CREATING AND RESTORING IMAGES ON THE HP THIN CLIENT WITH

ALTIRIS DEPLOYMENT SERVER V6.5

HP thin clients running Microsoft®
Windows Embedded Standard 2009
(WES) and
Windows® XP Embedded (XPe)

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Introduction

This paper provides instructions for imaging the HP WES- and XPe-based thin clients.

> **Note**
>
> Although the Altiris Client agent is preinstalled, a free license will no longer be included on the t574x and all new platforms going forward. To purchase a license, contact Altiris at http://www.altiris.com.

Imaging an HP thin client with Altiris RapiDeploy is similar to imaging a PC, but with a few limitations and advisories. Conflicts with the write filter partition and current imaging technology can cause problems if not handled correctly. This document explains these limitations and the correct procedures for imaging the thin client with customer-modified Altiris images and Hewlett-Packard factory images.

Prerequisites

There are two methods to create or restore an image to an HP thin client. Both methods require an Automation pre-boot environment with a network drive mapped to the express share of the deployment server and the image filestore. HP recommends that users change the boot order on all thin clients to either network or PXE boot as the first device. You can do this locally through BIOS setup or remotely by script execution of the HP Compaq Thin Client Boot Order Change Utility through Altiris Deployment Server. You can find the HP Compaq Thin Client Boot Order Change Utility at http://www.hp.com.

Additionally, imaging requires the following:

- ROM version 1.05 or higher is required for the boot order utility to work
- Deployment Server 6.5 for images using EWF filter
  Images using the FBWF must use Deployment Solution 6.9 SP3. 6.9 SP3 has a known issue with Sidgen on some WES thin clients when using FBWF in conjunction with the default user account on the thin client. The recommended

method to capture and deploy the image is to do this with the FBWF disabled, whether using no write filter at all or using just EWF. After the image is deployed, convert the system back to FBWF using the sample jobs if desired.

If you are using older machines that do not support PXE or a network that does not have a DHCP PXE environment, you can install an Altiris BootWorks Partition on the drive. You can install BootWorks remotely using Altiris Deployment Server or locally on the thin client. For more information about Boot- Works, see the Altiris Deployment Server User Guide.

Creating an Altiris backup image

Altiris Deployment Solution comes with sample scripts for executing jobs and tasks on HP thin clients. You can find jobs for creating and distributing disk images which properly handle the EWF partition in the Jobs pane under the **HP Thin Clients** heading. HP recommends capturing and deploying images using the EWF and not the FBWF, though the FBWF can be changed using the sample jobs and re-enabled after the imaging is complete. You can also create jobs manually as shown in the following section.

Creating an Altiris backup image remotely using deployment server

To create an Altiris backup image remotely using Altiris Deployment Server:

1. In the jobs pane, expand **Samples\HP Thin Clients\Windows XP Embedded**.
2. Click **Create Disk Image**.
3. Double-click **Create Disk Image** in the right pane (detail pane).
4. Select the Automation pre-boot environment. Be sure to use either a Windows Preinstall Environment (WinPE) or a Linux pre-boot environment on the HP t5740/t5745 thin client.
5. Click **Next**.
6. Click **Finish**.
7. Drag and drop the **Create Disk image** job under **Samples\HP Thin Clients\Windows XP Embedded**.
8. Click **Yes** to ignore the warning message and continue scheduling the imaging job. The **Schedule Computers for Job** screen is displayed.
9. Select one of the following options, and then click **OK**.
   — **Do not schedule**
   — **Run this job immediately**
   — **Schedule this job**

The system reboots and begins the image capture process.

Creating an Altiris backup image locally using DOS

To create an Altiris backup image locally:

1. Reboot the thin client, and then press **F12** when the HP logo displays during system restart.
2. Press **F8** when prompted, and then select **Altiris Managed PC**.
3. Press **Esc** to exit the BootWorks process at the **F2 for Diagnostics Mode** prompt.
4. Type `rdeployt –mu –ff:\<location of image>\<imagename.img>`.
   For example: `rdeployt –mu –ff:\images\myimage.img`
5. When imaging is complete, restart the thin client.

