HP Thin Clients

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Customizing Software

Creating and Restoring Images on the HP Compaq Thin Client t5700 with Altiris Deployment Server

Table of Contents

Abstract

This paper provides instructions for imaging the HP Compaq Thin Client t5700.

Introduction

Imaging an HP Compaq Thin Client t5700 with Altiris RapiDeploy is a process 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 will explain in more detail these limitations and the correct procedures for imaging the t5700 with customer-modified Altiris images and the Hewlett-Packard factory images.

Prerequisites

There are two methods to either create or restore an image to the HP Compaq Thin Client t5700. Both methods require a DOS boot environment with a network drive mapped to the express share of the deployment server and the image filestore. It is recommended that users change the boot order on all thin clients to either network or PXE boot as the first device. This can be done locally through the BIOS setup or remotely by script execution of the HP Compaq Thin Client Boot Order Change Utility through Altiris Deployment Server.   The HP Compaq Thin Client Boot Order Change Utility can be found at http://www.hp.com.

ROM version 1.05 or higher is required in order for the boot-order utility to work.

The second option, installing an Altiris BootWorks Partition on the drive, is designed for older machines that do not support PXE or for a network that does not have a DHCP PXE environment. BootWorks can be installed via Altiris Deployment Server or locally on the thin client. Refer to the *Altiris Deployment Server User's Guide* for more information on BootWorks.

Creating an Altiris Backup Image on the t5700

The enhanced write filter (EWF) that is included with the image on the thin client is built into a very small RAW formatted partition on the hard drive. Due to current limitations of imaging technology and the EWF, this partition cannot be restored to a flash unless the flash is the same size as the flash from which the image was created. For example, an image that was created from a 192 MB flash should only be restored to systems with a 192 MB flash.

Additionally, any new updated images released by HP will need to be restored using the Hewlett Packard Imaging Utility (IBR). Please refer to the HP Compaq Thin Client Imaging Tool User's Documentation for more information on usage with Altiris Deployment Server.

Altiris Deployment Server features "Create a Quick Disk Image" and "Distribute a Disk Image" options. These options can be accessed by right-clicking on the thin client(s) to be managed. Do not use these options unless the EWF on the managed thin client(s) has been disabled. If the EWF is not disabled during the create image process or distribute a disk image process, the Aclient post-image configuration tasks will not be written to the hard drive when the image is restored. This will cause a reboot loop on the thin client. The following steps will show how to avoid this and the correct procedure for imaging an HP Compaq Thin Client t5700 using RapiDeploy.

Creating an Altiris backup image remotely using Deployment Server

To create an Altiris backup image remotely using Altiris Deployment Server, complete the following steps:

1. After modifying the image as desired, on the Deployment Server Console, right-click in the **Jobs** window and select **New Job**.

2. Name the **Job** with a descriptive name that can be easily remembered, such as "Create Backup Image of the HP t5700."

3. Select **Add** > **Run Script** in the upper right corner of the job window.

4. Type **ewfmgr c: -disable** in the **Run this Script** window and click the **Run this script in Windows** button. Click **Finish**.

5. Select **Add** > **Create Disk Image.**

6. Select a location for the image to be stored and a unique name for the image file and click **Finish**.

The default location is c:\Program files\Altiris\Express\Deployment Server\Images.

7. In the upper right corner of the **Job Detail** window select **Add** > **Run Script**.

8. Type **ewfmgr c: -enable** in the **Run this Script** window and click the **Run this script in Windows** button. Click **Finish**.

9. Select **Add** > **Power Control**.

10. Click **Restart** and **Force applications to close without a message**. Click **Finish**.

11. Drag-and-drop this newly created backup job to the selected machine. A **Schedule Computer Job** screen appears with the following three options:

   ❑ Do Not Schedule

   ❑ Run this Job Immediately

   ❑ Schedule this job

12. Select an option and click **OK**.

Creating an Altiris Backup Image Locally

To create an Altiris backup image locally, perform the following steps:

1. Modify the image on the HP Compaq Thin Client t5700 as desired.

2. Disable the EWF on the thin client by running the **XPEmbedded Sample** job provided for disabling the EWF from the Deployment Server Console or by running the command **ewfmgr c: -disable** on the machine under an account with Administrative privileges.

3. Reboot the HP Compaq Thin Client t5700 and press **F12** when the HP logo is displayed during system restart.

4. Press **F8** when prompted and select **Altiris Managed PC**.

5. Press **Esc** to exit the BootWorks process at the **F2 for Diagnostics Mode** prompt.

6. Type **Rdeploy**

7. Click **Create an Image File**, then click **Next**.

8. Select a location for the image to be stored and a unique name for the file. Click **Next**.

Do not make any changes to the partition sizes or locations on the following screen.

9. Click **Finish**.

10. When the imaging is complete, restart the thin client.

Restoring an Altiris Backup Image on the t5700

An Altiris Backup Image can be restored remotely using Altiris Deployment Server or locally by invoking **RDeploy.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, complete the following steps:

1. On the Deployment Server Console, right-click in the **Jobs** window and select **New Job**.
2. Name the Job with a descriptive name that can be easily remembered, such as "Restore Backup Image of the HP t5700."
3. In the upper right corner of the **Job Detail** window, click **Add** > **Run Script**.
4. Type **ewfmgr c: -disable** in the **Run this Script** window and click the **Run this script in Windows** button. Click **Finish**.
5. Click **Add** > **Distribute Disk Image**.
6. Select a backup image to be restored and click **Finish**.
7. In the upper right corner of the **Job Detail** window, click **Add** > **Run Script**.
8. Type **ewfmgr c: -enable** in the **Run this Script** window and click the **Run this script in Windows** button. Click **Finish**.
9. Click **Add** > **Power Control**.
10. Click **Restart** and **Force applications to close without a message**. Click **Finish**.
11. Drag-and-drop this newly created backup job to the selected machine. A **Schedule Computer Job** screen appears with the following three options:
    - ❑   Do Not Schedule
    - ❑   Run this Job Immediately
    - ❑   Schedule this job
12. Select an option and click **OK**.

Restoring an Altiris Backup Image Locally

To restore an Altiris backup image locally, complete the following steps:

1. Disable the EWF on the thin client by running the XPEmbedded Sample job provided for disabling the EWF from the Deployment Server Console or by running the command **ewfmgr c: -disable** on the machine under an account with Administrative privileges.
2. Reboot the HP Compaq Thin Client t5700 and press **F12** when the HP logo is displayed during system restart.
3. Press **F8** when prompted and select **Altiris Managed PC**.
4. Press **Esc** to exit out of the BootWorks process at the **F2 for Diagnostics Mode** prompt.
5. Type **Rdeploy**.
6. Click **Restore an Image File**, then click **Next**.
7. Select an image to be restored and click **Next**.
8. On the following screen make any modification to the post-configuration settings desired and click **Next**.

Do not make any changes to the partition sizes or locations on the following screen.

9.   Click **Finish**.

10. When the imaging is complete the machine may be rebooted into production.

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