



# How to Manage the Imaging of Multiple WES-7 Devices

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Images are for demonstration purposes only.

## Objectives

This document explains how to centrally manage the “Imaging” of multiple WES-7 devices. The list of supported devices is brought below:

- EX-PC
- HD-PC
- EX-PC 2<sup>nd</sup> Gen.

## General

Installing an Image on an WES 7 device, also known as “Imaging”, is usually performed in one of the following scenarios:

- Recovery – re-installing the current image version due to corruption of the current installation.
- Upgrade – installing a new version of the image.

The procedure described below is applicable to both of these scenarios.

Imaging can be performed by one of the following methods:

- Central batch imaging – the imaging is performed via the network on a batch of devices simultaneously.
- Local per device imaging - each device is connected to an external CD from which the imaging is performed.

The scope of this document does not include “Local per device imaging”. Throughout this document the term “Imaging” will be used in referral to “Central batch imaging”.

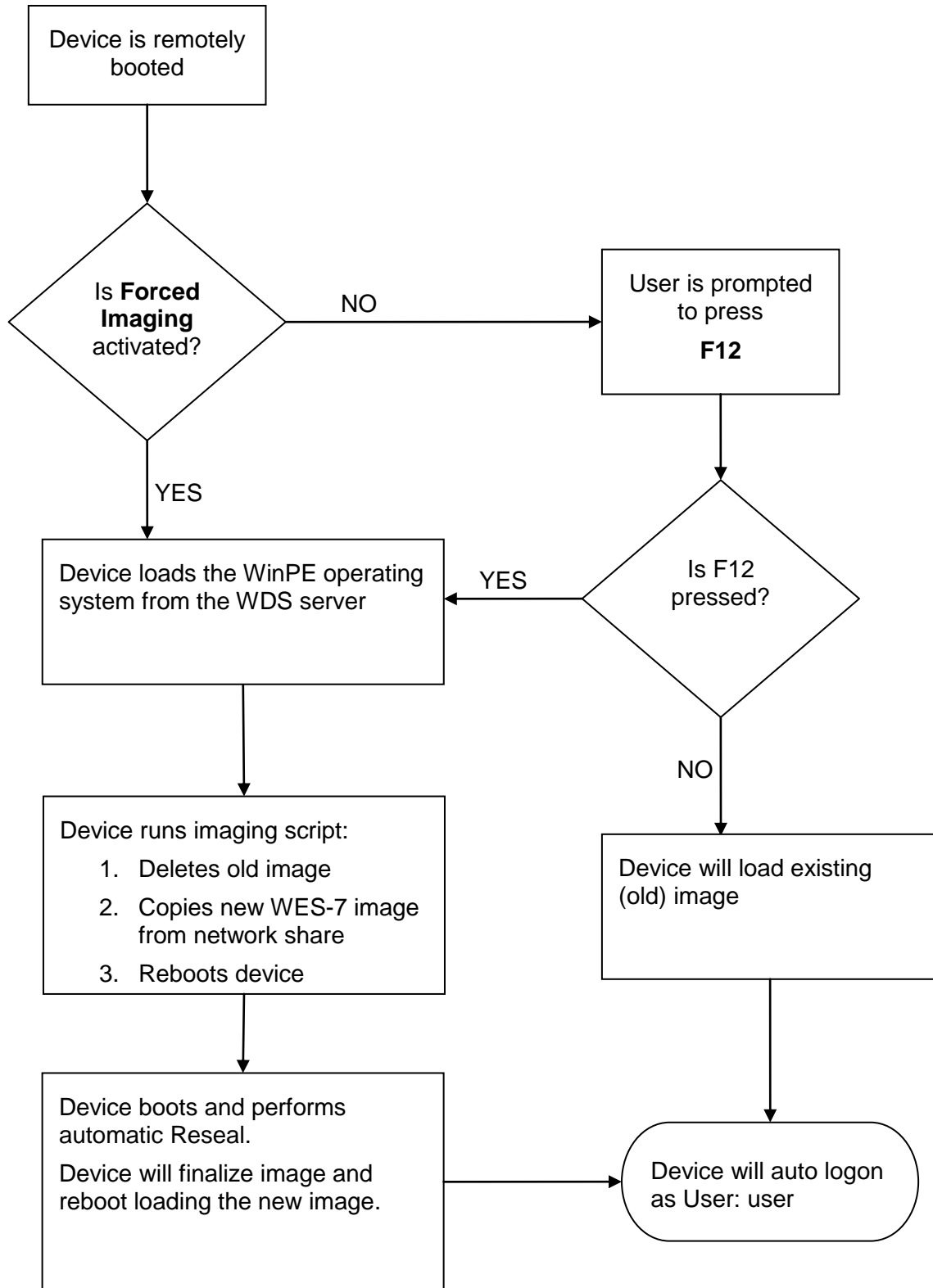
**CAUTION!** *All existing data will be deleted from the device during the imaging process.*

## Software Components

The following software components are required for Imaging:

1. **Windows Deployment Services (WDS)** – available on Windows Server 2003 R2, Windows Server 2008 and Windows Server 2008 R2.
2. **Windows AIK** – available for free download at Microsoft.com.
3. **WinPE Image (winpe.wim)** – provided by Chip PC Ltd.
4. **WES-7 Image (xpe.wim)** – provided by Chip PC Ltd.

