

Kodak Workflow with Dell

Windows 2003 installation using Ghost Image

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AC	July 6, 2006	Derek Braendel	Update with TrippLite
AD	Nov 3, 2006	Derek Braendel	Update with PE2900, PE2950, PE840
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AF	Feb 15, 2007	Derek Braendel	Updated with Field Service input
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1. INTRODUCTION

This document contains procedures for installing the Microsoft® Windows® 2003 (W2K3) operating system for Kodak Prinergy®, Prinergy Evo, InSite, or BestRIP running on Kodak-approved Intel server platforms.

This document provides step-by-step procedures for Windows 2003 installation and configuration using a Ghost image prepared specifically for each platform.

Currently supported platforms include Dell® PowerEdge™ Servers PE400, 700, 800, 830, 840, R200, 2600, 2650, 2800, 2850, 2900, and 2950 and legacy Dell servers 1400, 2400, 2500, 4400, and 6400.

Ensure that you have the following software before beginning installation.

Table 1: Necessary Software

Disk	Type	Version	Comments	Systems
Windows 2003 Server and SP2	CD	2003	Operating system	All
W2K Resource CD	CD	Creo P/N: 651-00117A-03	Drivers and Firmware updates	All Dell

1.1 Other Related Documentation

Table 2: Related Docs

Kodak P#	Title	Overview
709-00997A	PE R200 Server Hardware Setup	
709-00701A	PE840 Server Hardware Setup	
709-00667A	PE29x0 Server Hardware Setup	Hardware Setup for PE2900, PE2950
709-00615A	PE830 Server Hardware Setup	
709-00383A	Dell 28x0, 800 Server Hardware Setup	Hardware Setup doc for PE800, PE2800, PE2850
72-3572A	Dell Hardware Setup	Hardware setup for PE2400, 4400, 6400, 2500, 2600, 400, 700
72-2125A	Workflow Hardware Site Prep	Power, Environmental, and Dimension specs for all DEC Alpha, DG Aviion, HP, Dell, Servers, Tap Libraries, and RAIDs.
XX0119A	Server Specs and Slot Location Matrix	Overview specification matrix for all DEC, DG, Dell, HP Servers along with recommended PCI slot locations
XX0396A	ResourceCD Matrix	Listing of all supported Firmware, Drivers, and Utilities for DG, Dell and HP Servers.

2. HARDWARE CONFIGURATION REFERENCE

The hardware must be configured before installing Windows 2003. For instructions, see the server hardware setup documents in *Table 2: Related Docs*.

3. GHOSTING THE OS FROM THE SERVER GHOST IMAGE CD

3.1 Ghosting from an OS Image

1) Disconnect any external RAIDs connected to your server.

2) Insert the appropriate Ghost CD as listed in ***Error! Reference source not found.*** and restart your server. It will automatically start Ghost.

3) From the main menu, select **Local > Disk > From Image** and press Enter. Select the desired GHOST image file on the CD and press **Enter**.

4) Highlight the first hard disk in the drive list and press **Enter**.

5) Ensure the **New Size** is equal to the **Old Size**. *Adjust if necessary* and click **OK**. For larger target disks you can adjust the new size up, but if you have to change sizes it is recommended that the **New Size** be greater than the **Old Size**.

6) Click **Yes** to proceed with the restore.

7) Upon completion of the ghost restore, remove the CD and restart the server. Unlike older Ghosts you will not need to remove any drives before you restart the server.

4. SETTING UP SYSTEM PREPARATION TOOL MINI SETUP WIZARD

The system will start up with a Microsoft mini setup wizard. Respond to the following prompts:

1) At the Welcome to Windows 2003 Setup Wizard prompt, click **Next**.

2) At the License Agreement dialog, if you agree to the terms of the license agreement, select **I accept this agreement**, and click **Next**.

3) At the Personalize Your Software prompt:

   a) In the **Name** field, type `Workflow Server`.

   b) In the **Organization** field, type the customer company name, and click **Next**.

4) If prompted enter the Product Key information. The key entered will depend upon the following criteria:

   Note! Product ID Keys shown below are NOT to be shown to customers!

