

Xerox DigiPath Production Software

System Administrator Guide

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Changes are periodically made to this document. Changes, technical inaccuracies, and typographical errors will be corrected in subsequent editions.

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Notices and Certifications

Approvals and certification

For the UK, this product is serviced under a BS5750 Quality system accepted by the British Standards Institution.

60HZ, 115V

The equipment is listed by the Underwriters Laboratories, UL1950, certified by Canadian Standards Association, CSA22.2, No. 1950.

50HZ, 220V-240V

The equipment is certified by the British Standards Institution, IEC950 (EN60950). The equipment is manufactured under a BS5750 Quality system accepted by the British Standards Institution. The equipment is also certified in compliance with applicable standards by various national bodies.

Radio frequency emissions

USA

This equipment generates, uses and can radiate radio frequency energy. It may cause radio interference to radio communications if not installed according to the installation instructions.

The equipment complies with the limits for a Class A computing device as documented in Subpart J, Part 15 of the FCC rules which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference. In such cases, the user is responsible for the expense of correcting the interference.

Canada

The equipment does not exceed the class A limits for radio noise emissions from a digital apparatus as documented in the radio interference regulations of the Canadian Department of Communications.

Cet appareil numérique est conforme aux limites d'émission de bruits radioélectriques pour les appareils de classe A stipulées dans le Règlement sur le brouillage radioélectriques du ministère des Communications du Canada.

Europe 50HZ, 220V-240V equipment

The equipment was tested and is certified in conformance with the European commission directive 82/499/ECC and VDE 0871/0875, class B which relates to radio frequency interference.

This equipment is certified, manufactured and tested in compliance with strict safety and radio frequency interference regulations.

Safety

Your Xerox equipment and supplies were designed and tested to meet strict safety requirements. These include safety agency examination, approval and compliance with established environmental standards.

Attention to the following notes ensures the continued safe operation of your equipment.

If you need any additional safety information concerning the equipment or materials, contact your local representative.

Operational safety



Always connect the equipment to a properly grounded power source receptacle. If in doubt, have the receptacle checked by a qualified electrician.

WARNING

Improper connection of the equipment grounding conductor can result in electrical shock.

Always follow all warnings and instructions marked on, or supplied with, the equipment.

Always locate the equipment on a solid support surface (not on a thick pile carpet) with adequate strength for the weight of the machine.

Always exercise care in moving or relocating the equipment.

Always place the equipment in an area which provides adequate room area for ventilation and servicing.

Always use the materials and supplies specifically designed for your Xerox equipment. Use of unsuitable materials may result in poor performance and possibly, a hazardous situation.

Never use a ground adaptor plug to connect the equipment to a power source receptacle that lacks a ground connection terminal.

Never attempt any maintenance function that is not specifically described in this documentation.

Never obstruct ventilation openings. These are provided to prevent overheating.

Never remove covers or guards that are fastened with screws. There are no operator serviceable areas within these covers.

Never install the equipment near a radiator or any other heat source.

Never override or “cheat” electrical or mechanical interlock devices.

Never push objects of any kind into the ventilation openings.

Never operate the equipment if you notice unusual noises or odors. Disconnect the power cord from the power source receptacle and call your customer service engineer to correct the problem.

General safety



WARNING

Never look directly at the scanner light. It may cause discomfort to your eyes. Always keep the document handler down on the document glass when you use the scanner.

Always follow all warnings and instructions marked on or supplied with the product.

Never locate the scanner where people may walk on the system power cable. Do not place objects on the system power cable.

Never use this product near water, wet locations, or outdoors.

Never put containers of coffee or other liquids on the product.

Never push objects of any kind into the slots of the scanner as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock.

Always switch off the system power, unplug this product from the wall outlet, and call a Xerox Service Representative under the following conditions:

- When the power cord is damaged or frayed.
- If liquid has been spilled into the product.
- If the product has been exposed to water.
- If the product is producing any unusual noises or odors.
- If the product has been dropped or the cabinet is damaged.



WARNING

This product is equipped with a 3-wire grounding type plug. A 3-wire plug is a plug having a third (grounding) pin. This type of plug will fit into a grounding-type power outlet. This is a safety feature.



WARNING

To avoid risk of an electrical shock, contact your electrician to replace the receptacle, if you are unable to insert the plug into the outlet.

Never use a ground adapter plug to connect the product to a power source receptacle that lacks a ground connection terminal.

Never place the product in a built-in installation unless proper ventilation is provided.

Never push objects of any kind into the slots of the product, as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock.

Maintenance safety

Always follow the cleaning instructions in the *Xerox DocuImage 620S Preventive Maintenance Guide* for proper care and maintenance of the product.

Never attempt any maintenance function that is not specified in the *Xerox DocuImage 620S Preventive Maintenance Guide*.

Always unplug this product from the wall outlet before cleaning.

Never use supplies or cleaning materials for other than their intended purposes.

Always keep all materials out of the reach of children.

About this guide

The *Xerox DigiPath Production Software System Administrator Guide* provides information on configuring, customizing, and maintaining your entire DigiPath system.

This book also includes:

- instructions for implementing file system maintenance, database maintenance, and backup strategies
- instructions for creating, modifying, and restricting DigiPath user accounts
- instructions for setting up and configuring production printers and all optional DigiPath hardware
- detailed instructions for using all the functions in the Library Administration Tool and the Printer Setup applications

This chapter explains the information found in this guide, how the information is organized, and helps you to get the most out of this guide by:

- identifying the audience and the basic skills required to use this guide effectively
- explaining the standard conventions and cues that highlight important information
- listing related documentation you may find helpful
- listing available online Help systems
- providing information on ordering additional materials and supplies
- providing information on obtaining additional information

Audience

The *Xerox DigiPath Production Software System Administrator Guide* is a comprehensive reference manual intended for site administrators and advanced DigiPath operators. Many of the procedures described in this guide require you to log on to a computer or network as an administrator with administrative privileges. Also, many of the maintenance tasks described in this guide require a solid understanding of hardware components, networks, and operating systems associated with DigiPath.

This guide assumes you are familiar with the Windows 2000 Server and Professional operating systems, standard communication protocols, basic networking terms, and production printer connections. You should also have a working knowledge of the following:

- IBM-compatible personal computers
- Local area networks (LANs)
- Token ring networks
- Novell operating system
- DocuTech Network Support Services
- Xerox Publishing Printers
- Magneto-optical drives (MODs)
- Redundant Arrays of Independent Disks (RAIDs)

How to recognize important information

The following sections provide the conventions and flag icons that are used in the *Xerox DigiPath Production Software System Administrator Guide*.

Conventions

The *Xerox DigiPath Production Software System Administrator Guide* uses the conventions listed in Table 1 to help you recognize information.

Table 1. Conventions

Convention	Description
<CAPS in angle brackets>	Within procedures, the names of keys to press are displayed in capital letters and enclosed in angle brackets (for example, press <ESCAPE>). Keyboard combinations are represented by the plus sign (+) between names of keys (for example, press <CONTROL+C> to copy).
<Angle brackets>	Variable information is enclosed in angle brackets (for example, select <filename>).
[Square brackets]	Names of options you select, including toolbar buttons and buttons in dialog boxes, are enclosed in square brackets (for example, select [Close]). Menu commands are also displayed in square brackets, with the menu name appearing first, then a colon, followed by the option name (for example, select [File: Close]).
Bold	Text you should enter exactly as it appears is displayed in bold (for example, enter test1.rdo).
<i>Italics</i>	Titles of documents and manuals that provide additional information on the current topic are displayed in italics (for example, the <i>DigiPath System Administrator Guide</i>).

Flag icons

The *Xerox DigiPath Production Software System Administrator Guide* uses the following flag icons to help you recognize important information:



NOTE: The NOTE symbol and text in italics indicate that there is important or supplemental information for a task or procedure.



CAUTION

The CAUTION symbol and text in italics indicate that you may lose data or damage equipment if care is not taken when performing the task or procedure following the caution.



WARNING

The **WARNING** symbol and bold text indicate that you may cause personal injury or death if care is not taken when performing the task or procedure following the warning.



1. The step-by-step icon identifies the beginning of a procedure.

Related information

This section lists additional materials you may need, or will find helpful, when using your DigiPath system.

To order the Xerox documentation listed below, or for additional information on Xerox solutions, contact your Xerox representative.

DigiPath documentation

For more information on DigiPath, refer to the following publications:

- *User Guide* section of the online Help system
- *Xerox DigiPath Production Software Customer Software Release Document*
- *Xerox DigiPath Production Software Physical Installation Planning Guide*
- *Xerox DigiPath Production Software Customer Training Program*

For more information on the training program, contact your Customer Training Specialist (CTS).

Scanner documentation

DigiPath scanner

For more information on the DigiPath Scanner, refer to the DigiPath scanner online Help system.

DocuImage 620S scanner

For more information on the DocuImage 620S, refer to the following publications:

- *Xerox DocuImage 620S Preventive Maintenance Guide*
- *Xerox DocuImage 620S Installation Guide*
- *Xerox DocuImage 620S User Guide*
- *Xerox DocuImage 620S Problem Solving Guide*

Xerox Production Printing Services

For more information on the Xerox Production Printing Services and Network Server products, refer to the following publications:

- *Site Configuration Guide*
- *Using Xerox Production Printing Services*
- *Problem Solving Guide*
- *Xerox Document Services Platform Series*
- *Xerox DocuPrint Publishing Series*
- *Xerox DocuTech Network Support Services*
- *Xerox DocuTech Publishing Series*

Xerox solutions

For more information on Xerox software solutions that can be integrated into a DigiPath system, refer to the following materials:

- *Xerox DocuJob Converter* customer documentation, including the Software Release Document
- *Xerox Extended Connectivity - Print Job Manager (EC-PJM)* customer documentation, including the Software Release Document
- *DocuSP* customer documentation, including the Software Release Document

Third party software

For additional information about third party software and hardware, refer to the following materials:

- *Compaq Professional Workstation PW8000 Reference Guide*
- Adobe Acrobat documentation (included on the DigiPath CD-ROM)
- Hummingbird NFS documentation (included on the DigiPath CD-ROM)
- TapeWare documentation (included on the DigiPath CD-ROM)
- *Sony MO Disk Unit User Guide*
- *Adaptec AHA-2940Ultra / 2940Ultra Wide PCI-to-UltraSCSI Host Adapter with SCSISelect User's Guide*
- *Compaq P1210 Color Monitor User's Guide*
- *AIT Autoloader Unit User Guide*

Windows 2000 related information

Microsoft provides users and administrators with several different resources to support the Windows 2000 environment. Some of these resources include web sites and online Help. The following sections describe these sources and tell you how to find and use them.

Windows 2000 Online Help

Windows 2000 Server and Professional includes extensive online Help for all aspects of the operating systems. Most likely, the online Help will be your primary source for information. Administrative procedures, from adding users and managing groups to installing Windows printers, can be found in the online Help files. Furthermore, most Windows applications also contain their own online Help system, containing information that is specific to the application.

To access online Help, select [Start: Help] from the Windows task bar. If you are looking for help within a specific application, use the options available from the Help menu within that application.

Windows 2000 Web site

Microsoft has a Windows 2000 World Wide Web site that contains the latest Windows 2000 news and information about upgrades. The URL for this site is:

<http://www.microsoft.com/Windows2000/>

Getting Help online

This section describes the type of Help available online for the DigiPath software.

Using a Help menu

All DigiPath applications, with the exception of the Scan and Print application, provide a Help menu.

Select the Contents tab to browse for the desired topic in the Help system.

Select the Index tab to scroll an alphabetical index of Help topics.

Select the Search tab to search for all topics for information on a specific feature or function.

Using Help in a dialog box

Most dialog boxes in the DigiPath system provide the standard Windows Help button [?] in dialog and message boxes. This button is displayed in the title bar of the dialog, next to the close button, [X].

This button provides context-sensitive Help, so you can select it, then click in the dialog on the field or option for which you need Help. A Help window opens, displaying information for the selected field or option.

Ordering additional materials and supplies

DigiPath provides you with all the resources you need to operate and maintain the system; however, you may order additional materials or supplies.

To reorder the scanner registration documents or the training disks, or to order screen finder tools, refer to the Xerox Supplies Resource Catalog (610P18158) or contact your Xerox representative.

