

TIFF Front End

Server Installation Procedure

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1. SCOPE

This document describes how to install or recover the TIFF Front End server using the Norton Ghost utility.

The following topics are covered:

- Setting up Dell PERC 4/Di Raid Controller disk sets
- Copying files from the ghost image to the workstation
- Changing the volume serial number for the system drive
- Creating Disk partitions for the workstation
- Copying the recovery utility to the workstation
- Connecting and configuring a Clairiion RAID
- Using the Regfind utility
- Setting up FTP service
- Installing TIFF Front End applications.

2. INSTALLATION

In order to install TIFF Front End, you must be logged on to the server as a user with administrative rights to that computer.

2.1 Setting Up Dell PERC 4/Di Raid Controller Disk Sets

All Dell PE2600 TIFF Front End W2K servers have a common disk drive configuration that is different compared to that of a PE2500 based server. This section describes the procedure on how to configure the physical disks connected to the server embedded PERC 4/Di Raid Configuration Utility. The table below shows the server's standard drive designation.

Table 2-1: Server's drive letter designation

Physical Drive	Logical Drive	Type	Information
0	C:	NTFS	BOOT: W2K OS Loader, boot files
0	D:	NTFS	System: W2K paging, operating system
	H:	N/A	CD-ROM
0	S:	NTFS	APPLICATIONS: TIFF Front End Applications, third-party executables
1	No drive	FAT32	GHOST + W2K OS images
1	I:	NTFS	DATAIN: Customer Input Data
2	T:	NTFS	DATAOUT: Application Output Data

TIFF Front End Server 2600's standard physical disk setup is:

- Disk 0: A single disk setup as a non-Fault-tolerance Raid-0 logical drive.
- Disk 1: 1 to 4 disk(s) setup as Raid-0 (1 to 2 disks) or Raid-5 (3 to 4 disks) logical drive.
- Disk 2: A single disk setup as a non-Fault-tolerance Raid-0 logical drive

If the customer has purchased additional drives for DATAIN, expand the size of this drive by creating either a non-Fault-tolerance stripe set (Raid-0, 1 to 2 disks), or a Fault-tolerance Raid-5 set (3 to 4 disks), using the Server's embedded PERC 4/Di Raid Configuration Utility software.

2.1.1 Creating The System Drive (Raid-0)

1. Press CTRL-ALT-DEL to REBOOT the server.
2. Press CTRL+M during the Dell PowerEdge Expandable Raid Controller boot up prompt to run the DELL PERC 4/Di Controller Configuration Utility. From the PERC BIOS Configuration Utility's Main Menu screen:
3. Select **Configure** (to initiate configuring logical drive(s)).
4. Select **Clear Configuration** to delete any existing pre-defined RAID sets.
5. Select **New Configuration** and then select **Yes** to go to the Proceed prompt. The New Configuration – ARRAY SELECTION pop-up window will appear.
6. Highlight the first disk (of channel 0 of the PERC controller) and press the space bar to select the disk. Note that the selected disk is now shown as Online state; this is your System disk, make sure you do not initialize it if W2K OS ghost image has already been loaded onto this drive. Data will be lost permanently if disk initialization is invoked.
7. Press ENTER to complete the disk selection step.
8. Press F10 to start configuring the RAID-set for the two disks attached to channel 0.
9. Press ENTER on each of the RAID-set options to select options that match the following settings:
   - `RAID` = `0`
   - `SIZE` = `34556 MB`

   Advanced Menu:
   - `Stripe Size` = `128 KB`
   - `Write Policy` = `WRBACK`
   - `Read Policy` = `READAHEAD`
   - `Cache Policy` = `Cached IO`
10. Press ENTER to accept the drive configuration.
11. Press ESC to get back to the New Configuration – ARRAY SELECTION menu.