Server Shipped With	License Purchased Image Used	Activation Required	Product ID
Windows 2003R2	Use the Windows 2003R2 OEM image.	No	KQTR2 - 2RYPB - W2GMT - BVXV9 - CXFC8
Windows 2008	Use the Windows 2003R2 OEM image.	No	KQTR2 - 2RYPB - W2GMT - BVXV9 - CXFC8
Windows 2003 non R2 or Windows 2000	Customer has purchased Windows 2003R2 Retail. Retail Windows 2003R2 image is required.	Yes	Use the customer's Product ID from the retail box (preferred). If not available use: TH8K8 - XJ4VM - T3B4B - 9HRT8 – 33M8M
Windows 2003 non R2 or Windows 2000	Customer has purchased Windows 2008 Retail. Retail Windows 2003R2 image is required.	Yes	TH8K8 - XJ4VM - T3B4B - 9HRT8 – 33M8M

5) Set the computer name, using the following convention:

   HWØnnnn for Evo servers

   n = the number of the machine shipping (for example, HWØ1234)

   YCSxn for all Prinergy servers and for InSite for Prinergy servers:

   x = **P** for Primary Server or **S** for Secondary Server (Note that the terms *primary* and *secondary* are not NT- or W2K3-related.)

   n = the number of the machine shipping (for example, YCSP023, YCSS300)

   BWSn for InSite for Brisque servers

   n = the number of the machine shipping (for example, BWSP023)

PW00n for InSite for Brisque servers

n = the number of the machine shipping (for example, PW00023)

6) Enter/confirm the Administrator password (= creo), and click **Next**.

7) Set the correct date and time, and time zone, and click **Next**.

8) The server will now restart.

9) After you log in for the first time, the server will re-synch the computer name from the Ghost.

5. ADDING NEW HARDWARE

Once the system is started, it may detect hardware changes in the target system (compared to that of the source system where the Ghost image was created) and display the **Found New Hardware Wizard** dialog box. **Respond to these dialogs boxes ONLY if they appear**.

1) If prompted at the initial wizard prompt, select **No, Not this time** to the Windows Update prompt and click **Next**.
2) For each new device detected you will see one of the following:

Found New Hardware Prompt	Follow Section
Ethernet Controller	Follow the IntelPro Controller section (the Broadcom driver is already installed and should automatically pick up).
RAID Controller	Follow the Dell RAID Controller section. For most cases this should be automatically detected and applied.

Use the following procedures to install each driver type (if they appear).

5.1 Ethernet Controller

If you have added an Intel Pro1000 NIC you will be prompted to install the driver.

1) Cancel the wizard.
2) Run **%SystemDrive%\Drivers\intelPro\MyVersion\Autorun.exe**.
3) Select **Install Drivers** and, when the driver installation is finished, click **OK**.
4) Exit the Intel Pro Network Connections wizard.

5.2 Dell RAID Controller

Depending on the server type you may receive a prompt to reinstall the RAID driver.

5) Select **Install from a list**.
6) Select **Search for the best**.
7) Uncheck **Search Removable** and select **Include the location in the search**.
8) Locate **%SystemDrive%\Drivers\Perc** and click **Next**.

5.3 Attach External RAID

1) After adding the device drivers, shut down the server and connect the external RAID.
2) Restart the server.

6. SETTING UP DISKS

The following table lists typical driver lettering conventions for Windows 2003 workflows.

Table 3: Workflow Drive Letters

Disk	Partition	Type	Information
1	C:	NTFS	W2K3 operating system, NT Loader, boot files, paging, Application executables, temp files
1	D:	NTFS	Temp1 (InSite only)
1	E:	NTFS	Temp2 (InSite only)
	H:	N/A	CDROM
2	D:	NTFS	Jobs (Evo only)
2	G - Z	NTFS	Jobs, Database and ITP data files, Ghost Backup directory (non Evo)

6.1 Setting Up Disk Configuration

1) Right-click **My Computer** and select **Manage**. The Computer Management Console appears.

2) Select **Computer Management (Local) > Storage > Disk Management**. The Disk Management view appears, showing the disks.

3) If prompted with the Write Signature and Upgrade Disk Wizard dialog box, select **Cancel**.

   WARNING: If you accept this prompt by selecting **Next**, W2K3 will convert all un-partitioned disk(s) to the new Dynamic disk type, which should be set for external Raid disk set(s) only. Note that DOS will not recognize the Dynamic disk type.

4) If a small red **STOP** sign appears on the new/blank disk(s), right-click the sign and select the **Write Signature** option to add the W2K3 disk signature to these disks before volume(s) can be created on them.