To order cleaning supplies for the DocuImage 620S scanner, refer to the *DocuImage 620S Preventative Maintenance Guide*.

Obtaining additional support

This section describes where you can obtain additional DigiPath support.

X-PRESS FAX

Customers can obtain additional DigiPath support documents, including solutions to common work process problems and hints and tips for enabling optimal use of the equipment, from Xerox C&TS Electronic Services.

Call X-PRESS at 1-800-979-9709 and request document number 12300 to receive a complete index of the documented DigiPath solutions, along with complete instructions for using the X-PRESS fax system.

DigiPath FAQ Xerox web site



A DigiPath FAQ (Frequently Asked Questions) Xerox web site is available for customers. To access the DigiPath FAQ Xerox web site:

1. Go to <http://www.xerox.com> from your web browser.
2. Search on the word “digipath”.
3. Find the appropriate DigiPath link.
 - DigiPath Professional Production Software
 - DigiPath Scanner
 - DigiPath Xpress Production Software
4. Select Support under the appropriate DigiPath link.
5. Under the FAQ heading, select the desired topic link to displays the FAQ for that topic.

Xerox Welcome Center

If your machine is down or you cannot solve a problem and you are located within North America, call 1-800-821-2797 for the Xerox Welcome Center.

1. About DigiPath

This chapter provides a brief introduction to the DigiPath Production Software system.

Topics covered in this chapter include:

- a product overview
- DigiPath networking
- instructions for powering up the DigiPath workstation platform and hardware options
- descriptions of hardware and software components, both required and optional
- recommendations for protecting your DigiPath system from virus contamination

Product overview

The Xerox DigiPath Production Software has the following applications:

- **Xerox DigiPath Professional Production Software** is a network-based image capture and retrieval system. It allows you to create electronic images by scanning hardcopy documents. You can then assemble the electronic images into digital documents; edit and enhance those digital documents; store, catalog and retrieve the digital documents; and submit the digital documents to print to produce high quality output.
- **Xerox DigiPath Xpress Production Software** provides the most direct path between job submission and job completion. Using a simple, copier-like interface, DigiPath Xpress enables you to scan, store, and print jobs quickly.



NOTE: None of the applications included in the DigiPath Xpress package provide the ability to view RDO files. The DigiPath Xpress package is used primarily for scanning documents, managing files, and printing files. The DigiPath Xpress package cannot be used to edit scanned files.

Understanding DigiPath networking

A DigiPath workstation uses networking for a variety of purposes. Some of the functions DigiPath allows you to perform by communicating over a network include the following:

- production printing to a networked Xerox production printer
- accessing and modifying imported objects on a remote workstation in a multiple client/server environment
- mounting UNIX drives to use Xerox products such as DocuJob Converter and DocuSP Decomposition Services

DigiPath systems support Ethernet and Token Ring networks and use two main protocols for network communication: TCP/IP and IPX/SPX. Also, the NFS protocol is used to enable the mounting of UNIX drives.

Powering up the hardware and starting DigiPath

This section contains instructions for powering up the DigiPath workstation platform and hardware options.



It is very important you power up the hardware components in the order presented below.

1. If there is a scanner attached to the DigiPath workstation, power up the scanner.
2. If there is a Windows printer attached to the DigiPath workstation, power up the printer.
3. If there is a Magneto-Optical Drive (MOD) attached to the DigiPath workstation, power up the MOD.



NOTE: If there is an optical disk in the MOD drive when the drive is powered up, the startup time for the MOD is shorter.

4. If there is a RAID attached to the DigiPath workstation, power up the RAID.



NOTE: Do not power off the RAID unless you are moving the RAID to another workstation.

5. If there is an external tape drive attached to the DigiPath workstation, power up the tape drive.
6. Power up the monitor.
7. Power up the workstation processor (CPU).
8. Log in to the network.



NOTE: It is recommended that you wait 2 - 5 minutes after logging in to the network before logging into the DigiPath applications.

9. To open the DigiPath applications, select [Start: Programs: Xerox DigiPath Production Software: <select the appropriate DigiPath application>] from the Windows desktop.



NOTE: All DigiPath applications are found in the DigiPath program group.

Logging into Document Library (DL) applications



To log into DigiPath Document Library applications:

1. Select [Start: Programs: Xerox DigiPath Production Software] and select the appropriate DigiPath Document Library application. The Login dialog box opens.
2. Enter the appropriate User name, Password, and DigiPath server.
3. Select [OK].

Ending the current DigiPath session

To protect files from unauthorized access, and to enable access to the network server, end your DigiPath session when you have finished using the system.



To end a DigiPath session:

1. Exit all DigiPath applications.
2. To exit Windows 2000, select [Start: Shut Down] from the Windows desktop. A confirmation dialog box appears.
3. Choose the desired Shut Down option from the confirmation dialog box.



NOTE: For more information on the Shut Down options, refer to your Windows documentation.

4. Select [Yes].

Hardware components

Table 1-1 lists the required hardware components for a DigiPath client and server platform.

Table 1-1. DigiPath client and server workstation required hardware components

Hardware component	Description
Compaq Workstation PW8000	<p>The DigiPath Production Software client platform. This system allows for optimum performance and provides uniformity for service and installation.</p> <ul style="list-style-type: none">• For Document Library server configuration: Compaq W8000 2.2 GHz with dual CPUs, 1.5 GB of memory, and Windows 2000 Server operating system• For Document Scan and Makeready w/Document Library client configuration, Document Scan and Makeready w/Document Library client/server configuration, and DigiPath Xpress configurations: Compaq W8000 1.7 GHZ with single CPU, 1 GB of memory, and Windows 2000 Professional operating system
Compaq P1210	DigiPath Production Software supports the 22-inch color, high-resolution monitor.

Table 1-2 lists the optional hardware components available with DigiPath.

Table 1-2. Optional hardware components

Hardware component	Description
DigiPath Production Scanner	A Xerox color scanner that interfaces with a PC workstation.
Xerox DocuImage 620S	A high resolution flatbed scanner required for high speed black and white image scanning. The scanner is fitted with a document handler or an optional, manual, platen cover.
Sony Magneto-optical drive (MOD)	This is an optical storage device that allows for up to 9.1 GB of local document storage and retrieval. Two MOD devices may be connected to one DigiPath Production Software workstation.
Redundant Array of Independent Disks (RAID)	This mass storage device (100, 150, or 300 GB capacity) allows for the largest capacity local storage. Two RAID devices may be connected to one DigiPath Production Software workstation.
Sony AIT Autoloader tape drive	This multi-tape drive is used for high capacity backup needs, such as backing up the RAID devices.
Exabyte Eliant 8mm/8505 tape drive	This tape drive is used with the DocuTech Tape Tool for extended storage DocuJob migration.
Local draft printers	Refer to the <i>Xerox DigiPath Production Software Customer Software Release Document, Version 3.0</i> for a list of local printers that are currently supported by the DigiPath Production Software system.
Production printers	Refer to the <i>Xerox DigiPath Production Software Customer Software Release Document, Version 3.0</i> for a list of production printers that are currently supported by the DigiPath Production Software system.
Token ring kit	This optional NIC allows you to use the Token Ring network adapter in place of the integrated Ethernet NIC.

Software components

This section provides descriptions of most of the software applications associated with the DigiPath configurations, including third party applications.

Table 1-3 shows which software applications are required, optional, not available, or for Administrative use only with a Document Library server configuration, a Document Scan and Makeready with Document Library client configuration, a Document Scan and Makeready with Document Library client/server configuration, or with a DigiPath Xpress configuration.

Table 1-3. DigiPath software

Software application	Document Library server configuration	Document Scan and Makeready w/Document Library client configuration	Document Scan and Makeready w/Document Library client/server configuration	DigiPath Xpress configuration
Document Scan & Makeready	not available	required	required	not available
Scanner Support	not available	required	required	required
Scan and Print	not available	required	required	required
Quick Print	Administrative use only	required	required	required
Printer Administration	Administrative use only	required	required	required
DigiPath File Manager	Administrative use only	required	required	required
DigiPath Rescue	Administrative use only	not available	required	not available
Job Manager	Administrative use only	required	required	required
Document Library	Administrative use only	required *	required	not available
DocuTech Tape Tool	Administrative use only	not available	required	not available
Library Search	Administrative use only	required *	required	not available

Table 1-3. DigiPath software

Software application	Document Library server configuration	Document Scan and Makeready w/Document Library client configuration	Document Scan and Makeready w/Document Library client/server configuration	DigiPath Xpress configuration
Batch Tool	Administrative use only	required *	required	not available
Library Administration Tool	Administrative use only	required *	required	not available
Network Agent	Administrative use only	required *	required	required

* These options are only accessible with a Document Library Server.

Table 1-4 shows which third party applications are required, optional, or not available with a Document Library server configuration, a Document Scan and Makeready with Document Library client configuration, a Document Scan and Makeready with Document Library client/server configuration, or with a DigiPath Xpress configuration.

Table 1-4. Third party applications provided with DigiPath

Software application	Document Library server configuration	Document Scan and Makeready w/Document Library client configuration	Document Scan and Makeready w/Document Library client/server configuration	DigiPath Xpress configuration
Adobe Acrobat 5.0.5	required	required	required	required
Hummingbird NFS 7.0	optional	optional	optional	optional
Autologic StorageView 2.3	optional	optional	optional	optional
WFTPD Pro 3.0	optional	optional	optional	optional
Yosemite TapeWare 6.3 SP1	required	required	required	required
Adobe Photoshop 7.0	not available	optional	optional	optional
Microsoft Windows 2000 Server (with SP2)	required	not available	not available	not available
Microsoft Windows 2000 Professional (with SP2)	not available	required	required	required

Virus protection recommendations

This section describes the recommended procedures for protecting your DigiPath system from virus contamination.

Protecting DigiPath from virus contamination

Xerox takes special precautions to ensure the software is shipped free from computer virus contamination. It is strongly recommended that you invest in a virus detection software application to protect your DigiPath system from viruses.

Computer viruses are best detected by virus detection and control application software that is accepted by the PC industry.

Some of the virus detection and control applications available to and widely-used by the PC industry include:

- Norton Anti-Virus by Symantec
- McAfee VirusScan by Network Associates, Inc.



NOTE: To ensure maximum protection from new viruses, update or upgrade your virus detection software frequently.

It is strongly recommended that you follow these guidelines to keep your DigiPath system decontaminated:

- On a regular basis (at least weekly), run virus detection software on all DigiPath workstations.
- In the event you find a virus on a DigiPath workstation, do not remove the virus. Instead, cancel the virus detection, then back up the entire hard drive.



NOTE: This is to protect your data in the event of corruption during the course of the virus removal.

You can then remove the virus using the procedures supplied with your virus protection software.

2. Setting up a DigiPath system

This chapter contains a list of the procedures you must perform after installing the DigiPath system.

This chapter assumes that a Xerox representative has performed the installation of all hardware and software necessary to run the DigiPath system.

Table 2-1 lists the procedures necessary for setting up a DigiPath system after the system is installed and provides a brief overview of each procedure.



NOTE: These procedures should be performed in the order in which they are presented in Table 2-1. The actual instructions for the procedures are found in other documents or in other chapters of this book.

Table 2-1. Procedures for setting up a DigiPath system

Procedure	Overview
1. Creating DigiPath user accounts	The Users tab, in the Library Administration Tool, allows you to create, modify, and delete DigiPath user accounts for users accessing Document Library applications. User accounts must be activated to allow a user to access Document Library applications from a local workstation. For information on creating user accounts, refer to Chapter 6, System administration.
2. Creating DigiPath groups	The Users tab, in the Library Administration Tool, allows you to create, modify, and delete DigiPath groups. User groups define a group of users. When creating a new cabinet, you can assign read, write, and administrator rights to various users and user groups. When many users need to access a specific cabinet, it is quicker to assign user access rights to that cabinet if the users are all members of the same group. For information on creating groups, refer to Chapter 6, System administration.
3. Setting the database location	The System tab, in the Library Administration Tool, is used to specify on which local drive a cabinet database is stored. The database stores information such as: <ul style="list-style-type: none"> • cabinet name • description of the cabinet • attributes and attribute sets for the cabinet • location of the cabinet • documents stored within the cabinet For information on setting the database location, refer to Chapter 6, System administration.
4. Setting the cabinet creation location for local users	The System tab, in the Library Administration Tool, is used to set up and modify drives on which local users can create cabinets. By default, users have the ability to create cabinets on all local drives. For information on setting the cabinet creation location for local users, refer to Chapter 6, System administration.

