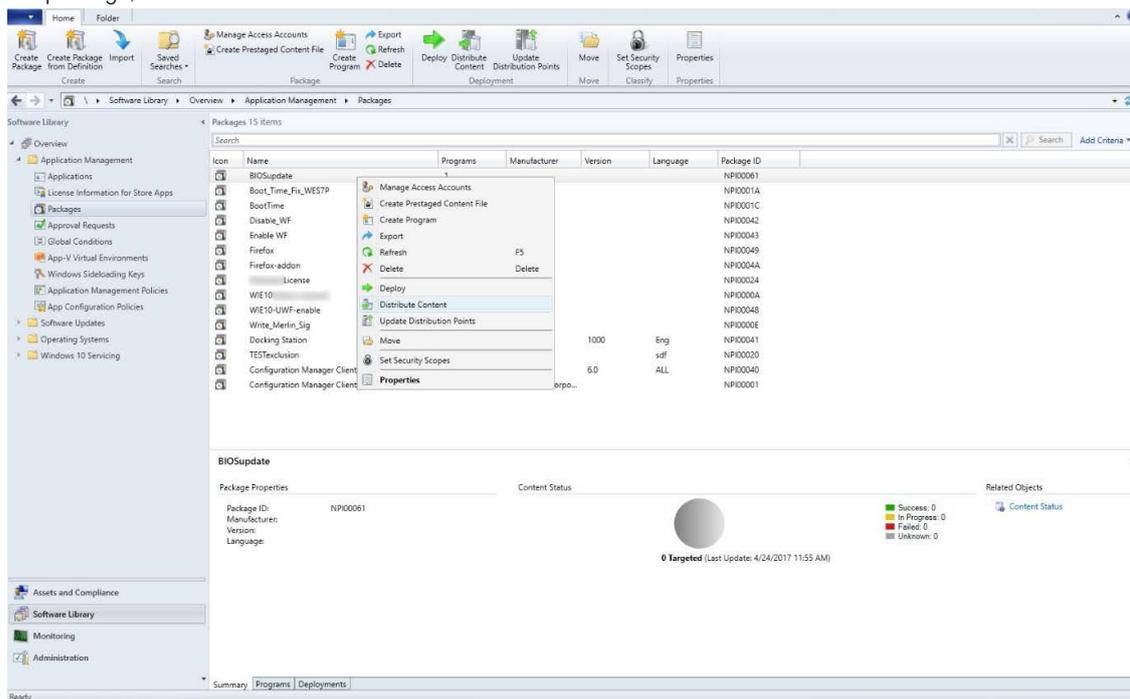
Figure 14. Distribute Content

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.

ⓘ **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.
2. Plug in the USB drive into a USB port.
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.