



How to update from Dell Wyse Enhanced Windows Embedded Standard 7 P (WES7P) to Dell Wyse Windows 10 IoT Enterprise

This white paper provides instructions for updating your Dell Wyse thin clients that include Windows 10 IoT Enterprise license, but running WES7P OS.

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Revisions

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1 Background/Purpose

Background

In July 2015, Microsoft Corporation launched Windows 10 for PCs and Windows 10 IoT Enterprise (WIE10) for embedded systems, such as the Dell Wyse thin clients. You can continue to use your WES7 device with the existing OS (WES7P) until you want to upgrade to Win 10 IoT without any issues. You can upgrade to Win 10 with an appropriate Win 10 License and/or appropriate upgrade rights. This document explains the steps that you need to follow to upgrade the device.

Purpose

This white paper guides you through the process of updating a Dell Wyse thin client configured with Windows 10 IoT Enterprise license and WES7P operating system to the Windows 10 IoT Enterprise operating system.

1.1 Supported platforms

Wyse 7040 thin client supports this upgrade feature

1.2 Requirements

The following are the requirements for updating the thin client to Windows 10 IoT Enterprise OS:

- A supported platform with Dell Wyse based WES7P image
- A Dell Wyse Windows 10 IoT Enterprise image published for the respective platforms
- One of the following remote/local management tools:
 - Wyse Device Manager (WDM)
 - Microsoft System Center Configuration Manager (SCCM)
 - Dell Wyse USB Imaging Tool

1.3 Logical representation

The following graphical representation displays a high-level process flow for WES7P to Windows 10 IoT Enterprise update:



WES7P to Windows 10 IoT Enterprise (Update Process Flow)

