

Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready)

Administrator's 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.

- Chapter 1: Introduction..... 4**
 - Audience..... 4
 - Document purpose..... 4
 - Supported platform..... 4
- Chapter 2: Convert to Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready)..... 5**
- Chapter 3: Complete the Out-of-Box Experience (OOBE)..... 7**
- Chapter 4: Configure device settings..... 8**
 - Configure BIOS settings..... 8
- Chapter 5: Manage applications and updates..... 9**
 - Create Intune application installation package..... 9
 - Deploy Windows App..... 9
 - Create and update rings for LTSC devices and deploy using Intune..... 10
 - BIOS and driver updates for LTSC devices..... 10
- Chapter 6: Frequently asked questions..... 11**
- Chapter 7: References..... 12**

Introduction

The Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) image is a preconfigured operating system for Dell fixed-function and purpose-built devices. It includes built-in support for device management through Microsoft Intune, enabling you to manage devices and apply policies through the Intune service. For Dell Pro 14 PC14250 and Dell OptiPlex 3000 Thin Client, you can download and install this image from [Dell | Support](#). For Dell Pro Micro Thin Client Q9M1260, the Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) option is available as factory-installed.

Topics:

- [Audience](#)
- [Document purpose](#)
- [Supported platform](#)

Audience

This administrator guide is intended for IT administrators using Dell devices running the Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready). This guide can also be used by IT administrators responsible for converting and managing existing OptiPlex 3000 Thin Client and Dell Pro 14 PC14250 devices running Windows 11 IoT Enterprise LTSC 2024. The guide provides instructions for transitioning these devices to the Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) image.

Document purpose

This guide provides steps to perform essential BIOS settings, manage applications and update firmware and drivers on Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) devices. This guide also explains how to deploy a Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) image on to an existing OptiPlex 3000 Thin Client and Dell Pro 14 PC14250 devices. This guide does not cover all Intune management, administration, or deployment guidelines. For detailed information about Microsoft Intune, see [Microsoft Intune documentation](#).

Supported platform

The Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) is available as factory-installed on the following system:

- Dell Pro Micro Thin Client Q9M1260

The Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) image can be downloaded and deployed on the following systems:

- OptiPlex 3000 Thin Client running Windows 11 IoT Enterprise LTSC 2024
- Dell Pro 14 PC14250 running Windows 11 IoT Enterprise LTSC 2024

Convert to Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready)

This section is applicable only for OptiPlex 3000 Thin Client and Dell Pro 14 PC14250 devices running on Windows 11 IoT Enterprise LTSC 2024. Perform the following steps to configure the USB drive using Dell OS Recovery Tool and deploying the downloaded image on the target device.

Prerequisites

- Ensure that the OptiPlex 3000 Thin Client or Dell Pro 14 PC14250 device is running a licensed Windows 11 IoT Enterprise LTSC 2024 operating system.
- Download the appropriate Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) ISO image from [Dell | Support](#). Ensure that the image is specific to the device and CPU type. Note that Dell Pro 14 PC14250 has separate images for the ARL and RPL CPU types.
- Install the Dell OS Recovery Tool (available for Microsoft Windows only). For more information, see [Reinstall Microsoft Windows | Dell US](#).
- Ensure that you have administrator user rights and at least 64 GB of available hard drive space to download the Dell operating system recovery image.
- Prepare a USB Drive ready with a minimum storage of 32 GB.
- Ensure that the system has a wired network connection for stable downloads.
- Ensure that you have disabled any antivirus software during the download.

NOTE: If you upgrade from Windows 10 IoT Enterprise LTSC 2021 to Windows 11 IoT Enterprise LTSC 2024 and then perform the Intune conversion, the license key is erased during bare metal recovery. Therefore, ensure that you have the key available to reactivate the license after the process is complete.

Steps

1. Launch the **Dell OS Recovery Tool**.
2. On the **Dell OS Recovery Tool** screen, click **Switch to Advanced Recovery**.
3. In **Select preference**, browse and select the Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) ISO image and click **Next**.
4. Select the **I understand that the selected drive will be reformatted and existing data will be deleted** option, and then click **Burn OS**.
Image verification is initiated.
5. After verification is complete, click **Close**.
6. Remove the USB Drive.
7. Insert the USB with the Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) image or recovery image into the target device.
8. Power on the device and press **F12** to open the **One-Time Boot Settings**.
9. Under the **UEFI Boot Devices**, select the USB drive that contains the recovery image.
10. Enter the BIOS admin password. The Dell default password is `Fireport`.
The device starts and automatically launches **Dell Imaging Manager**.
11. Click **Apply Image**.
The Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) image files are displayed.
12. Select the appropriate ISO image.
13. Click **Apply Image**.
The **End User License Agreement (EULA)** page is displayed.
14. Review Dell and Microsoft EULA and do the following:
 - a. Select **I have reviewed all license agreements**.
 - b. Click **Accept and proceed**.