2.1.2 Creating The DATAIN Drive (Raid-0/Raid-5)

1. Highlight the second disk (of channel 0 of the PERC controller) and press the space bar to select the appropriate number of disk(s) according to the following table:

Total Disk	Selected Disk	Raid Type	Information
1	0	N/A	Not Valid Config, Need Minimum 3 disks.
2	0	N/A	Not Valid Config, Need Minimum 3 disks.
3	1	0	1 for System, 1 for DataIn, 1 for DataOut
4	2	0	1 for System, 2 for DataIn, 1 for DataOut
5	3	5	1 for System, 3 for DataIn, 1 for DataOut
6	4	5	1 for System, 4 for DataIn, 1 for DataOut

2. Press ENTER to complete the disk selection step.
3. Press F10 to start configuring the RAID-set for the 1 to 4 selected disks with the appropriate settings, depending on the following:

   a) If one to two disk drives are selected, then create one or two RAID-0 disk set with the following settings:
   - `RAID` = `0`
   - `SIZE` = `34556 MB`

   Advanced Menu:
   - `Stripe Size` = `128 KB`
   - `Write Policy` = `WRBACK`
   - `Read Policy` = `READAHEAD`
   - `Cache Policy` = `Cached IO`

   b) If three or more disk drives are selected, then create a single RAID 5 disk set with the following settings:
   - `RAID` = `5`
   - `SIZE` = `138224 MB` (approximately for 5 disk set)

   Advanced Menu:
   - `Stripe Size` = `128 KB`
   - `Write Policy` = `WRBACK`
   - `Read Policy` = `READAHEAD`
   - `Cache Policy` = `Cached IO`

12. Press ENTER to accept the RAID configuration.
13. Press ESC to get back to the New Configuration – ARRAY SELECTION menu.

2.1.3 Creating The DATAOUT Drive (Raid-0)

1. Highlight the last disk (of channel 0 of the PERC controller) and press the space bar to select the last un-selected Ready-state disk (of channel 0 of the PERC controller). Note that it is now shown as Online state.
2. Press ENTER to complete the disk selection step.
3. Press F10 to start configuring the RAID-set for the two disks attached to channel 0.
4. Press ENTER on each of the RAID-set options to select options that match the following settings:
   - `RAID` = `0`
   - `SIZE` = `34556 MB`

   Advanced Menu:
   - `Stripe Size` = `128 KB`
   - `Write Policy` = `WRBACK`
   - `Read Policy` = `READAHEAD`
   - `Cache Policy` = `Cached IO`
5. Press ENTER to accept and complete the RAID configuration.
6. Select **`Yes`** to accept the Save Configuration prompt and exit the utility.
7. Press **CTRL-ALT-DEL** to reboot

2.2 Installing W2K Server OS Using Ghost Utility

To install TIFF Front End using the Norton Ghost Utility:

1. Put the Bootable 2600 Server Image CD (P/N: 651-00013A-G) in the CD drive.
2. From the **Start** menu, choose **Shut Down**.
   The Shutdown dialog box displays.
3. In the Shutdown dialog box, choose **Restart the computer**.
   As the computer restarts, the final screen before the A:\ prompt will read:

```
4. A:\>A:\MSCDEX.EXE  ID:ASPICD0
   MSCDEX Version 2.23
   Copyright © Microsoft Corp. 1986-1993. All rights reserved

   Drive Z: = Driver ASPICD0
   Unit 0
```

5. The drive letter identifies your CD drive.
6. At the A:\ prompt, put your resource CD in the CD drive and type that drive letter followed by a colon; for example **Z**:.
7. At the D:\ prompt, type **cd recovery**.

8. At the D:\RECOVERY\ prompt, type **ghost6**.
9. The Norton Ghost dialog box displays. Press Enter**.**
10. Navigate on the menu pop-up bar using the arrow keys to **Local>disk>from Image**. Press **Enter** to continue.
11. In the File Name to Load Image From dialog box, use the arrow keys to choose 26W2KG6B.GHO and press **Enter**.
12. Select **Drive 1** as the Local Destination Drive and press **Enter**.
    The Destination Drive Details dialog box displays
13. In Parts 1, 2 and 3, match the numbers in the **new size** column to those in the **old size** column. The dialog box looks like this:

Partition	Type	Descript	Label	New Size	Old Size	Data Size
1	DE	Fat 16	DE	**31**	31	9
2	07	NTFS	BOOT	**203**	203	nn
3	07	NTFS	System	**8605**	8605	xxxx
4	07	NTFS	DataLog	**258xx**	258xx	yy
			Total	**33xxx**	33xxx	zzzz

14. Once they are matched, tab to navigate to the **OK** button and click **OK**.
    The Destination Drive Details dialog box closes and the Question dialog box opens.
    `Proceed with disk load? Destination drive will be overwritten`.
15. Tab to **Yes** and press **Enter**.
16. The progress indicator creeps across the screen as Norton Ghost copies files from the ghost image to Disk 1. When the indicator reaches 100 percent, the Clone Complete dialog box opens.
17. ****Note**: Remove the boot CD from CD drive before resetting the computer.
18. Press Enter to **Reset Computer**.
19. The computer reboots and the Windows 2000 mini Setup window displays.
20. Click **Next** at the "Welcome to Windows 2000 Setup Wizard" prompt.
21. At the License Agreement dialog, select "I accept this agreement", and then click **Next**.
22. Click **Next** at the Regional Settings prompt.
23. At the Personalize Your Software prompt:

    Name: `TIFF Front End`

    Organization: `Customer's name` and select **Next**.