Table 2-1. Procedures for setting up a DigiPath system

Procedure	Overview
5. Creating cabinets	<p>The Cabinet and Attributes tab, in the Library Administration Tool, allows you to manage cabinets, including:</p> <ul style="list-style-type: none"> • adding a cabinet • defining the properties and attributes of a cabinet • deleting a cabinet • purging the contents of a cabinet <p>When you create a cabinet, the access rights you define are critical. If you do not assign Read or Write permissions to users for the cabinet, those users will not be able to view the cabinet when they use Document Library.</p> <p>For information on creating cabinets, refer to Chapter 7, Managing cabinets.</p>
6. Creating new attributes, attribute groups, and attribute sets	<p>Use the Cabinet and Attributes tab, in the Library Administration Tool, to:</p> <ul style="list-style-type: none"> • create new custom attributes • modify existing attributes • delete attributes • create user defined attribute groups • create new attribute sets <p>Attribute sets are applied to cabinets when they are created. Attribute sets allow you to apply the same attributes and attribute groups to several cabinets. By doing so, you can easily create the same properties for several cabinets.</p> <p>For information on creating new attributes, attribute groups, and attribute sets, refer to Chapter 8, Defining attribute sets.</p> <p><i>NOTE: Do not use the attribute set file <code>dgpminimal.set</code> located in the <code>e:\digipath</code> directory when assigning an attribute set file to a cabinet or creating a new set file.</i></p>
7. Scheduling the conversion of documents	<p>The Conversion tab, in the Library Administration Tool, allows you to schedule document conversions in all Document Library applications on a "per server" basis. Once converted, documents are viewable in the Document Library preview pane.</p> <p>For information on using and scheduling document conversions, refer to Chapter 6, System administration.</p>
8. Setting up remote access	<p>The Servers tab, in the Library Administration Tool, allows you to configure connections between remote servers, including Document Library servers in a multiple server environment.</p> <p>For information on configuring remote servers, refer to Chapter 6, System administration.</p>

3. Windows 2000 and network configurations

This chapter describes some of the Windows 2000 functions and network configurations used with DigiPath.

Topics covered in this chapter include:

- a brief description of some of the basic Windows 2000 procedures you may need to perform
- instructions for preparing to shutdown the workstation
- instructions for updating the Emergency Repair Disk
- a description of the Hummingbird products included on the DigiPath Production Software CD-ROM and instructions for configuring Hummingbird for use with DigiPath
- instructions for configuring the DocuSP decomposition service
- instructions on using the Event Viewer



NOTE: You are strongly advised to obtain a dedicated Windows 2000 Administration Guide.

Understanding and using Windows 2000

This guide assumes you have a working knowledge of the Windows 2000 Professional and Server operating systems and does not contain basic Windows 2000 procedures, unless they are part of a DigiPath-specific procedure.

Performing basic Windows 2000 administrative functions



NOTE: This section does not provide the instructions for performing the basic Windows 2000 administrative functions. Refer to your Windows 2000 documentation for more information.

In addition to the DigiPath-specific administrative functions you will perform, you may also need to know how to perform the common Windows 2000 administrative functions listed below.

Creating shortcuts

You can create a shortcut to an application or file; allowing you to open the application or file directly from the Windows desktop.

Adding Windows printers

To add a local Windows printer, refer to the printer kit instructions packaged with your printer.

Adding and configuring users and groups

All DigiPath users and groups should be created using the DigiPath Library Administration Tool (LAT) application.

When creating users in LAT, you have the option to also create a local (Windows 2000) account for the user. If you delete the DigiPath user in LAT, you must also delete the local user using Windows 2000 User Manager.

For more information on creating DigiPath users, refer to Chapter 8, System Administration.



NOTE: The Windows 2000 User Manager is used to create Windows 2000 user accounts and groups. The User Manager can be accessed by selecting [Start: Settings: Control Panel: Administrative Tools: Computer Management] from the Windows desktop, expanding the System Tools, and expanding Local Users and Groups.

Setting up shared folders, files, and printers

Windows 2000 allows you to set up shared folders, files, and printers that can be accessed from other Windows 2000 workstations.



NOTE: The DigiPath File Manager application can also be used to set up shared folders and files.

Adding or removing network services

From the Network and Dial-up Connections, you can add, remove, or change the properties for network services on the workstation. The Network and Dial-up Connections can be accessed by selecting [Start: Settings: Network and Dial-up Connections] from the Windows desktop.

Preparing to shut down the Makeready workstation

For the most part, shutting down the Makeready workstation is the same as shutting down any other Windows 2000 workstation. However, because of the Document Library cabinet system and the ability to access the Document Library cabinets from a remote workstation, there are some precautions you must take before shutting down a Makeready workstation.

The most important thing to do before shutting down a Makeready workstation is make sure no one else is connected to the workstation and, possibly, using local cabinets. If you shut down the workstation while someone is remotely accessing local cabinets, the remote user could lose data and experience problems with their workstation.



CAUTION

If you shut down the Makeready workstation and receive a message such as “still connected to a user; do you want to disconnect?,” select [No]. To properly shut down the local workstation and avoid problems with the remote workstation, you must have the connected user exit the application that is using the cabinet system and then you must disconnect the remote workstation from the local workstation.

The following sections describe how to check for connected users, notify them that the workstation is going to be shut down, and then disconnect them from the remote workstation.

Checking for connected users



To check for connected users:

1. Select [Start: Settings: Control Panel] from the Windows desktop. The Control Panel opens.
2. Double-click on the [Administrative Tools] icon.
3. Double-click on the [Computer Management] icon.
4. Expand the [System Tools] console tree.
 - a. Expand the [Shared Folders] folder.
 - b. Highlight [Sessions].

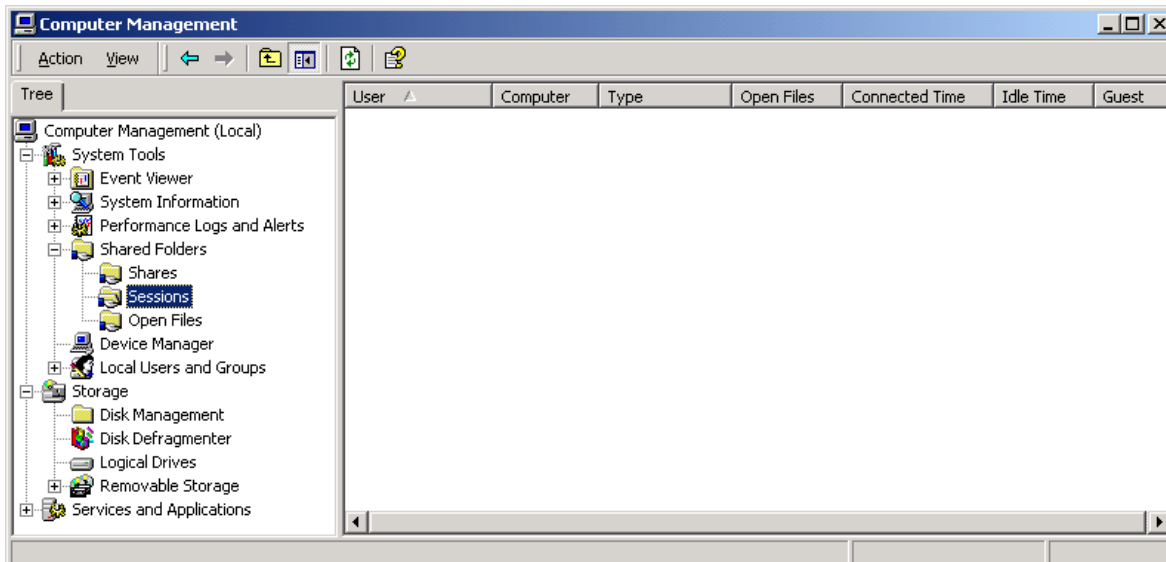


Figure 3-1. User Sessions

If any users are connected to the workstation, the name of their host machine, the resources they are using on the workstation, and other details are listed in the right window frame.

5. If no other machine is connected to the workstation, it is safe to shut down the system. To shut down the workstation, refer to the procedure “Ending the current DigiPath session” on page 1-5.

Otherwise, continue with “Notifying users connected to the workstation” on page 3-6.

Notifying users connected to the workstation



To notify connected users to close any files or applications they are currently using and disconnect from the workstation:

1. Select [Start: Programs: Accessories: Command Prompt] from the Windows desktop. The Command Prompt window opens.
2. At the prompt, type the following command:

net send <destination> <message>

The <destination> is either the name of the connected computer or an asterisk (*), which sends the message to every computer within the current workgroup. The <message> should tell the user or users to close any applications or files they may have open on the workstation.

3. Press <Enter> to send the message to the specified destination.
4. Close the Command Prompt window.
5. Continue with the procedure "Disconnecting users connected to the remote workstation" on page 3-7.

Disconnecting users connected to the remote workstation



After connected users have notified you that they have disconnected, or after giving the users a reasonable amount of time (10 minutes or so) to save any files and disconnect from the database, disconnect the remote workstation by completing the following:

1. From the Computer Management console, highlight Sessions and select [Action: Disconnect All Sessions].
2. Select [Yes] in the confirmation message box that displays.

All connected users are disconnected from the local workstation. It is now safe to shut down the Makeready workstation.

3. To shut down the workstation, refer to the procedure “Ending the current DigiPath session” on page 1-5.

Updating the Emergency Repair Disk

When DigiPath Production Software is installed, the Emergency Repair Disk is updated to reflect the most recent configuration. You may need to occasionally update the Emergency Repair Disk if you make changes to the DigiPath workstation configuration, such as the following:

- Add, delete, or change user accounts and user information or configuration
- Install new software or hardware
- Change or remove network drive mappings



To update the Emergency Repair Disk for a DigiPath workstation:

1. Locate the Emergency Repair Disk for the workstation and have it ready for use.
2. Select [Start: Programs: Accessories: System Tools: Backup] from the Windows desktop. The Backup utility opens.
3. Select the [Emergency Repair Disk] button on the Welcome tab. The Emergency Repair Diskette dialog box opens.
4. Insert the Emergency Repair Disk into the floppy drive and select [OK].

The Emergency Repair Disk is reformatted and then updated with the new repair information. This process may take several minutes.

5. Select [OK] at the message informing you that the Emergency Repair Disk was saved successfully.
6. Remove the Emergency Repair Disk from the floppy drive and place it in a secure storage area.
7. Select [File: Exit] to close the Backup utility.

Using Hummingbird NFS products with DigiPath

Along with the software, the documentation for both Hummingbird NFS Maestro server and client is provided on the DigiPath Production Software CD-ROM. Table 3-1 lists the available PDF document files and their location on the DigiPath Production Software CD-ROM.



NOTE: If using Hummingbird NFS with DigiPath 3.0, both the Hummingbird NFS Maestro server and client third party software applications are required for all DigiPath 3.0 configurations.

Table 3-1. Hummingbird NFS documentation on CD-ROM

Document Title	CD-ROM Location and File Name
NFS Maestro - Client User's Guide	<CD-ROM drive>:\nfs\maestro\nfsma32.pdf
Host Explorer User's Guide	<CD-ROM drive>:\nfs\maestro\heuser32.pdf
NFS Maestro Server for Windows	<CD-ROM drive>:\nfs\server\nfssrv.pdf
Hummingbird Basic Language Guide	<CD-ROM drive>:\nfs\maestro\hbasic.pdf
Hummingbird Applications Guide	<CD-ROM drive>:\nfs\maestro\hbapps.pdf

Using Hummingbird to mount UNIX hosts

The following procedure provides instructions for mounting a UNIX host from a DigiPath workstation. By doing this, you can use UNIX-based Xerox products, such as DocuJob Converter and DocuSP Decomposition Services.



NOTE: This section does not provide instructions for configuring DocuJob Converter to use the Hummingbird authentication daemon. Refer to the documentation provided with that product for more information. The procedure to configure the DocuSP Decomposition Service follows this section.



To mount a UNIX host from a DigiPath workstation:

1. From the DigiPath workstation, log in as the administrator.



NOTE: If the installation site is running DNS, then go to step 3.