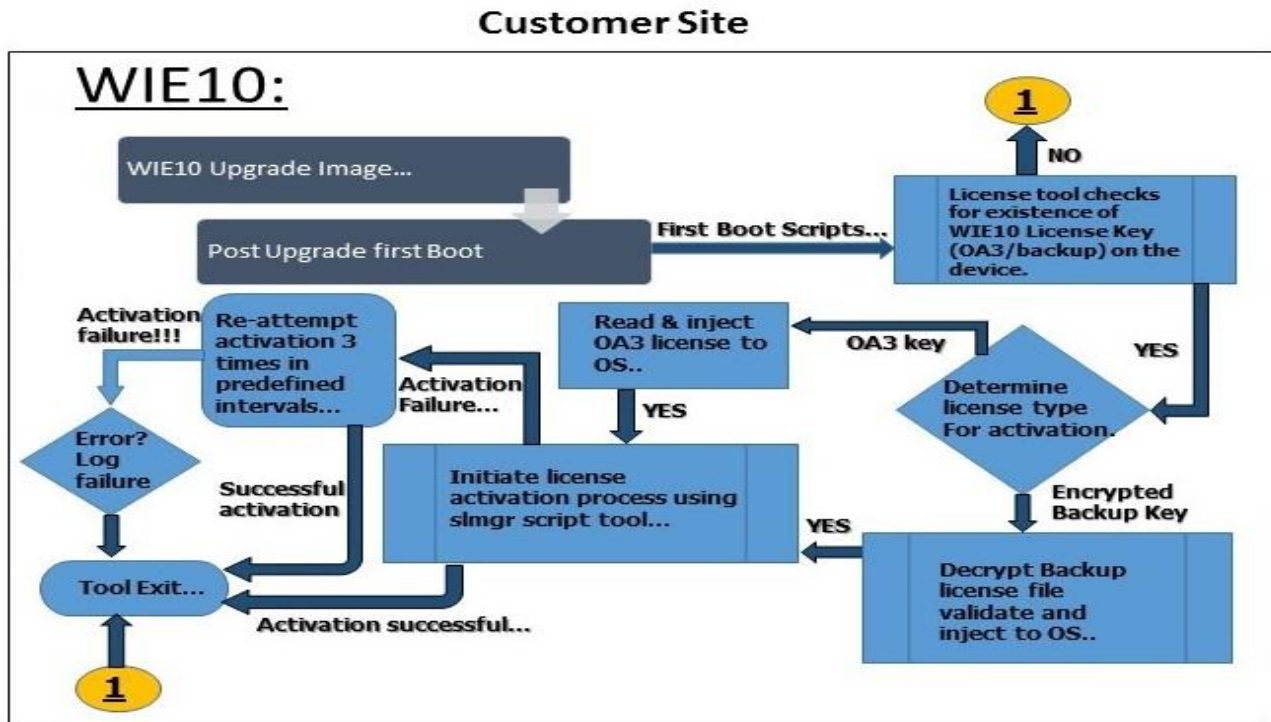


Figure 1 Logical representation of WES7P to Windows 10 IoT Enterprise upgrade scenario

1.4 Limitations

- Only applies to devices that already include Windows 10 IoT Enterprise license.
- After you update to Windows 10 IoT Enterprise, you cannot downgrade the devices again to WES7P.

1.5 BIOS and TPM dependencies

You need to update BIOS to the latest available version based on the supported platforms. For more information on BIOS updates, see platform-specific release notes.

To update the TPM firmware from version 1.2 to 2.0, see Release Notes for TPM add-on under corresponding platform at [Dell support website](#).

2 Instructions to update WES7P to Windows 10 IoT Enterprise

The following are the different types of supported client management suites for conversion/update from WES7P to Windows 10 IoT Enterprise:

2.1 Using Wyse Device Manager (WDM)

To update WES7P OS to Windows 10 IoT Enterprise using WDM, do the following:

1. Go to the [Dell support website](#), and download the appropriate Dell official update image package.
2. After the download is complete, extract the contents to a local storage location.
3. Configure the thin client to register itself to WDM server.
4. Register the extracted image package onto WDM server.
5. After the package/device registration is complete, follow the WDM imaging process, and start the image update task. For more information about WDM imaging process, see WDM 5.7.1 Administrator's guide at [Downloads.dell.com/wyse/](#).

After the update process is complete, the thin client reboots into Windows 10 IoT enterprise, and the first boot process is initiated.

Note: As part of the first boot experience and customizations, license management subsystem checks for existence of appropriate Windows 10 IoT Enterprise licensing data, and initiate the process including activation, if internet connection is available.

In the scenario of unavailability of an internet connection, license management subsystem retries to fetch the Windows 10 IoT Enterprise licensing data for a predefined time interval and repeat the activation process again. After three retry cycles are complete, this iteration activity is logged and the subsystem exits.

In the previous scenario, after the internet connection is available, you have to initiate/perform the manual activation process as per Microsoft recommended activation options.

2.2 Using Microsoft System Center Configuration Manager (SCCM)

Under the System Center Configuration Manager Update scenario, there are a few changes in image deployment steps as compared to WDM.

To update WES7P OS to Windows 10 IoT Enterprise using Microsoft SCCM, do the following:

1. To update a master image, deploy the Windows 10 IoT Enterprise update image using USB imaging tool ready pen drive to a single thin client.
2. After the completion of update process and thin client is booted onto Windows 10 IoT Enterprise desktop, carry out image customization (if any), and run the ConfigMgr sysprep scripts.

After the sysprep process is complete and client is shut down, the master image is captured using SCCM server and the image is deployed onto other update ready thin clients.



Note: For more details on SCCM configuration procedures, refer to the SCCM Administrator's guide.

2.3 Using Dell Wyse USB Imaging Tool

To update WES7P OS to Windows 10 IoT Enterprise using USB Imaging Tool, do the following:

1. USB imaging tool allows you to image the thin client devices with update capable WES7P image to Windows 10 IoT Enterprise manually.
2. Copy the downloaded and extracted Windows 10 IoT Enterprise update image package to a predefined folder on the imaging ready USB pen drive.
3. Modify update script on the USB drive to point at image folder.
4. Boot the thin client device with USB imaging pen drive, and allow the imaging process to complete. After this process, the thin client is updated to Windows 10 IoT Enterprise image.

Note: For more details on USB Imaging Tool procedures, refer to the Dell Wyse USB Imaging Tool User's guide at [Downloads.dell.com/wyse/](https://downloads.dell.com/wyse/).