6.1.1 Configuring the Data Disk

1) The first Jobs Disk is configured as single volume

   a) Right-click the un-partitioned Disk1 and select **New Partition**.

   b) Select **Primary Partition** and click **Next**.

   c) Set **Partition size** = **entire volume** and click **Next**.

   d) Assign **Drive Letter** (as per *Table 3: Workflow Drive Letters*) and click **Next**.

   e) Use the following options:

File System	NTFS
Allocation unit size	Default
Volume label	Data1
Format Type	Perform a Quick Format

   f) If no additional disks need to be configured, close the Computer Management Console.

2) Repeat the procedure for any additional disks using drive letters.

3) Close the Computer Management Console.

6.1.2 Configuring Multiple External RAID Volumes

In Prinergy systems, there is no restriction for job storage on a single logical volume. Therefore, it is strongly recommended that multiple large volumes *not* be configured into a single stripe set because of a higher risk of losing data. This configuration would require extra administrative steps in recovering the stripe set and its data when moving the RAID unit between different servers. Configuring multiple RAID5 volumes as multiple NTFS volumes is strongly recommended.

7. CONFIGURING PERFORMANCE SETTINGS

7.1 Verifying Virtual Memory

1) Right-click **My Computer** and select **Properties**.

2) On the **Advanced** tab, select **Performance > Settings > Advanced**.

3) Under **Virtual Memory**, select **Change**.

4) Select the **Jobs** drive and set **Initial Size = Maximum Size** (= 1.5 x of physical RAM installed. For example, if the system has 1GB RAM installed, type 1536).

5) Click **OK** and **OK**.

6) Select **Startup and Recovery…**

   a) Set **Display list of Operating Systems** to **5** seconds.

   b) Set **Write Debugging Information** to **None**.

   c) Uncheck **Automatically Restart** and click **OK** and **OK** to confirm.

7) At the restart the computer prompt, click **No**.

7.2 Configuring Networking

7.2.1 Verifying NIC Driver Settings (including AppleTalk binding)

Ensure that the Network Interface Card (NIC) driver settings are correct and verify that AppleTalk is binding to the appropriate NIC.

1) On the desktop, right-click **My Network Places** and select **Properties.**

2) Right-click the **Local Area Connection** icon and select **Properties**.

3) Select the **Show icon in notification area when connected** check box.

4) Select **Connect Using > Configure > Advanced**.

5) Set **Speed & Duplex** to **AUTO DETECT.**

   You may also choose to match the settings to the local network switch connection type. This will allow you to achieve maximum network throughput. Click **OK** and wait for the Adapter properties to complete making changes.

6) Right-click **Local Area Connection** and select **AppleTalk Protocol > Properties**.

   If the **AppleTalk Properties Enable** box is unavailable, re-enable AppleTalk as follows:

   a) Clear the **Apple Talk Protocol** check box and click **OK**.

   b) Reopen **Local Area Connection > Properties** and enable **AppleTalk Protocol**. Click **OK**.

   c) Reopen **Local Area Connection > Properties** and select **AppleTalk Protocol > Properties**. You should now see a valid AppleTalk zone in the **Zone** field. If the **Accept inbound connections on this adapter** option is available, select it and click **OK**.

7) Configure WINS:

   a) Select **Local Area Connection > Internet Protocol (TCP/IP)**.

   b) Select **Properties > General tab > Advanced > WINS**.

   c) Clear the **Enable LMHOSTS lookup** check box.

   d) Select **Enable NetBIOS over TCP/IP** and click **OK**.

   e) Type in the static IP address, Subnet mask, Gateway & DNS.

8) Close the **Local Area Connections** window.

8. ACTIVATING WINDOWS

If the Windows 2003R2 image applied to the Server was an OEM image then Activation will not be required. If the image was Retail then Activation will be required.

To see if your installation of Windows needs to be activated select **Start > Run** and type: **%WinDir%\System32\oobe\msoobe.exe /a**

If you see “Windows is already activated” you are fine. If instead you see the “Let’s Activate Windows” windows you will need to Activate.

If the Product ID key used was from the customer’s purchased Windows 2003R2 Retail box then activation should be as simple as selecting the “Yes let’s activate windows over the internet now” option.