2. Add UNIX hosts using the following procedure:
 - a. Select [Start: Programs: Hummingbird Connectivity V7.0: Accessories: Host Editor] from the Windows desktop. The Host Editor opens.
 - b. Select the [+] button.
 - c. Enter the IP address of the host (a DJC or DocuSP server, for example) to which you are connecting.
 - d. Select [Add Name].
 - e. Enter the name of the machine you are connecting to and select [OK].
 - f. Select [OK].
 - g. Select [File: Exit] to exit the Host Editor application.
 - h. Select [Yes] to save the changes to Hosts.
3. Connect to the UNIX server.
 - a. Select [Start: Programs: Hummingbird Connectivity V7.0: Maestro Client]. The NFS Network Access dialog box opens.
 - b. Select the [Register] tab.
 - c. Enter the user name and password for the account that you created on the host.



NOTE: The Username and Password must be identical to the Username and Password of the host account. These items are case sensitive.

- d. Select [Register].
- e. Select [OK] to confirm.
- f. Select the [Connect] tab.

The next available drive is displayed in the **Drive** field. You can select any available drive.

- g. In the Network Path text box, enter the network path. Use the following syntax:

\\<host name>\<exported_directory_name>

If you do not remember the complete path to the exported directory, select [Browse]. In the Browse Network Connection dialog, locate the makeready host and double-click on it to expand it. Select the share point related to the exported directory, then select [OK]. The complete path of the exported directory displays in the Network Path text box.

- h. Mark the check box for [Persistent connection] to ensure the connection is reestablished when the system is restarted or the user logs out of Windows 2000.
- i. Select [Connect].
- j. In the HCLNet confirmation dialog that displays, confirm the network mapping by selecting [OK].
- k. Select [Exit].

The DigiPath workstation is now connected to the proper directory on the UNIX server. The directory should be visible and accessible through Windows Explorer and DigiPath software applications as a network drive.

Configuring the DocuSP Decomposition Service

DocuTech 61XX production printers, with a DocuSP print server, have a function called Decomposition Service (decomp service). This service converts each page of a print job file to a TIFF file. Using Document Scan and Makeready, TIFF files can be imported into an RDO.

Before a DigiPath workstation can be used to submit jobs to the Decomposition Service, both the DocuSP print server and the DigiPath workstation must be configured to direct the output from the Decomposition Service back to the DigiPath workstation. Hummingbird NFS Maestro Server software must be configured, as detailed in the previous section, "Using Hummingbird to mount UNIX hosts," to accomplish this task.



NOTE: For additional information on Decomposition Service, on the DocuTech 6135 or on the DocuTech 6180 printers, refer to the documentation provided with those production printers.

At the DigiPath workstation, perform the following steps:



1. If necessary, define a directory where the decomposed jobs will be automatically downloaded (the decomp directory). Use DigiPath File Manager to create a Decomp download directory on the DigiPath workstation local hard drive.

For example: **e:\digipath\decomp**



NOTE: Note the location and name of this directory. The directory name is case sensitive.

2. Select [Start: Settings: Control Panel]. The Control Panel opens.
3. Select [HummingbirdNFS Server]. The NFS Maestro Server Status dialog box opens.
4. Select [Exported File systems].
5. In the Exported File System field, type in the local Decomp download directory. Or, use the [Browse] button to browse for the directory.

6. Clear the [Restrict Access to Hosts] check box.
7. Select [Insert].
8. Select the [Name Mapping] tab.
9. In the User Name for Non-mapped Access field, type the administrator name for the DigiPath system.
10. In the Group Name for Non-mapped Access field, enter the group(s) you want to have access.
11. Select the [General] tab. Under Permissions, mark the [NTFS] check box.
12. Select [OK] to close the dialog box.
13. Select [Close] to close the Control Panel.
14. Select [Start: Programs: Hummingbird Connectivity V7.0: NFS Maestro Server: NFS Maestro Server Status] from the Windows desktop. The NFS Maestro Server Status dialog box opens.
15. Select [Exports]. The Current Exports dialog box opens.
16. Select one of the following options if the newly created local decomp directory:
 - does not appear in the Exports dialog box, proceed to Step 17.
 - appears in the Exports dialog box, advance to Step 19.
17. Select [Reload].
18. Select [OK] to confirm reload.
19. Select [Close] to close the Current Exports dialog box.
20. Select [Close] to close the NFS Maestro Server Status dialog box.

Information for the DocuSP administrator



Supply the following information to the DocuSP System Administrator to set up the Decomposition Service queue:

1. Log in as a DocuSP super user.
2. Create a decomposition service queue using the following steps:
 - a. Specify a queue name of **<dgphost>decomp**, where **<dgphost>** is the host name of your DigiPath workstation.
 - b. Specify a queue destination of **save** as an override parameter for the jobs it receives.
 - c. Specify a save location of **/var/spool/<dgphost>**, where **<dgphost>** is the host name of your DigiPath workstation.
3. Open the Terminal application and complete the following:
 - a. Log in as root.
 - b. While logged in as root, create and save location **mkdir /var/spool/<dgphost>**
 - c. Set the permissions **chmod 777 /var/spool/
/var/spool/<dgphost>**

4. NFS-mount the save location directory (in step 2c) onto the directory you exported on the DigiPath workstation. In a DocuSP command tool, type the following command:

mount <dgphost>:/<drive>/<dir> /var/spool/<dgphost>

where

- <dgphost> is the host name of your DigiPath workstation,
- <drive> is the drive letter of the decomp output directory created on the DigiPath workstation, and
- <dir> is the full path of the decomp output directory on the DigiPath workstation.



NOTE: All of the above variables are case sensitive.

For example, if your DigiPath workstation host name is DGP1 and you exported the directory <DigiPath directory>:\DigiPath\Decomp, the command should be:

mount DGP1:/<DigiPath drive>/DigiPath/Decomp /var/spool/DGP1

5. You can make the NFS mount point permanent using the **vfstab** command.



NOTE: If you choose not to make a mount point permanent, rebooting the DocuSP server causes the mount point to be lost. The mount command will need to be executed again.

This completes the configuration of the DocuSP server and the DigiPath workstation. You can now submit jobs to the DocuSP Decomposition queue and the output will be sent to the defined directory on your DigiPath workstation.



NOTE: For additional information on submitting jobs to the DocuSP Decomposition queue and using the output of the Decomposition service, refer to the User Guide section of the online help.

Using the Event Viewer

Use the Event Viewer to view the Windows 2000 event logs.



NOTE: For more information on reading and interpreting the event log, refer to your Windows 2000 documentation.



To access the Event Viewer:

1. Select [Start: Settings: Control Panel] from the Windows desktop.
2. Select [Administrative Tools].
3. Select [Event Viewer]. The Event Viewer opens. See Figure 3-2.

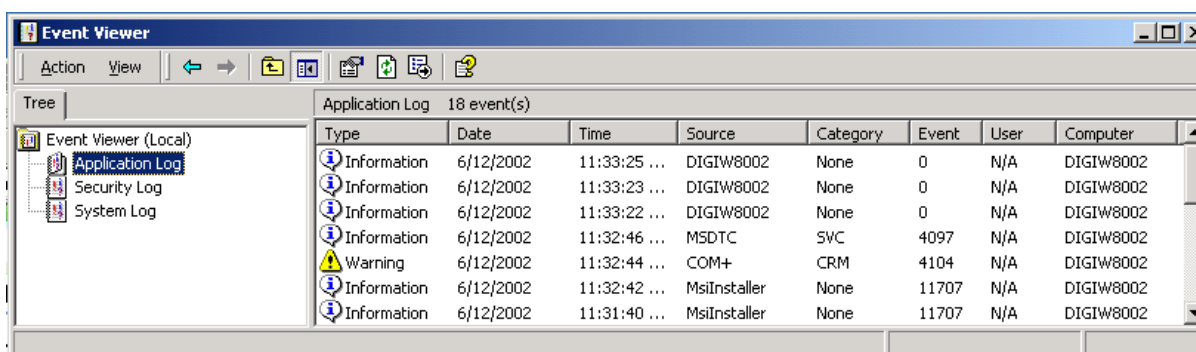


Figure 3-2. Event Viewer

4. Expand [Event Viewer] in the console tree to view the different events.

Table 3-2 lists and describes the three types of events displayed in the Event Viewer.

Table 3-2. Types of events

Event	Description
Application	Collects messages from Windows 2000 applications
Security	Tracks success and failure audits
System	Records errors, warnings, and information events of the system

5. To view an event log, select the appropriate event. The event log displays in the right frame.



NOTE: You should save the Windows 2000 event logs to file once every two months and keep these log files for approximately one year. After saving the logs to file, you can then clear them from the Event Viewer.

It is important to save event logs as they may be needed in the future for diagnosing problems.

Table 3-3 provides the Windows 2000 log files to which DigiPath writes event data.

Table 3-3. Windows 2000 log files

Log file	Log file path
Application log	c:\winnt\system32\config\AppEvent.Evt
Security log	c:\winnt\system32\config\SecEvent.Evt
System log	c:\winnt\system32\config\SysEvent.Evt

6. Select [Log: Exit] to close the Event Viewer.

4. Hardware maintenance

This chapter provides procedures necessary for maintaining the DigiPath hardware.

Topics covered in this chapter include:

- maintaining a scanner
- maintaining a Magneto-optical drive (MOD)
- maintaining a Redundant Array of Independent Disks (RAID)
- maintaining internal and external tape drives

Using a scanner with DigiPath

The following sections provide information about maintaining the DigiPath Production scanner and the DocuImage 620S scanner.

Maintaining the DigiPath scanner

DigiPath provides a Scanner Support application for performing system tests and maintenance procedures on the DigiPath Scanner. These procedures include, but are not limited to, scanner configuration, resetting scanning counters, keeping a record of all scanner faults and events, and tools for troubleshooting, setting up, and calibrating the scanner.

To access the DigiPath Scanner Support application:

1. Select [Start: Programs: Xerox DigiPath Production Software: Scanner Support (DigiPath Scanner)] from the Windows desktop. The Scanner Support dialog box opens. See Figure 4-1.

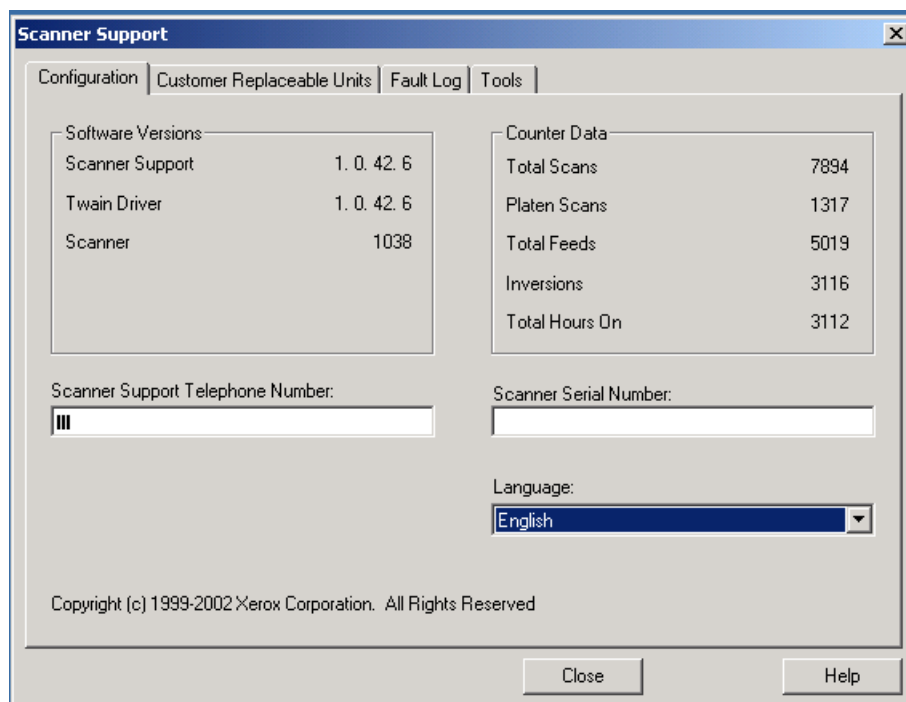


Figure 4-1. Scanner Support dialog box

For more information on using the Scanner Support application, refer to the DigiPath scanner integrated Help system.