24. Enter the W2K Product Key (off the OEM certificate sticker adhered near the bottom front of the right-hand side panel), and then click **Next**.

25. If this is an upgrade of an NT4 server, then make sure to arrange for a proper license certificate purchased on site and use a temporary product key code supplied here to get thru your installation. The code is: CXJD4-DWWM9-887XH-K7JQ7-BQG4Y

26. Set **Licensing Mode** to **Per Server** and set the number of connections to 10; and then click **Next**.

27. Set the machine name to: **cwXXX** and Click **Next**

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

29. Enter the area code (such as 604) in the "Modem Dialing Information" dialog and click **Next**.

30. Set the correct date and time, and time zone and then click **Next**.

31. If the prompt appears, select Remote Administration Mode at the Terminal Services Setup screen, and then click **Next**.

32. At the Networking Settings Setup screen, select Custom Settings and then click **Next**.

33. Select File and Printer Sharing for Microsoft Networks and then select Properties.

34. On the Server Optimization tab, select Maximize data throughput for Network applications and click **OK**.

35. Uncheck "NetBEUI Protocol" check box

36. Select (highlight) "AppleTalk Protocol" option, and click **Properties** to ensure a valid AppleTalk "Zone" appears in the Zone field. If the "Accept inbound connections on this adapter" is not grayed out, then check this check box and click **OK**.

37. Select Internet Protocol (TCP/IP), and then select Properties. On the General tab, select <**Advanced…>**

38. Select the WINS tab, uncheck Enable LMHOSTS lookup, select Enable NetBIOS over TCP/IP and select OK.

39. In the General tab, select OK again, and then click **Next**.

40. At the Workgroup or Computer Domain Setup screen, click **Next** (Setup starts copying files, wait…)

41. Click **Finish** to reboot server when prompted. Wait for the system reboots.

42. Log in as Administrator.

2.3 Adding New Hardware

Once the system is booted up, the system may detect hardware changes in the target system (compared to that of the source system where the ghost image was created) and pop up the "**Found New Hardware Wizard**" dialog. **Respond to these dialogs accordingly ONLY if they appear**.

Setting Up the Digi AccelePort 4P Universal PCI card

If the Digi multi-serial port card is not set up correctly, or the ghost image does not include it, use the following instructions to configure the board and update the driver.

New COM Ports Assignment

All Dell servers with the device connection kit are configured with the Digi AccelePort 4P PCI card. Port assignments are as follows:

	COM1 (Embedded)	COM2 (Embedded)	COM3 (Digi P1)	COM4 (Digi P2)	COM5 (Digi P3)	COM6 (Digi P4)
MODEM	X					
UPS		X				
Workstation Serial I/F			X			
Recorder Diagnostic				X		
Head Diagnostic					X	
Harmony Densitometer I/F						X

Connections between the output device serial cables and the Render station are as follow:

- Modem Serial cable – COM1 port (embedded on the motherboard)
- UPS black cable – COM2 port (embedded on the motherboard)
- Recorder WS – COM3 (Digi Adapter cable's P1 connector)
- Recorder Diag. – COM4 (Digi Adapter cable's P2 connector)

New Found Hardware: Digi AccelePort 4P Multi Serial Port PCI Card

If the "**Found New Hardware**" dialog of the **Digi AccelePort 4P** card appears, follow the steps below to load the **Digi AccelePort 4P PCI Controller** device driver:

1. Click **Next,** Select "**Search for a suitable driver for my device (recommended)"** and click **Next.**
2. Select "**Specify a location"** and click **Next.** Click **Browse,** Select "**D:\DRIVERS\DIGI\XL4P*.INF"** file and click **Open, OK.**
3. At the "**Driver Files Search Results"** window showing "**d:\winnt\oem1.inf"** file, click **Next.**
4. Click the **Yes** tab at the "**Digital Signature Not Found"** prompt, and then click **Finish** to complete the driver loading process.