## Imaging Process Overview



## Setting-up the Imaging Server

Perform the following on the designated imaging server:

### 1 Install WDS

1. Open **Control Panel > Add or Remove Programs > Add/Remove Windows Components**.
2. In the **Windows Components** window, select the **Windows Deployment Services** check box and then click **Next**.
3. When the installation has completed, click **Finish** and restart the computer

### 2 Install Windows AIK

1. Run the Windows AIK setup.
2. Complete the installation wizard selecting all default options.

### 3 Configure WDS

1. Open **Start > Programs > Administrative Tools > Windows Deployment Services**.
2. In the Windows Deployment Services window, right click on the designated Imaging Server and select **Configure Server**.
3. Complete the configuration wizard:
  - 3.1. You may select a non-default **Remote installation folder**.
  - 3.2. For the **PXE Server Initial Settings**, select **Respond to all**.
  - 3.3. Do not add an image at this point.
4. Copy the WinPE image to the Remote installation folder.

### 4 Share the WES7 Image

1. Create a shared folder on the imaging server (you can skip this step and simply use the Remote installation folder).
2. Copy the WES-7 image (xpe.wim) to the shared folder.

## 5 Customize WinPE Image

1. Create a temporary folder such as `c:\tmp`.
2. Click **Start > Programs > Microsoft Windows AIK > Windows PE Tools Command Prompt**.
3. From the Windows PE Tools Command Prompt issue the following command:  
**IMAGEX /MOUNTRW c:\remoteinstall\winpe.wim 1 c:\tmp**  
(the paths may vary depending on your choices in the previous steps).
4. Use a text editor to open and edit the following file:  
**c:\tmp\Windows\System32\U800\_Script.bat**
5. Modify the first line of the file as follows:
  - 5.1. Replace the default IP address with the IP address of the imaging server.
  - 5.2. Replace the share name with the name of the shared folder you created in section 5.4.
  - 5.3. Replace the default user credentials with credentials that have read access to the shared folder you created in section 5.4.
6. Save and close the file.
7. From the Windows PE Tools Command Prompt issue the following command:  
**IMAGEX /UNMOUNT /COMMIT c:\tmp**
8. Close the Windows PE Tools Command Prompt windows.

## 6 Load WinPE Image

1. Open **Start > Programs > Administrative Tools > Windows Deployment Services**.
2. In the Windows Deployment Services window, expand the imaging server.
3. Right click on the **Boot Image** node and select **Add Boot Image**.
4. Complete the **Add Image Wizard**; select the WinPE image file stored in the remote installation folder and apply all default settings.

## 7 Activate Forced Imaging – optional

This setting is only required if intending to force imaging on remote devices without local action from the device side.

1. Open **Start > Programs > Administrative Tools > Windows Deployment Services**.
2. In the Windows Deployment Services window, expand the imaging server.
3. Right click on the imaging server node and select **Properties**.
4. In the Properties window, select the **Boot** tab.
5. In the Boot tab, modify the **Default boot program** for the **x86 architecture**. Click **Browse** and select the file `pxeboot.n12`.

## Initiating Imaging

Select the appropriate procedure depending on whether Forced Imaging is active or not.

- 1 If Forced Imaging is activated perform the following steps:
  1. Boot all devices that require imaging.
  2. When the imaging has began on all devices, de-activated the Forced Imaging:
    - 2.1. Open **Start > Programs > Administrative Tools > Windows Deployment Services**.
    - 2.2. In the Windows Deployment Services window, expand the imaging server.
    - 2.3. Right click on the imaging server node and select **Properties**.
    - 2.4. In the Properties window, select the **Boot** tab.
    - 2.5. In the Boot tab, modify the **Default boot program** for the x86 architecture. Click **Browse** and select the file *pxeboot.com*.
  
- 2 If Forced Imaging is not activated perform the following steps:
  1. Boot all devices that require imaging
  2. On the local device, during the boot sequence, click **F12** when the following message is displayed: **Press F12 for network service boot**.

## Completing the Imaging

1. When the imaging process has completed the device will boot and perform **Resealing** process (This Process takes approx. 2-3 minutes).
2. The device will run finalizing scripts and will reboot again, automatically logging-in as the default user (User: user / Password: user).

## Disable\Enable the Imaging Server

To prevent accidental imaging, the imaging server can be temporarily disabled by the following procedure:

1. Open **Start > Programs > Administrative Tools > Windows Deployment Services**.
2. In the Windows Deployment Services window, expand the imaging server.
3. Right click on the imaging server node and select **Properties**.
4. In the Properties window, select the **Boot** tab.
5. In the Boot tab, modify the **Default boot program** for the **x86 architecture**. Click **Browse** and:
  - To **Disable** the server, select the file *abortpxe.com*.
  - To **Enable** the server, select the file *pxeboot.com*.