Maintaining the DocuImage 620S scanner

The following sections identify two basic maintenance procedures you may be required to perform on the Xerox DocuImage 620S scanner. For further information regarding regular maintenance for the DocuImage 620S, refer to the Xerox DocuImage 620S User Documentation.

Moving and reinstalling the DocuImage 620S



NOTE: For a more detailed description of the steps in the following procedure, refer to the Installation Guide found in the Xerox DocuImage 620S User Documentation.



WARNING

The scanner weighs 50 pounds (23 kg) and the document handler weighs 28 pounds (12.7 kg). To prevent personal injury or equipment damage, you should seek assistance when moving the scanner and when removing or installing the document handler.



To move the Xerox DocuImage 620S after it is installed:

1. Make sure the scanner is turned off, and then unplug the power cord.
2. Power off the PC.
3. If necessary, disconnect the SCSI cable from the back of the scanner.
4. Remove the document handler from the scanner.
5. Secure the movable parts in the scanner by reinstalling the packing screws removed during the scanner installation.



NOTE: To perform this step, go into scanner support and select the [Position scan bar for shipping] option under the Tools drop-down menu.

6. Before moving the scanner to its new location, follow the same procedures for the initial installation to make sure the surface on which the scanner will be placed is level.
7. Move the scanner to its new location.
8. Remove the packing screws from the scanner.
9. Reinstall the document handler on top of the scanner.
10. Plug the scanner power cord into an acceptable power source and reconnect the SCSI cable to the scanner.



NOTE: Make sure the PC and scanner are off before connecting the SCSI cable.

11. Perform the scanner registration procedure found in the following section.

Registering the scanner

Register the scanner every time you remove or replace the document handler, or if images appear shifted off the page after scanning.

When you register the scanner, the parameters for scanning are captured. The scanner identifies the position of the registration documents, compares that position to the document, and makes the necessary adjustment.

To register the scanner, you need ten registration documents, part number 82E8371. These documents have an X in the upper right and lower right corners of the page, and they come in an envelope with your DigiPath software setup.

If an error occurs during registration, acknowledge the error and begin the process again. If you continue to have trouble, call your Xerox representative for assistance.



NOTE: If you have a document handler attached to your scanner, register both the document glass and the document handler.

The registration process lasts approximately 10 seconds for the document glass and approximately 30 seconds for the document handler.

1 3...
2

To register and set up the scanning parameters for the document glass and document handler:

1. Select [Start: Programs: Xerox DigiPath Production Software: Scanner Support (DocuImage 620S)] from the Windows desktop. The Scanner Support dialog box opens. See Figure 4-2.

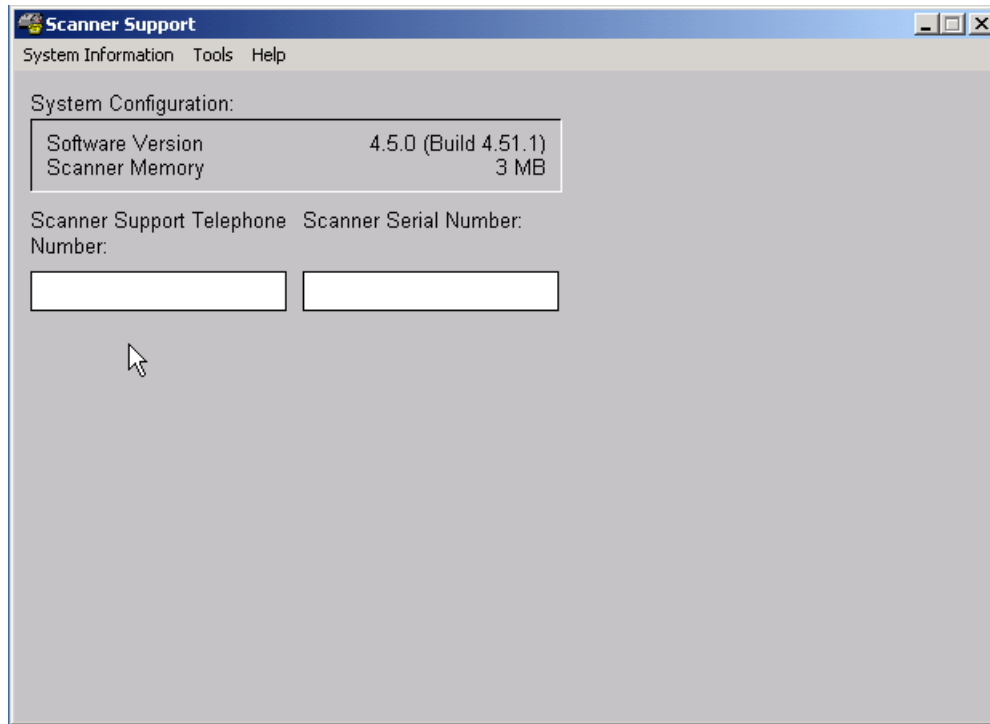


Figure 4-2. Scanner Support dialog box



NOTE: The information in the System Configuration area of the above Figure may be different than the information that displays on your screen.

2. Select [Tools: Options: Document Handler] from the menu bar. Validate that there is a check mark beside Document Handler.

3. Select [Tools: Scanner Registration] from the Scanner Support menu bar. The Customer Scanner Registration dialog box opens. See Figure 4-3.

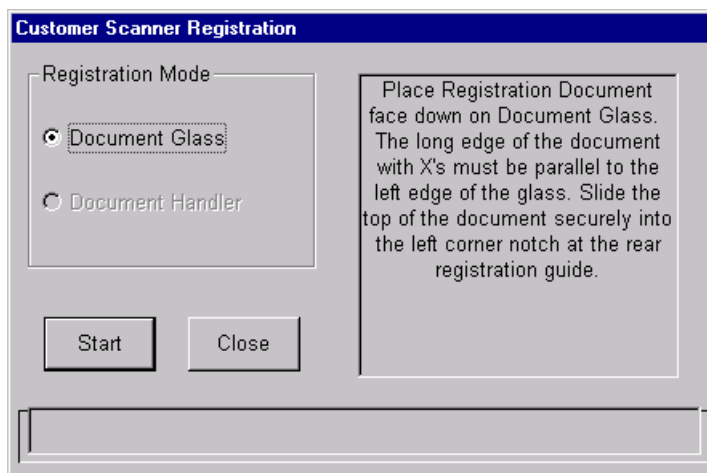


Figure 4-3. Customer Scanner Registration dialog box

4. To register the Document Glass:
 - a. Mark the [Document Glass] radio button in the Registration Mode area.
 - b. Place one of the scanner registration documents face down on the document glass.

The long edge of the document with XS must be parallel to the left edge of the glass. Slide the top of the document securely into the left corner notch at the rear registration guide. Make sure the document does not move when closing the document handler or manual platen cover.
 - c. Select [Start] from the Customer Registration dialog box.

The registration process begins. When the test is complete, a message appears in the message bar at the bottom of the Customer Scanner Registration dialog box.

5. To register the Document Handler:



NOTE: If you have a manual platen cover instead of a document handler, skip to step 7.

- a. Mark the [Document Handler] radio button in the Registration Mode area.
- b. Remove the single registration document from the document glass and place 10 of the scanner registration documents all together face up on the document handler.

Follow the directions on the screen for proper placement and orientation of the documents. Make sure the ready light on the document handler is illuminated.

- c. Select [Start] from the Customer Registration dialog box.

The registration process begins. When the test is complete, a message appears in the message bar at the bottom of the Customer Scanner Registration dialog box.

6. Remove the scanner registration documents from the document handler.
7. Select [Close] to close the Customer Scanner Registration dialog box.
8. Select [System Information: Exit] to close the Scanner Support window.

Using a magneto-optical drive (MOD)

As an option, DigiPath Production Software supports the use of up to two magneto-optical drives (MODs) for mass storage of objects. A MOD offers you the ability to transfer DigiPath documents and images to a relatively inexpensive medium, an optical disk, for online and offline storage. After the stored information is taken offline, you can easily restore the optical disk to online status and access the information.



CAUTION

When using a MOD with DigiPath Production Software, users must be sure the optical disk is mounted and online before moving data to it. Similarly, users must also offline the optical disk before removing it from the drive. Failing to perform either of these steps may result in either a loss of data or incorrect data in the Document Library cabinet system.

DigiPath Production Software 3.0 supports the following MOD devices:

- Sony 9.1 GB MOD (can be purchased with DigiPath Production Software)
- Sony 5.2 GB MOD
- Sony 2.6 GB MOD



NOTE: Previous versions of DigiPath Production Software supported the 650MB Sony MOD and 1.3 GB MODs. These devices are no longer supported by DigiPath Production Software.

Table 4-1 lists the currently supported MOD devices and identifies their optical disk capacity and compatibility.

Table 4-1. Supported MOD devices and their compatibility

MOD Device	Optical Disk Capacity	DigiPath Production Software Image Capacity*	Compatible Optical Disks and Read/Write Capability
Sony 9.1 GB	9.1 GB (4.55 GB per side)	4 GB	650 MB (read only) 1.3 GB (read only) 2.3 GB (read/write) 2.6 GB (read/write) 5.2 GB (read/write) 9.1 GB (read/write)
Sony 5.2 GB	5.2 GB (2.6 GB per side)	30952	650 MB (read only) 1.3 GB (read only) 2.3 GB (read/write) 2.6 GB (read/write) 5.2 GB (read/write)
Sony 2.6 GB	2.6 GB (1.3 GB per side)	15476	650 MB (read only) 1.3 GB (read/write) 2.3 GB (read/write) 2.6 GB (read/write)
<p>* The storage capacity of an optical disk depends upon the average size of the images being stored. Assuming that a 600 dpi letter-size image is compressed at an average ratio of 25:1, each image page would require approximately 168 KB of space. The number of images listed in this column is based on an average of 168 KB per image.</p>			



CAUTION

Due to a low-level formatting incompatibility between the XDOD 3.X Corel SCSI drivers and the Windows 2000 drivers, any optical disk data created with XDOD 3.X running on Windows 3.1 is not accessible from DigiPath Production Software 3.0 running under Windows 2000.

Sony 9.1 GB magneto-optical disk

The MOD for DigiPath 3.0 is the Sony 9.1 GB drive. In the past DigiPath/XDOD supported five different MOD drives:

- Sony model SMO-S501 — 650 MB
- Sony model SMO-S521 — 1.3 GB
- Sony model CMO-R540-40 — 2.6 GB
- Pinnacle Micro Sierra MOD — 1.3 GB
- Sony model RM)-5551 — 5.2 GB

All the MODs use 5.25 inch optical media. The difference between MODs is in the storage capacity as shown above. The 650 MB and 1.3 GB optical disks can be used only as read only devices with the new MOD drive. There is a hardware limitation that prevents writing to the 650 MB optical disks with the new drive.

Formatting the Sony 9.1 GB MOD platter

The 9.1 GB MOD platter can store 4.55 GB per side. The platter must be manually turned over to access the opposite side.



NOTE: Use this procedure to format the 9.1, 5.2, 2.6, and 2.3 MODs.



Before you can use a MOD platter, it must be partitioned and formatted. Use the following procedure to prepare the MOD for use:

1. Place a blank 9.1 GB platter in the MOD drive. Be sure that the side you wish to prepare is face up.
2. Select [Start: Settings: Control Panel] from the Windows desktop.
3. Double-click on the [Administrative Tools] icon.
4. Double-click on the [Computer Management] icon. The Computer Management console opens.
5. Expand the [Storage] console tree.
6. Highlight the [Disk Management] folder.
7. Select the MOD.
8. Select [Action: All tasks: Format] from the main menu.
9. Enter the volume label for the MOD in the Volume label text box.
10. Select [FAT] as the file system from the File System drop-down list box.
11. Select [default] as the allocation unit size from the Allocation unit size drop-down list box.

12. Select [OK].
13. Select [OK] if a warning message appears stating that formatting will erase all data on the volume. The formatting may take several minutes.

The Status field indicates that the MOD is being formatted and includes the percentage of formatting complete. When the formatting is complete, the MOD status indicates that the MOD is healthy.
14. Eject the MOD platter from the drive and turn it over so the second side is face up. Reinsert the platter into the drive and repeat steps 2 through 13.
15. Close the Computer Management console.

Using DigiPath 1.2/2.x MODs with DigiPath 3.0



To mount a DigiPath 1.2/2.x MOD with DigiPath 3.0:

1. Place the DigiPath 1.2/2.x MOD in the MOD drive.
2. Select [Start: Programs: Xerox DigiPath Production Software: Document Library] from the Windows desktop.
3. Select [Cabinet: Mount] to mount the MOD.