2.4 Changing the Volume Serial Number for the System Drive

Change the volume serial number for the system drive to ensure there is only one system using that serial number.

To change the volume serial number:

1. From the **Start** menu, point to **Programs,** then select **Command Prompt**.
2. At the D:\ prompt, type `S:.`
3. At the S:\ prompt, type `cd ctk_volumeserialchange\intel`.
4. At the S:\CTK_VolumeSerialChange\intel> prompt, type `changeserial d: (system drive).`

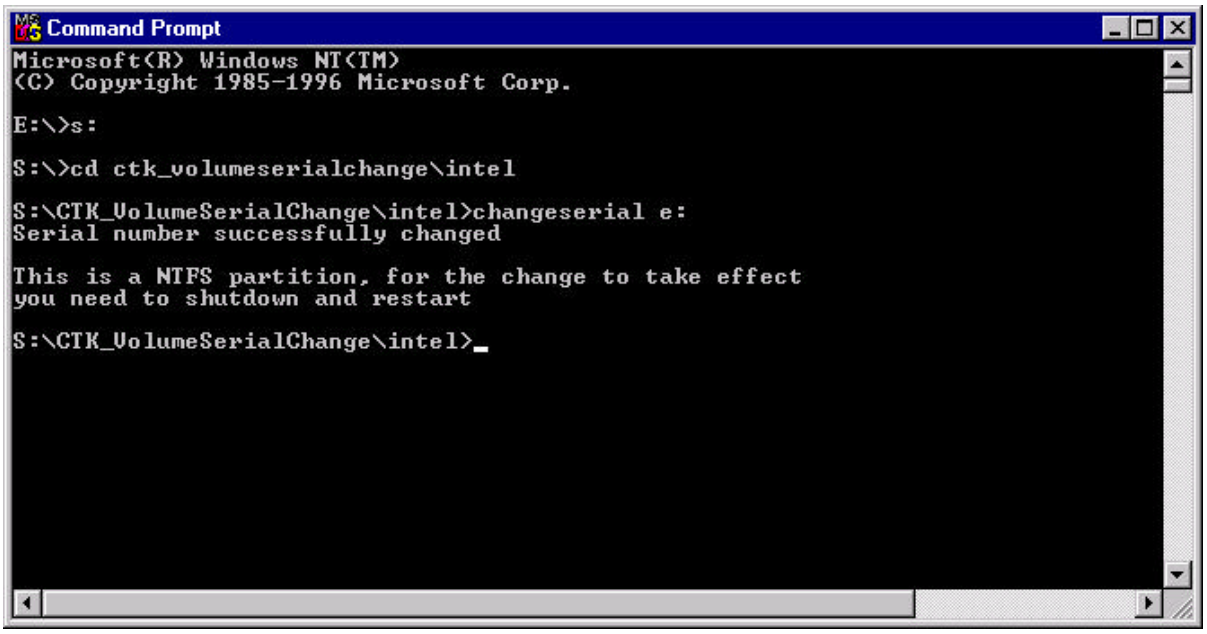


Figure 3: Command Prompt Window

5. Close the window.

The volume serial number for the system drive will now be changed.

2.5 Setting Up Drives for the TIFF Front End Server

We will now create the appropriate drives for the server: DATAIN, RECOVERY and DATAOUT using the Computer Manage Console's Disk Management.

To set up drives for the TIFF Front End server:

1. Right-click **My Computer** and select **Manage** to bring up the Computer Management Console.
2. Expand the Storage component under the Computer Management (Local) tree and select **Disk Management**. The Disk Management view appears on the right-hand window of the Microsoft Management Console (MMC).

3. If the Write Signature and Upgrade Disk Wizard dialog box, select <**Cancel>** The disk layout similar to the following should appear:

WARNING: **If you accept this prompt by selecting <Next>, W2K 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.**