Creating an Altiris backup image locally using WinPE

> **Note**
>
> Use this WinPE-based local image creation for HP t5740/t5745 thin clients.

To create an Altiris backup image locally:

1. Reboot the thin client, and then press **F12** when the HP logo appears during system restart.
2. Press **F8** when prompted
3. Select **WinPE managed**.
   Two DOS windows appear:
   — **Altiris Windows PE2-x86 Pre-boot Automation Environment windows**
   — **Altiris Agent for WinPEx86**
4. Close the **Altiris Agent for WinPEx86** window.
5. Maximize the other window: **Altiris Windows PE2-x86 Preboot Automation Environment windows**.
6. Type this command at the prompt (f:\)
   ```
   cd rdeploy
   cd windows
   ```
7. Type `rdeployt –mu –ff:\<location of image>\<imagename.img>`.
   For example: `rdeployt –mu –ff:\images\myimage.img`.
8. When imaging is complete, restart the thin client.

Restoring an Altiris backup image

You can restore an Altiris backup image remotely using Altiris Deployment Server or locally by invoking RDeployt.exe. The following sections provide instructions for both methods.

Restoring an Altiris backup image remotely using deployment server

To restore an Altiris backup image remotely using deployment server:

1. On the Deployment Server Console, right-click **Samples\HP Thin Clients\Windows XP Embedded\Distribute Disk Image**, and then select **Copy**.
2. Right-click **Distribute Disk Image**, and then select **Paste**.
3. Rename **Copy of Distribute Disk Image** to `Restore Backup Image of the HP t57x0`.
4. Click **Restore Backup Image of the HP t57x0**.
5. In the **Task** window, select the **Distribute Disk** Image task.
6. Click **Modify**.
7. Browse to the image you want to restore.
8. Select the **Automation** environment.
   Be sure to use either a WinPE or a Linux pre-boot environment on the HP t5740/t5745 thin client.
9. Click **Finish**.
10. Drag-and-drop the job to the selected machine. Click **Yes** to ignore the warning message and continue scheduling the imaging job.
11. Select one of the following options, and then click **OK**.
    — **Do not schedule**
    — **Run this job immediately**
    — **Schedule this job**

Restoring an Altiris backup image locally

To restore an Altiris backup image locally:

1. Reboot the thin client, and then press **F12** when the HP logo appears during system restart.
2. Press **F8** when prompted, and then select **Altiris Managed PC**.
3. Press **Esc** to exit the BootWorks process at the **F2** for **Diagnostics Mode** prompt.
4. Type `rdeployt –mu –ff:\<location of image>\<imagename.img>`.
   For example: `rdeployt –md –ff:\images\myimage.img`

When imaging is complete, you can reboot the machine into production.

Restoring an Altiris backup image locally using WinPE

> **Note**
>
> Use this WinPE-based local image restoration for HP t5740/t5745 thin clients.

To create an Altiris backup image locally:

1. Reboot the thin client, and then press **F12** when the HP logo appears during system restart.
2. Press **F8** when prompted
3. Select **WinPE managed**.
   Two DOS windows appear:
   — **Altiris Windows PE2-x86 Pre-boot Automation Environment windows**
   — **Altiris Agent for WinPEx86**
4. Close the **Altiris Agent for WinPEx86** window.
5. Maximize the other window: **Altiris Windows PE2-x86 Preboot Automation Environment windows**.
6. Type in this command at the prompt (f:\)
   ```
   cd rdeploy
   cd windows
   ```
7. Type `rdeployt -md -ff:\<location of image>\<imagename.img>`.
   For example: `rdeployt -md -ff:\images\myimage.img`
8. When imaging is complete, restart the thin client.