For more information on mounting MODs, refer to the *User Guide section of the online Help system*.

Optical media compatibility information

Table 4-2 lists the optical media capacity for DigiPath 3.0 and optical drives previously supported by DigiPath.

Table 4-2. Optical media compatibility

Optical Drive	MOD Platter Capacity	Can read from platter	Can write to platter
Sony 650 MB	650 MB	yes	yes
Sony 1.3 GB	650 MB	yes	yes
Sony 1.3 GB	1.3 GB	yes	yes
Pinnacle 1.3 GB	650 MB	yes	yes
Pinnacle 1.3 GB	1.3 GB	yes	yes
Sony 2.6 GB	650 MB	yes	no
Sony 2.6 GB	1.3 GB	yes	yes
Sony 2.6 GB	2.6 GB	yes	yes
Sony 5.2 GB	650 MB	yes	no
Sony 5.2 GB	1.3 GB	yes	yes
Sony 5.2 GB	2.6 GB	yes	yes
Sony 5.2 GB	5.2 GB	yes	yes
Sony 9.1 GB	650 MB	yes	no
Sony 9.1 GB	1.3 GB	yes	no
Sony 9.1 GB	2.6 GB	yes	yes
Sony 9.1 GB	5.2 GB	yes	yes
Sony 9.1 GB	9.1 GB	yes	yes

Using a Redundant Array of Independent Disks (RAID)

As an option, DigiPath Production Software supports the use of a Redundant Array of Independent Disks (RAID) for mass storage of objects. A RAID device is an array of two or more relatively small, inexpensive SCSI hard disks organized to function as if they were a single, large disk drive. The hard disks are contained in an enclosure called the RAID cabinet and are managed by the RAID device controller. The RAID cabinet for the 100 GB RAID is capable of holding up to seven SCSI hard disks and the RAID cabinet for the 150 GB RAID is capable of holding up to ten SCSI hard disks. DigiPath Production Software supports a configuration using one or two RAID cabinets.

The device controller and management software, included with the RAID system, manage all internal aspects and operation of the device and make RAID operations transparent to the attached computer. From the computer and user viewpoints, the RAID device appears to be a single, large disk rather than several, small disks.

Understanding RAID levels

Often, part of the total available capacity for the disk array is devoted to storing the extra check data needed to detect and correct errors. Different schemes exist for writing actual data and for writing check data to the disk array. Referred to as the RAID level, these schemes use a variety of techniques, such as those described in Table 4-3.

Table 4-3. RAID level techniques

Technique	Description
Mirroring	Writes the same data to more than one disk in the array
Parity bits	Stores extra bits with the actual data to assist in detecting and correcting errors
Striping	Distributes consecutive data block sequences across the disk array

Table 4-4 lists and describes the available RAID levels.

Table 4-4. RAID Level

RAID level	Description
Level 3	RAID Level 3 uses one entire disk (sometimes referred to as a parity disk) for storing the check data for a group of disks. The actual data is striped across the other data disks in the array. When reading or writing data in the array, all disks are accessed simultaneously, which allows for only one data transfer at a time. This data configuration is optimal for many small data transfers.
Level 5	RAID Level 5 uses the equivalent of one entire disk for storing check data but distributes the check data over all the disks in the array. When reading or writing data in the array, only two disks are accessed simultaneously, which allows for multiple simultaneous data transfers. This data configuration is preferable for large data transfers.
Level 3/5	The RAID Level 3/5 data configuration is adaptive, combining the advantages of both Level 3 and Level 5 data configurations. Based upon the data transfer size, RAID Level 3/5 determines which data storage scheme to use. Level 3/5 incorporates both data striping, so that data is written across the array of disks, and parity bits, which eliminate the possible slowdown associated with a dedicated parity disk. Because of the composition of DigiPath Production Software application data, RAID Level 3/5 is optimal for both data transfer rates and efficient use of disk space.



NOTE: *In general, the check data on a RAID device reduces the probability of losing actual data. However, just as with any mass storage device, such as a hard drive, you should regularly back up the data stored on the RAID device.*

Several RAID levels exist; however, currently, no RAID device is capable of supporting all RAID levels. Table 4-5 provides the RAID levels used in the DigiPath supported RAID devices.

Table 4-5. DigiPath supported RAID devices

RAID	RAID Level
100 GB RAID	Uses RAID Level 5 data configuration with moving parity
150 GB RAID	Uses RAID Level 5 data configuration with moving parity

Understanding the DigiPath RAID device configurations

Table 4-6 describes the RAID system configurations supported by the DigiPath Production Software.

Table 4-6. RAID system configurations

RAID device	System configuration
100 GB RAID	This RAID device has the following hardware: <ul style="list-style-type: none">• Seven 18.0 GB SCSI hard disks per cabinet• Two redundant RAID device controllers
150 GB RAID	This RAID device has the following hardware: <ul style="list-style-type: none">• Ten 18.0 GB SCSI hard disks per cabinet• Two redundant RAID device controllers

The RAID system is configured as one virtual disk or drive.



NOTE: Because part of the disk array is used to store check data, the space available for storing actual data files is not equal to the total size of all the drives.

Using the 100 GB RAID

This section provides instructions for using the Enterprise Storage Manager software with the 100 GB RAID device, shutting down the 100 GB RAID device, and powering up the 100 GB RAID device.

Using the Enterprise Storage Manager

The Enterprise Storage Manager (ESM) software is included with the 100 GB RAID system. This software is used to configure, operate, monitor, and troubleshoot the RAID system. The ESM software is what your Xerox service representative uses to create the RAID volume and to configure the RAID controller for use with DigiPath Production Software.

In general, you should not change any of the settings for your RAID system using the ESM software. However, you may need to access the ESM software to view the RAID configuration or for troubleshooting information if you ever call customer support with a problem.



CAUTION

You should not change the settings or configuration of the RAID device unless instructed to do so by a Xerox customer support or service representative. Doing so may result in loss of data or incompatibility with the DigiPath Production Software.



To access the ESM software:

1. Select [Start: Programs: Enterprise Storage Manager] from the Windows desktop.

For more information on how to use the ESM software, refer to the online Help files or to your RAID documentation.

Shutting down the 100 GB RAID system

Use the following procedure if you have to temporarily shut down the RAID system.



To shut down the RAID system:

1. Close and exit all applications to end all activity to the RAID system.
2. Select [Start: Programs: Enterprise Storage Manager: SC5230 Storage Window] to start ESM. The SC5320 Management dialog box opens.
 - a. Select the [SCSI Radial] button.
 - b. Select [OK].
 - c. Select the RAID drive letter.
 - d. Select [OK].
3. Select [Storage: Controller: Configuration: Save] from the SC5230 Storage Window to save the current RAID configuration. Save the configuration to a file name of your choice.
4. Select [Yes] in the ESM warning message.
5. Shut down the RAID device controller.
 - a. Select [Storage: Controller: Shutdown] from the SC5230 Storage Window menu and confirm.
 - b. Select [File: Exit] from the SC5230 Storage Window menu to exit ESM.
6. Select [Start: Shut Down] from the Windows desktop to shut down the workstation.
7. Power off the workstation.
8. Power off the RAID system.

Powering on the 100 GB RAID system



To power on the RAID system:

1. Power on the RAID system.



NOTE: It takes several minutes for the RAID controller to power on and reach the ready state. If you power on the workstation before the RAID controller reaches the ready state, the workstation will not detect the RAID system.

2. Power on the workstation.

The workstation should automatically detect the RAID, which is now ready for use.

Using the 150 GB RAID

This section provides instructions for using the StorageView software to monitor the 150 GB RAID system.

Using StorageView

The StorageView software is included with the RAID system. This software is used to configure, operate, monitor, and troubleshoot the 150 GB RAID system. The StorageView software is what your Xerox service representative uses to create the RAID volume and to configure the RAID controller for use with DigiPath Production Software.

In general, you should not change any of the settings for your RAID system using the StorageView software. However, you may need to access the StorageView software to view the RAID configuration or for troubleshooting information if you ever call customer support with a problem.



CAUTION

You should not change the settings or configuration of the RAID device unless instructed to do so by a Xerox customer support or service representative. Doing so may result in loss of data or incompatibility with the DigiPath Production Software.



To access the StorageView software:

1. Select [Start: Autologic StorageView: StorageView] from the Windows desktop. The StorageView application opens.

For more information on how to use the StorageView software, refer to the StorageView online Help files or to your RAID documentation.



NOTE: *For procedures on shutting down and powering on the 150/300 GB RAID system, refer to the RAID device documentation.*

Using the internal and external tape drives

DigiPath Production Software uses the internal tape drives listed in Table 4-7 and external tape drives listed in Table 4-8 for backing up the system.



NOTE: Refer to Chapter 7, Backup and restore, for procedures on backing up the DigiPath system using the tape drives.

Table 4-7. Supported DigiPath internal tape drives

Internal tape drive	Description
TR5	<p>This internal tape drive, which is included with the Compaq Workstation PW8000, is used to back up the workstation hard drive. The TR5 internal tape drive has an expected data transfer rate of 60 MB per minute and uses tapes with a maximum capacity of 10 GB uncompressed, or 20 GB compressed. The tape drive performance and tape capacity of the internal tape drives allow you to complete a full backup of the hard drive in a reasonable amount of time, using only one or two tapes.</p> <p><i>NOTE: Because of the large capacity of the RAID device, using one of the internal tape drives to back up the RAID would require numerous tapes and many hours. Therefore, it is strongly recommended that you purchase and use the optional Sony AIT tape drive for backup of a RAID system.</i></p>
8 mm Exabyte Eliant/8505	<p>The Exabyte Eliant/8505 8 mm tape drive is an optional unit. It is used with DocuTech Tape Tool to manipulate DocuTech Extended Storage Tapes.</p> <p><i>NOTE: If you have a previous version of the Exabyte tape drive, part Number 98K27531C, and are having problems reading tapes, contact your Xerox Service Representative. The part number is displayed on a nameplate on the rear of the tape drive unit.</i></p>

Table 4-8 lists and describes the external tape drive supported by DigiPath.

Table 4-8. DigiPath external tape drive

External tape drive	Description
AIT	<p>The Sony AIT tape drive is an optional external drive that can be used to backup the 100 GB or 150 GB devices. The AIT drive has an expected data transfer rate of 1360 MB per minute and a maximum data transfer rate of 720 MB per minute with 2:1 compression. The AIT drive supports the following tape lengths:</p> <ul style="list-style-type: none">• 25/50 GB tape• 35/70 GB tape• 50/100 GB tape <p>The maximum capacity of each tape is 50, 70, and 100 GB with a 2:1 compression and 25, 35, and 50 GB native.</p> <p><i>NOTE: Although the AIT tape drive is capable of 2:1 compression, these results are not likely with DigiPath data. The TIFF images in the RDO documents are already highly compressed; therefore little gain is realized from the AIT tape drive's compression algorithm.</i></p> <p>Instead of using a driver, the Sony AIT tape drive is controlled by the TapeWare software installed on the DigiPath workstation.</p>

The following sections provide detailed instructions for using the external AIT tape drive when backing up the DigiPath system.

Sony AIT 100 autoloading tape drive

Sony AIT tape magazine

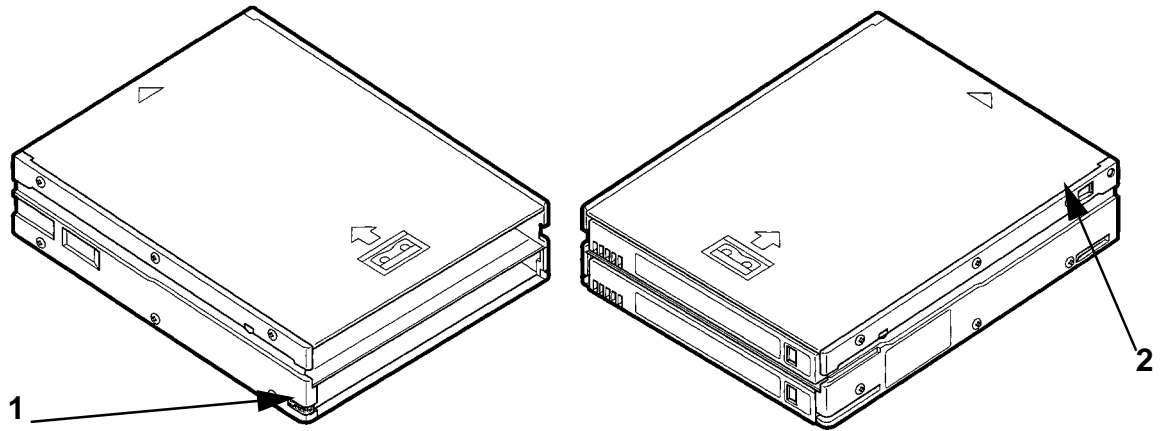


Figure 4-4. Sony AIT tape magazine

Figure 4-4 shows the tape release button and write protect tab on the Sony AIT tape magazine.