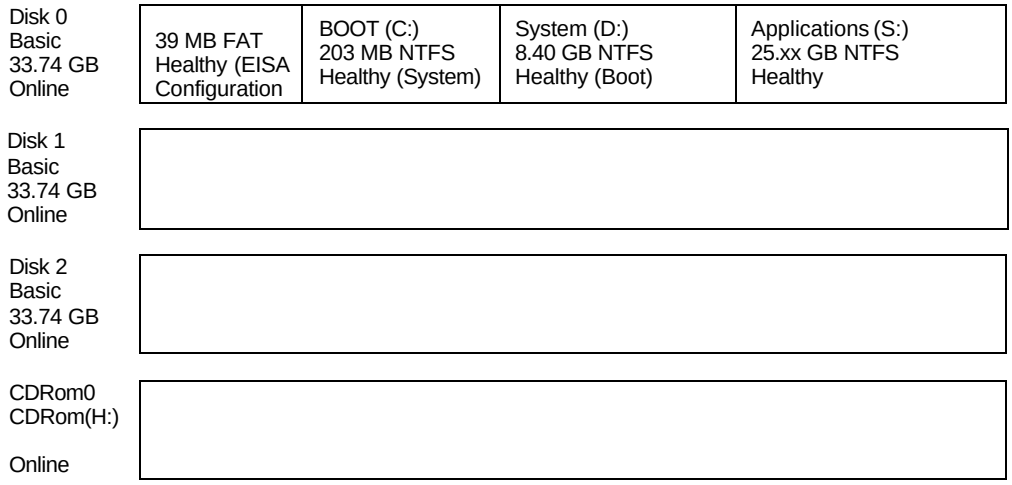


Figure 1: TIFF Front End W2K Server's Pre-complete Disk layout

4. If a small red **STOP** sign appears on the new/blank disk(s), then right click on the sign and select "**Write Signature**" option to put W2K disk signature onto these disks before volume(s) can be created on them.

5. Right-click the un-partitioned Disk1 and select "**Create Partition…"** and "Create Partition" wizard appears, click <**Next>.**

6. Select "**Primary Partition**", click <**Next>**, leave the entire partition size, and then click <**Next>**.

7. Assign **Drive Letter** = **I**, **File System to use = NTFS, Allocation unit size = Default** and **Volume label = DataIn,** then check the "**Perform a Quick Format**" option and then click <**Next>**, **<Finish>** to complete creating the partition.

8. Right-click the un-partitioned Disk2 and select "**Create Partition…**". The "Create Partition" wizard appears, click <**Next>**.

9. Select "**Primary Partition**", and then click <**Next>**.

10. Enter **4095** for partition size, and then click <**Next>**.

11. Assign **Drive Letter** = **None**, **File System to use = FAT32, Allocation unit size = Default** and **Volume label = RECOVERY,** then check the "**Perform a Quick Format**" option and click **<Next>, <Finish>** to complete creating a partition.

12. Repeat the above steps on the 2nd part of Disk2 to create another primary partition with the following settings: **Drive Letter** = **T**, **File System to use = NTFS, Allocation unit size = Default** and **Volume label = DataOut,** then check the "**Perform a Quick Format**" option and then click <**Next>**, **<Finish>** to complete creating the 2nd partition on Disk2. The final drive configuration should look like this:

Disk 0 Basic 33.74 GB Online	39 MB FAT Healthy (EISA Configuration	BOOT (C:) 203 MB NTFS Healthy (System)	System (D:) 8.40 GB NTFS Healthy (Boot)	Applications (S:) 25.xx GB NTFS Healthy
Disk 1 Basic 33.74 GB Online	DataIn (I:) 33.74 GB NTFS Healthy			
Disk 2 Basic 33.74 GB Online	RECOVERY 4.00 GB FAT32 Healthy	DataOut (T:) 29.74 GB NTFS Healthy		
CDRom0 CDRom(H:) Online				