15. Click **Confirm**.

The system starts the recovery process after a brief delay. The device enters recovery mode and displays progress indicators while it applies the image. You can safely remove the USB drive at this point.

Results

After the initial reboot, the device will boot into the **Windows Out-of-Box Experience (OOBE)** screen.

Complete the Out-of-Box Experience (OOBE)

This section outlines the Windows 11 IoT Enterprise LTSC 2024 Intune Deployment Ready Out-of-Box Experience (OOBE) setup process. During OOBE, configure basic system settings such as language, region, network connectivity, and account sign in.

Steps

1. On the **Out-of-Box Experience (OOBE)** screen, choose your language, time zone, and keyboard layout.
2. When prompted, connect to a Wi-Fi or Ethernet network, and then click **Next**.
3. On the **Sign in** screen, sign in with your credentials and click **Next**.
After you sign in, the device is enrolled in Intune.
4. On the **Choose privacy settings for your device** screen, enable your preferred options and click **Accept**.
 **NOTE:** When prompted, enter your password or use alternative login methods like **Windows Hello** (fingerprint or facial recognition) if supported by your device and click **OK**.
5. On the **Set up a PIN** screen, create a PIN, and then click **OK**.

Results

Windows will set up your device and may install updates, certificates, and security baselines as required. After the process is complete, the Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) desktop appears and the device is ready for use.

Configure device settings

Topics:

- [Configure BIOS settings](#)

Configure BIOS settings

You can configure BIOS settings on Dell devices running Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) using Dell Command | Configure (DCC) and deploy the configuration through Microsoft Intune.

Steps

1. Create an SCE file by using the Dell Command | Configure (DCC) wizard to set the required BIOS settings and export them as a configuration file.
For information, see [Creating self-contained executables](#).
2. Download the Dell Command | Endpoint Configure for Microsoft Intune (DCECMI) from [Dell | Support](#) site and package it as an Intune app.
For more information, see [Create Intune application installation package](#). For more information about DCECMI, see [Dell Command | Endpoint Configure for Microsoft Intune User's Guide](#).
3. In Microsoft Intune Admin Center, create a configuration policy.
4. Select **Windows 10 and later platform** and **Templates** profile type.
5. Select **BIOS configurations and other settings**.
6. Enter a name for the policy, and then click **Next**.
7. Upload the SCE file that you created in Step 1 as the configuration file. Review the settings, and then click **Next**.
8. Assign the policy to the required groups or users, and then click **Create** to deploy the policy.

 **NOTE:** When generating a .cctk file, BIOS passwords are not exported. If a setup password is configured, manually add ValSetupPwd=<current setup password> and any new SetupPwd entries before applying the file.

Manage applications and updates

You can create an Intune application installation package, deploy Windows App, create and deploy update rings, and configure BIOS and driver update options for Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) devices.

Topics:

- [Create Intune application installation package](#)
- [Deploy Windows App](#)
- [Create and update rings for LTSC devices and deploy using Intune](#)
- [BIOS and driver updates for LTSC devices](#)

Create Intune application installation package

Create a Win32 application package (.intunewin) from a Windows application installer so that it can be deployed through Microsoft Intune.

Steps

1. Identify the .exe file for the application you want to install.
 2. Download IntuneWinAppUtil.exe from [Microsoft-Win32-Content-Prep-Tool](#).
 3. Create a source folder and an output folder, for example, C:\Sources and C:\Output.
 4. Copy the application .exe file into the source folder.
 5. Open **Command Prompt** or **PowerShell**, and run the command:
IntuneWinAppUtil.exe
 6. When prompted, enter:
 - The source folder path
 - The installer file name (.exe)
 - The output folder path

After you provide the details, the tool generates a .intunewin file in the output folder.
 7. In Microsoft Intune Admin Center, go to **Apps > Windows app (Win32)** and upload the generated .intunewin package. For more information, see [Prepare Win32 App Content for Upload](#).
- NOTE:** For Third-party VDI broker deployments, follow the same steps as mentioned above using the appropriate installation package for your chosen VDI broker. To deploy the Citrix Workspace app, see [Citrix Workspace app for Windows](#).

Deploy Windows App

On devices running Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready), applications are deployed using Microsoft Intune. You can use the standard Intune app assignment workflow to deploy the Windows App to your devices. Assigning the application to the appropriate device or user groups enables automatic installation on those devices.