If the Product ID key used was the Kodak Internal Windows 2003R2 Retail key then activation will be done manually. Please follow the Activate Windows document 719-00861A from TechPlanet:

http://techplanet.creo.com/software_solutions/networking_os/windows_support/content/troubleshooting/Activate_Windows.htm

9. MICROSOFT UPDATES AND HOT FIXES

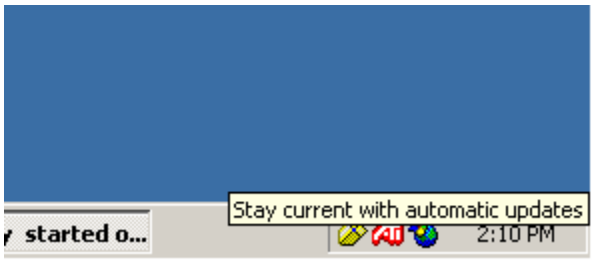
Windows baselines have the most recent security updates and Hot Fixes at the time they are created. However, images may not be up-to-date with the most recent Microsoft Critical Updates. Kodak highly recommends that you obtain the latest Critical Updates directly from Microsoft. Some customers insist on having Kodak qualify critical updates before they are applied to their workflow systems. In this case, all images point directly to the Kodak WSUS Server. You have the option of installing the updates from Microsoft (recommended) or from the Kodak WSUS Server.

9.1 Installing Updates from Microsoft

1) Select **Start > Run** and type: **WUPDMGR.EXE**.
2) Select **Custom** (not Express) and wait for the update check.
3) Select **Review and Install Updates**.
4) Select all critical updates except for Service Packs. Some Workflows are Service Pack sensitive. **Note:** For Evo servers running Windows 2003 SP0, you must install SP2 as a minimum.
5) Follow the rest of the prompts to apply the updates.

9.2 Installing Updates from the Kodak WSUS Server

Kodak servers running Windows 2000 and Windows 2003 are factory-configured with Automatic Updates, which monitors and downloads critical security updates from http://windowsupdate.creo.com. When a new update is available, a small icon appears in the System Tray:



1) When you click the icon, a dialog box appears and gives you the following options:
   - Install the updates now
   - Remind you to install the updates in a specified period of time
   - Close the dialog box, leaving the System Tray icon in place
2) Select **Install the Updates Now** and follow the on-screen prompts.

10. INSTALLING AND CONFIGURING REMOTE ACCESS

Please refer to Techplanet for the latest configuration documentation in:

Techplanet.creo.com -> Software Solutions -> RSS/ServiceWire -> Procedures:

Select the procedure applicable to your configuration:

Modem installed	Configuring Windows Server 2003 for Analog Dial-up Connectivity with Kodak RSS Server
RSS VPN Feed only	Configuring RSS Server and Client for RSS VPN

11. INSTALLING AIT-2/3 TAPE DEVICE DRIVER (IF A TAPE DEVICE IS INSTALLED)

Windows 2003 will auto-detect the connected device and prompt the user to install a device driver for it. Ensure that you use the driver (version 1.5) included in the Resource CD for the appropriate installed devices (Single DLT8000, FastStor 7/22, ATL P1000, and so on). The AIT-based Qualstar

tape libraries and AIT-2/3 single tape drive device driver is available from the W2K3 Resource CD. *Do not use the W2K3 default tape drive device driver.*

12. INSTALLING UPS SOFTWARE

There are two types of uninterruptible power supply (UPS) supported by Kodak. You can determine which UPS you have by the manufacturer's name on the UPS faceplate (TrippLite or APC). Depending on which UPS you are using, see the following documents, which are available on TechPlanet: **Software Solutions > APC or TrippLite > Reference**.

APC	719-00223A – Installing APC PowerChute Management software (v7.0.4 minimum)
TrippLite	719-00607A – Installing TrippLite PowerAlert Management software.

13. PERFORMING A WINDOWS 2003 SPOT CHECK

After installing Windows 2003, perform a spot check on each server to ensure that the operating system has been installed correctly.

To perform a spot check on the Windows installation:

1) Using Windows 2003 Event Viewer, check for any errors.

2) Check connectivity:

   a) Ensure that the network drop is live and connected to the appropriate hub/switch.

   b) Try browsing the network.

   c) Ping another server to ensure TCP/IP works.

   d) Map a drive to another system and copy a file.

3) Defragment the system disk before installing Prinergy software.