Figure 2: TIFF Front End W2K Server's Final Disk layout

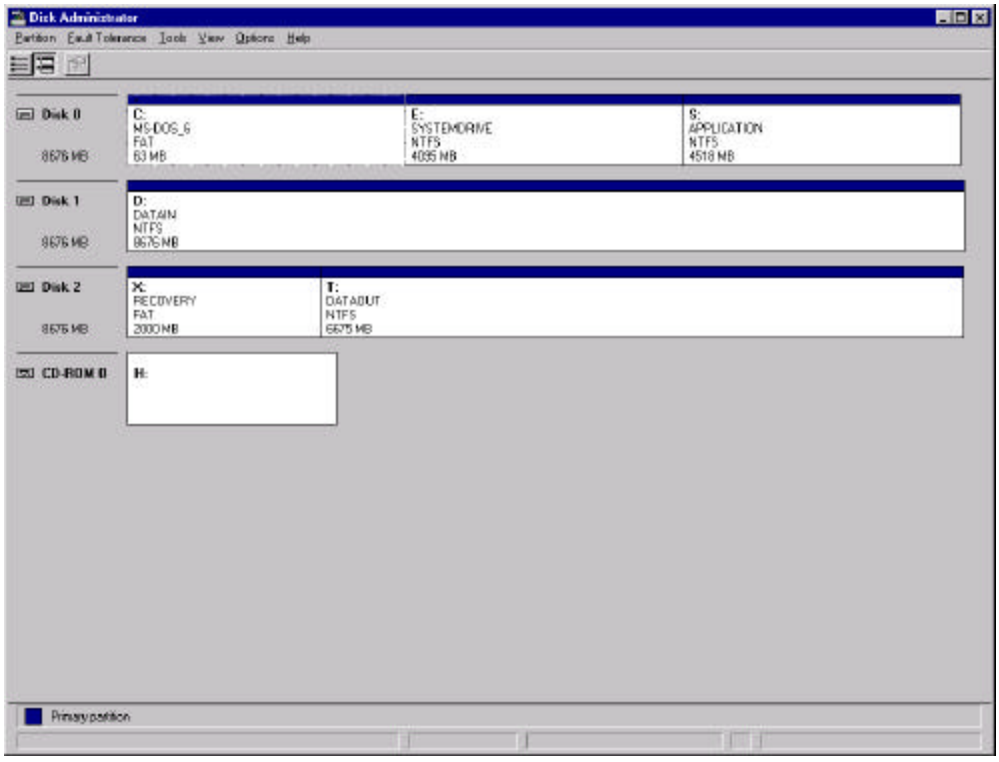


Figure 3: TIFF Front End NT4 based 2500 Server's Old Disk layout

2.6 Copying Recovery Utility to the Workstation

To ensure you have the recovery utility available, copy it to the workstation.

To copy the Recovery application to the workstation:

1. Insert the Server Image CD into your CD Rom drive.
2. Open Windows NT Explorer, point to the Resource CD, and select the Recovery folder.
3. Select all the files in the folder and copy them to the Recovery drive (X:, this drive letter is temporarily assigned to allow the user to copy utility files to the RECOVERY drive, once the files are copied, user is advised to remove the drive letter to avoid accident delete of the system Recovery files) on the TIFF Front End workstation. If the files already exist, overwrite them.
4. Select the Bootdisk folder and copy it to the Recovery drive (X:) on the TIFF Front End workstation.

The files are now copied to the workstation.

2.7 Connecting and Configuring a Clariion RAID

To connect and configure a RAID, please refer to the document “Workflow Systems Clariion SCSI RAID Configuration” (73-3227).

2.8 Using the Regfind Utility

Regfind is a Reskit utility found on the system drive in a folder called \drivers\reskit. It is used as a very powerful search and replace tool, that searches the TIFF Front End workstation for registration information.

To use Regfind to search the TIFF Front End workstation:

1. Click **Start** and point to **Programs>Command Prompt**
2. Type cd \drivers\reskit and press Enter.
3. Type Regfind –y <string1> -r <string2>.

Where –y is a switch to enable case insensitivity.
Where string1 is the text string you search for.
Where –r is a switch to enable replace.
Where string2 is the text string to replace string 1.

For example:

Regfind –y CW000 –r CWA999

This will search for all occurrences of CW000 (in all case combinations) and replace them with CWA999 in capitals.

2.9 Setting Up FTP Service

If the site requires you to set up FTP service, please refer to the document "Setting Up FTP Service for Barco and PCC Connectivity" (78-0044).

2.10 Installing TIFF Front End Applications

To install the application programs for TIFF Front End, first install Copydot Toolkit Viewer, ServerShell Host/Client & Print Console, and then TIFF Assembler. To avoid possible DLL conflicts please install them in this order. For information on installing these applications, please refer to the install documentation for each application. For latest revisions of the TFE software and documentation, please refer to the Controlled Releases page on TechPlanet at: http://techplanet.creo.com/output/computer_to_plate/thermoflex/nav/creleases.htm

Application	**Document**	**Part Number**
Copydot Toolkit Viewer	Copydot Toolkit User Guide	03-4089
	Copydot Toolkit (Viewer) Release Notes	06-0304
Service Shell Host/Client	Part of Print Console Package	
Print Console	Print Console Installation	73-3305
TIFF Assembler	TIFF Assembler User Guide	03-4150