Steps

1. Sign in to the Microsoft Intune Admin Center and go to **Apps > All apps > Create**.
2. On the **Select app type** pane, select **Microsoft Store app (new)** from the **App type** dropdown, and then click **Select**.
3. From the **Add app** page, click **Search the Microsoft Store app (new)**, search for **Windows App**, select the app from the list, and then click **Select** to continue.
4. On the **App information** page, keep the default settings or modify them as needed, and then click **Next**.

For more information, see [Add Microsoft Store Apps to Microsoft Intune](#).

- On the **Scope tags** page, apply scope tags to control administrator access to Intune objects, and then click **Next**. This step is optional.

For more information, see [Use role-based access control \(RBAC\) and scope tags for distributed IT](#).

- On the **Assignments** page, select the device or user groups that include the Cloud PCs where the Windows app should be automatically installed.

When you target a user group, the app installs after the user signs in to the Cloud PC. When you target a device group, the app installs before user sign-in.

- Under **Required**, select **Add group** and add the groups containing the devices where Windows App should be automatically installed.
 - Under **Available for enrolled devices**, select **Add group**, and add the user groups. The Windows app is available in the **Company Portal** app and on the Company Portal website, where you can choose to install it as needed.
 - After selecting all required groups, click **Next**.
- On the **Review + create** page, select **Create**.

Results

The Windows App is deployed to the assigned devices through Microsoft Intune.

Create and update rings for LTSC devices and deploy using Intune

You can use Microsoft Intune update rings to manage Windows updates for devices running Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready). Update rings allow you to control update settings and deploy security updates to LTSC devices.

Steps

- Sign in to the Microsoft Intune Admin Center.
- Go to **Devices > Windows > Manage updates > Windows updates > Update rings > Create profile > Create update ring for Windows 10 and later**.
- Click **+ Create profile**.
- Enter a name for the update ring, for example, LTSC Update Ring.
- Configure update settings such as servicing channel, quality updates, and feature updates.

 **NOTE:** LTSC devices receive security and quality updates but do not receive feature updates.

- Configure the restart options and active hours based on your requirements.
- Assign the update ring to the Azure AD group that contains the LTSC devices.
- Review and save the configuration.
- To review the deployment status, click **View reports**.

For more information, see [Manage Windows Update ring policies](#).

BIOS and driver updates for LTSC devices

You can use Intune to manage and update drivers, BIOS updates for platforms (Dell Pro Micro Thin Client) where Windows Update is supported. For some platforms like OptiPlex 3000 Thin Client, where Windows Update does not support these updates, the BIOS, driver, and Microsoft QFE updates for devices running Windows 11 IoT Enterprise LTSC (Intune Deployment Ready) can be managed by using the following deployment methods.

- Download the required BIOS and driver installers from [Dell | Support](#) for the platform and deploy them as an Intune application package. For more information, see [Create Intune application installation package](#).
- Deploy BIOS and driver installers to devices using an Intune Update Ring policy. For more information, see [Create and update rings for LTSC devices and deploy using Intune](#).
- Deploy Dell Command | Update (DCU) as an Intune application and configure update policies using ADMX templates. For more information, see [Importing ADMX templates](#).

Frequently asked questions

How to convert an OptiPlex 3000 Thin Client running Windows 10 IoT Enterprise LTSC 2021 directly to Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready) ?

You cannot directly convert a Windows 10 IoT Enterprise LTSC 2021 device to Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready).

You must first upgrade the device to Windows 11 IoT Enterprise LTSC 2024. For detailed steps, available upgrade paths, and licensing requirements, see [Windows 11 IoT Enterprise LTSC 2024 Upgrade Guide | Dell US](#).

If you upgrade from Windows 10 IoT Enterprise LTSC 2021 to Windows 11 IoT Enterprise LTSC 2024 and then perform the Intune conversion, the license key gets erased during the bare metal recovery. Therefore, ensure that you have the key available for license reactivation once the process is complete.

After the device is successfully upgraded to Windows 11 IoT Enterprise LTSC 2024, you can convert it to Windows 11 IoT Enterprise LTSC 2024 (Intune Deployment Ready).

How can I check the CPU type (ARL or RPL) and select the correct image for converting a Dell Pro 14 PC14250?

1. Open **System Information**.
2. In the **System Summary** pane, locate the **System SKU** and **Processor** fields and identify the CPU type based on the following values:
 - For ARL CPU type:
 - **System SKU**: 0D63
 - **Processor**: Intel(R) Core(TM) Ultra 5 235U, 2000 MHz, 12 Core(s), 14 Logical Processors
 - For RPL CPU type:
 - **System SKU**: 0CFB
 - **Processor**: Intel(R) Core(TM) 5 220U, 1400 MHz, 10 Core(s), 12 Logical Processors
3. Select the image that matches the identified CPU type.
4. Proceed with the conversion using the selected image.

References

For detailed information on Microsoft Intune, see [Microsoft Intune documentation](#).