- **(1) Release button** — Press this button to remove tapes from the magazine.
- **(2) Write protect tab** — Slide the tab to the left to write-protect the tapes in the magazine. This tab inhibits writing to the tapes, regardless of whether the tape cartridges are individually write-protected.

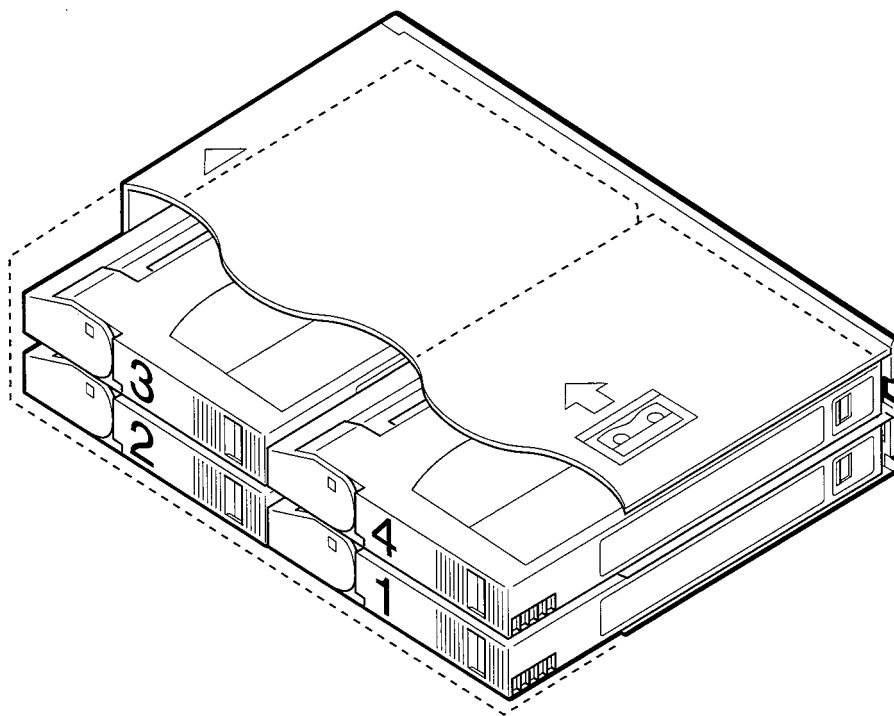


Figure 4-5. The numerical positions of tapes in the magazine

Figure 4-5 shows the slot number assignments for tapes when they are loaded in the magazine. For example, when you use the select tape slot four, you are selecting the tape in position four in the Figure above. For DigiPath, tapes can be loaded in any order.

Advanced Intelligent Tapes (AIT)

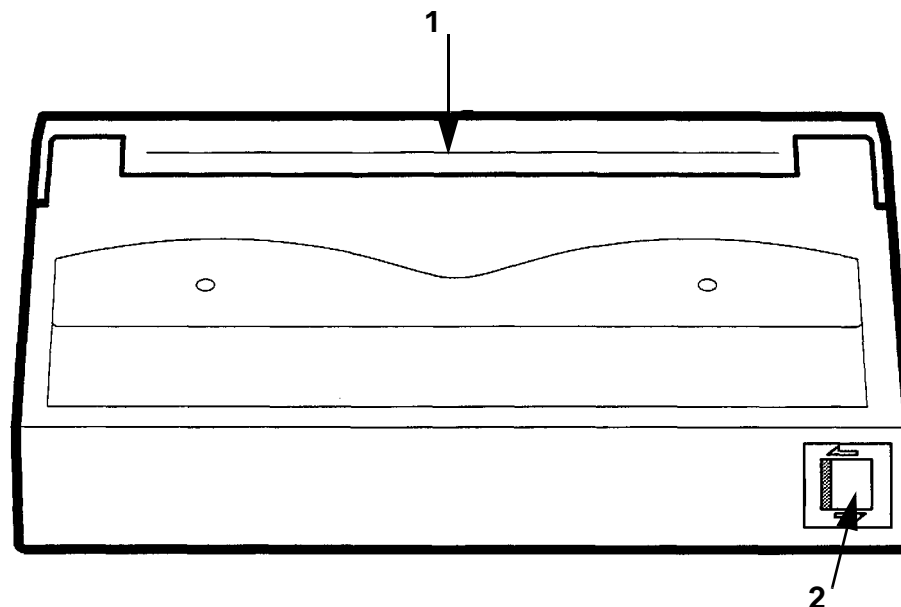


Figure 4-6. AIT cartridge

Figure 4-6 shows the AIT cartridge and its components. An AIT tape cartridge is capable of storing 50/100GB of data.



CAUTION

Do not open the tape lid or attempt to disassemble the tape cartridge.

- **(1) Tape lid** — Protects the medium when the tape is not in the drive.
- **(2) Write-protect tab** — Slide to the left to enable writing and erasure. Slide to the right to write-protect the tape.

Loading the Sony AIT tape magazine



The AIT tape drive uses a magazine of four tapes to backup up to 200 GB of data. The magazine automatically rotates the tape cartridges in one direction only. To load the magazine:

1. Hold the magazine upright. Insert two tapes in the bottom slot. See Figure 4-7.

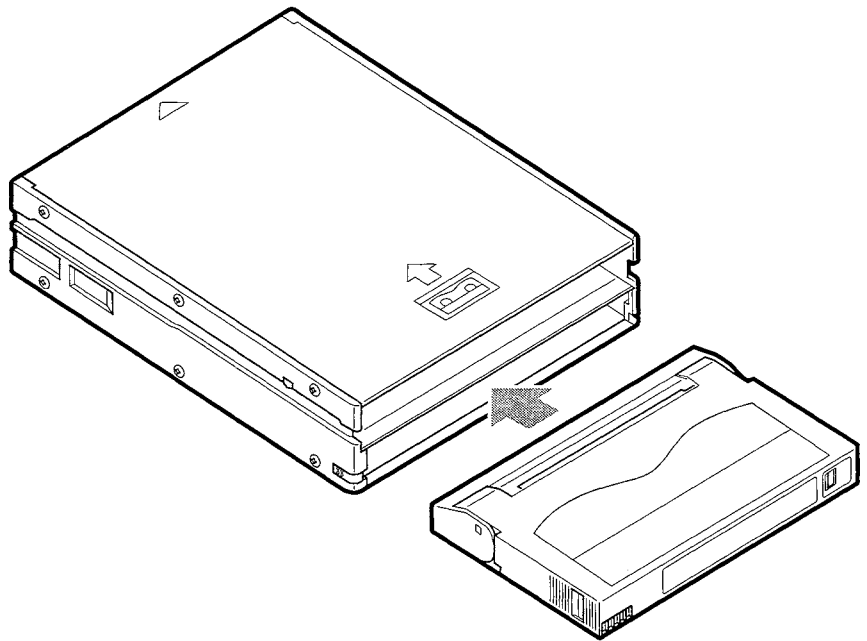


Figure 4-7. Insert two tapes into the bottom slot

2. Insert two tapes into the top slot. See Figure 4-8.

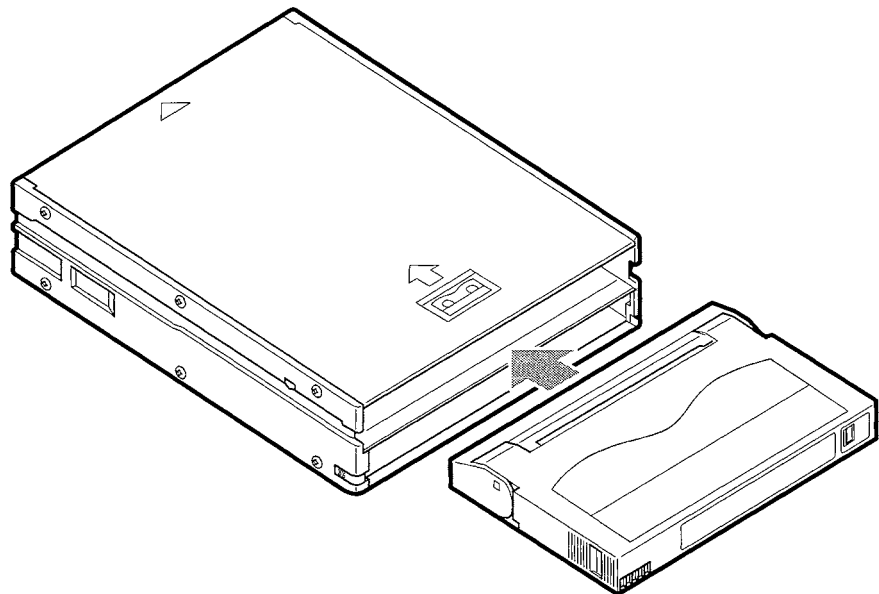


Figure 4-8. Insert two tapes into the top slot

3. Insert the loaded magazine into the AIT drive.

Unloading the Sony AIT tape magazine

1 3...
2

The tape magazine empties from the bottom slot.

1. Hold the magazine in one hand with the open end tilted slightly downward.
2. Press the release button on the lower left side of the magazine. See Figure 4-4. The first tape slides out and the second tape slides into the first position. The third tape drops to the bottom slot.
3. Press the release button and the second tape slides out.
4. Press the release button and the third tape slides out.
5. Grasping the open end of the magazine in one hand, briskly tap the closed end of the tape drive against your open palm one time. See Figure 4-9. The fourth tape drops into the bottom slot.

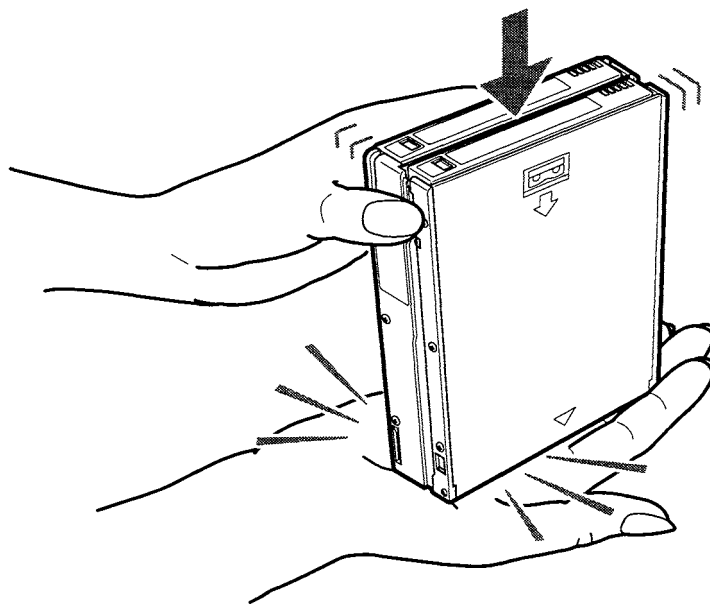


Figure 4-9. Tap the magazine against your palm to drop the fourth tape to the bottom slot

6. Tilt the open end of the magazine downward and press the release button. The fourth tape slides out.

Cleaning the Sony AIT tape drive heads

Clean the heads of the Sony AIT tape drive regularly to maintain reliable performance. The AIT tape drive displays the message “CleanReq” when cleaning is necessary. Use the following procedure to clean the heads:



1. If the tape magazine is in the drive, eject it.
2. Load the cleaning cartridge into tape position 1 of the tape magazine, as shown in Figure 4-5. If necessary, remove the first tape and insert the cleaning cartridge in its place.



NOTE: You can load the cleaning cartridge into any position, but it is faster to load it into position 1.

3. Insert the loaded tape magazine into the drive.
4. Push the <SELECT> button on the tape drive until the cleaning cartridge is selected.
5. Push the <ENTER> button on the drive.
6. The following message sequence displays:
 - “Load Tape”
 - “Cleaning in Process”
 - “Unload Tape 1”
 - “Ready”
7. Eject the magazine, remove the cleaning tape, and store the cleaning tape in it's case until it is needed again.

Tape media compatibility information

Table 4-9 lists the ability of the DocuTech Tape Tool, offered with DigiPath, to interact with information stored on previously supported tape media.

Table 4-9. Tape media compatibility

Xerox Legacy Product	Tape Drive	Can read from tape	Can write to tape
DocuTech Extended Storage (DES)	Exabyte model 98K27531C	yes	yes
DocuTech Offline File Storage (DTOFS)	Exabyte model 98K27531C	yes	yes
DocuTech Internal tape drive	Exabyte model 98K27531C	yes	yes

5. Backup and restore

This chapter provides information and procedures for maintaining, backing up, and restoring the files and information stored on a DigiPath system. A DigiPath system includes a DigiPath Document Library server or a Document Scan and Makeready/Document Library server and any of its components.

The topics covered in this chapter include:

- a strategy for backing up and restoring a DigiPath system
- instructions for backing up a DigiPath system
- instructions for restoring a DigiPath system

Digipath backup strategy

Backing up your DigiPath system is an important and necessary function. Should the DigiPath system experience an internal hard drive or RAID system failure, accidental file deletion, or another catastrophic event, a successful backup of data minimizes the amount of lost data. Using a successful and efficient backup strategy reduces the amount of time required to restore the system to a fully operational state once the necessary hardware repairs are made.

The DigiPath Rescue application is used to backup and restore DigiPath cabinets, including user information, registry settings, documents, and cabinet attributes, to a specified directory on the machine's hard drive.

The TapeWare software is used to backup and restore the following:

- DigiPath workstation/server hard drive to the internal TR5 tape drive
- 100/150 GB RAID's to the external Sony AIT tape drive

The following sections provide information on the backup devices, the backup and restore software, the various backup types, and backup strategies.

Backup devices

Table 5-1 lists the different backup devices and what each device is used to backup.

Table 5-1. Backup devices

Device	Used to back up
TR5 tape drive	<ul style="list-style-type: none">• Compaq PW8000• Compaq AP550/1 GHZ• Compaq AP550/733
Sony AIT tape drive	100 GB, 150 GB RAIDs

The following sections provide information on each of the backup devices.

TR5

Use the TR5 tape drive to backup up to 27 GB of data on the C, D, and E drives. A full backup, using a minimum of 2 tapes, takes approximately 3.75 hours. A full backup, using a maximum of 3 tapes, takes approximately 7.5 hours.

The TR5 tape drive has the following uncompressed and compressed backup rates:

- 10 GB uncompressed data at a backup rate of 60 MB/minute
- 20 GB compressed data at a backup rate of 120 MB/minute

Sony AIT

The Sony AIT tape drive is used to backup one or two 100/150 GB RAID devices.

The Sony AIT tape drive supports two tape lengths: a 25/50 GB (170 meter) tape and a 35/70 GB (230 meter) tape. These two tapes have the following backup rates:

- 25 GB (170 meter) or 35 GB (230 meter) uncompressed data have a backup rate of 180 MB/minute
- 50 GB (170 meter) or 70 GB (230 meter) compressed data have a backup rate of 360 MB/minute

Table 5-2 provides the approximate time it takes to complete a full backup using the minimum and maximum number of tapes.



NOTE: The job data on a RAID is highly compressed during a backup; therefore, so little additional compression can be achieved by using the compression algorithms in the Sony AIT tape drive firmware.

Table 5-2. Sony AIT full backup time

RAID configuration	Storage	Tapes (minimum) 35/70 GB (230 meter)	Tapes (maximum) 35/70 GB (230 meter)	Full backup time (minimum)	Full backup time (maximum)
1 x 100 GB	100 GB	2	3	4.63 hours	9.26 hours
1 x 150 GB	150 GB	3	5	6.94 hours	13.89 hours
2 x 100 GB	200 GB	3	6	9.26 hours	18.52 hours
1 x 100 GB and 1 x 150 GB	250 GB	4	8	11.57 hours	23.15 hours
2 x 150 GB	300 GB	5	9	13.89 hours	27.78 hours
2 x 18 GB (internal)	36 GB	1	2	1.7 hours	3.4 hours

Backup and restore software

Table 5-3 lists and describes the two software programs used to backup and restore the DigiPath system.

Table 5-3. Backup and restore software

Backup and restore software	Description
DigiPath Rescue	Backs up and restores DigiPath cabinets, including a cabinet's documents and/or attributes, to a specified directory on the workstation hard drive
TapeWare	Backs up and restores the following: <ul style="list-style-type: none">• DigiPath workstation/server hard drive to the internal TR5 tape drive• 100/150 GB RAID's to the external Sony AIT tape drive <i>NOTE: For more information on using the TapeWare software application, refer to the TapeWare documentation.</i>

Understanding the various backup types

The backup strategies recommended by DigiPath Production Software use three types of backups: full, differential, and incremental. Table 5-4 lists and describes the different backup types.

Table 5-4. Recommended backup types

Backup Type	Description
Full	This type of backup copies every file on the selected drive(s) the tape device.
Differential	This is an intermediate backup. It copies only those files that were added or changed after the last full backup was performed.
Incremental	This is an intermediate backup. It copies only those files that were added or changed after the most recent full or incremental backup was performed.

Each of the various backup types have their advantages and disadvantages. Table 5-5 lists and describes the advantages and disadvantages of each backup type.

Table 5-5. Advantages and disadvantages of each backup type

Backup Type	Advantages	Disadvantages
Full	This type of backup is the most complete and reliable type of backup.	This type of backup takes the longest amount of time and the largest amount of tape storage.
Differential	This type of backup requires the last full backup and the last differential backup, if you need to restore a hard disk or RAID system.	This type of backup requires more tape and takes longer than incremental backups.
Incremental	This type of backup takes the least amount of time and tape storage.	This type of backup requires the last full backup and all of the incremental backup sets since the last full backup, if you need to restore a hard disk or RAID system. Furthermore, if any incremental tapes are lost or damaged, it may not be possible to recover all the backed up data.



NOTE: You can backup or duplicate the Sony magneto-optical drive (MOD) to another MOD.

A full backup is a necessary part of your backup strategy. Most often, full backups are used in combination with either differential or incremental backups. You should never perform only differential and incremental backups. The following section explains how to select and implement a backup strategy.

Selecting and implementing a backup strategy

When backing up your DigiPath system, it is important to identify the backup strategy that is most efficient and effective for your situation. You should determine your backup strategy based on the number of new files or file changes made every day, week, or month on your DigiPath workstation. You should perform a full backup of both partitions on the hard drive and on the RAID system at least once a week. Most likely, you will want to back up the system more than once a week.

The most common backup strategies involve a combination of full backups with either incremental or differential backups. Some backup strategies require more time to backup data, but less time to restore. Others require less time to backup data, but more time to restore. It is important to understand your work environment and select a method that best supports your work activities.



NOTE: Regardless of the backup strategy you select, it is recommended that you perform backups at the end of the work day rather than at the beginning. By backing up the DigiPath system at the end of the workday, you minimize the period of vulnerability to data loss.

Table 5-6 lists and describes the recommended backup strategies.

Table 5-6. Recommended backup strategies

Backup strategy	Description
Full backups only	In this strategy, every time a backup is performed, all the data on the drive is backed up. This is an effective strategy to use when backing up the local hard drive to the internal tape drive or backing up the RAID device to the external Sony AIT tape drive. This strategy is most efficient when there are significant changes or additions to the contents of the drive you wish to backup.
Full backups combined with differential backups	In this strategy, after a full backup is performed, a series of differential backups are performed until the next full backup is made. This cycle repeats itself, with another series of differential backups followed by another set of full backups. This strategy is most efficient when the changes of the drive you wish to backup are localized to a small number of files.
Full backups combined with incremental backups	In this strategy, after a full backup is performed, a series of incremental backups are performed until the next full backup is made. This cycle repeats itself, with another series of incremental backups followed by another full backup. This strategy is most efficient when the content changes on the drive you wish to backup are made to a variety of files.



NOTE: A different backup strategy can be used for backing up the hard drive and backing up the RAID device.

Once you choose the backup strategy that is most efficient for your DigiPath system, you need to decide how often you should perform the backups. It is recommended that you perform a full backup at least once a week; the scheduling of incremental or differential backups can then be arranged within the full backup cycle. The more critical the data stored on the DigiPath system, the more frequently you should backup the system.

After you choose a backup strategy and frequency, you need to organize your tapes and decide how to use them to implement your backup strategy. For example, based on a five-day backup cycle (five working days between full backups), Table 5-7 lists the minimal tape usage for all three backup strategies. Notice how the different backup strategies require a different number of tapes. The more tapes you use for backups, the longer the tapes last because the tapes will not be used as frequently as if you used the minimum number of required tapes.

Table 5-7. Tape usage and backup strategies

Backup Day	Tape usage with full backup only	Tape usage with full and differential backups	Tape usage with full and incremental backups
Week 1, Day 1	Tape #1	Tape #1 (full)	Tape #1 (full)
Day 2	Tape #2	Tape #2 (differential)	Tape #2 (incremental)
Day 3	Tape #1	Tape #3 (differential)	Tape #3 (incremental)
Day 4	Tape #2	Tape #2 (differential)	Tape #4 (incremental)
Day 5	Tape #1	Tape #3 (differential)	Tape #5 (incremental)
Week 2, Day 1	Tape #2	Tape #4 (full)	Tape #6 (full)
Day 2	Tape #1	Tape #1 (differential)	Tape #1 (incremental)
Day 3	Tape #2	Tape #2 (differential)	Tape #2 (incremental)
Day 4	Tape #1	Tape #1 (differential)	Tape #3 (incremental)
Day 5	Tape #2	Tape #2 (differential)	Tape #4 (incremental)
Week 3, Day 1	Tape #1	Tape #3 (full)	Tape #5 (full)
NOTE: Depending on your selected backup cycle and strategy, you may need to order additional backup tapes from your supplier. DigiPath Production Software includes one backup tape with the internal tape drive.			



NOTE: You may want to archive tapes storing the data from your monthly full backups, rather than recycle those tapes.

Table 5-7 represents only a sample backup cycle based on a five-day work backup cycle. You should implement a backup cycle that is most effective and convenient for your environment. The backup cycle and backup strategy you use determines the number of tapes you need. Also, depending on the amount of data being backed up, backups may require more than one tape. In that case, with relation to Table 5-7, each tape is actually a collection of tapes. For example, Tape #1 would actually be tapes 1a and 1b, if two tapes were required to complete the backup.

Backup media

Xerox recommends that you use multiple backup media sets for each device. Having multiple backup sets provides additional security, in case one set is corrupted or damaged. Table 5-8 lists the minimum recommendation for each device.

Table 5-8. Minimum recommendation

Tape drive	Minimum recommendation
TR5	At least two TR5 tape cartridges. Alternate backups between tapes. Make the first backup on the first cartridge; make the second backup on the second cartridge. For the third backup, overwrite the first tape cartridge, and so on.
Sony AIT	At least two sets (eight tape cartridges) per RAID. Alternate backups between tape sets. Make the first backup on the first cartridge set; make the second backup on the second cartridge set. For the third backup, overwrite the first tape cartridge set, and so on.

Backing up the DigiPath System

The DigiPath Rescue application is used to backup DigiPath cabinets, including the cabinet's documents and attributes, to a specified directory somewhere on the machine's hard drive.

The TapeWare software is used to backup the following:

- The DigiPath workstation/server hard drive to the internal TR5 tape drive
- 100/150 GB RAID's to the external Sony AIT tape drive



NOTE: Refer to the TapeWare documentation for more information on using the TapeWare software.

Table 5-9 lists what procedures you should perform to backup different areas of your DigiPath system.

Table 5-9.

If you are backing up	Perform the following procedures:
DigiPath cabinets (including documents and/or attributes)	Backing up DigiPath cabinets
DigiPath cabinets and workstation hard drive	<ol style="list-style-type: none"> 1. Backing up DigiPath cabinets 2. Backing up the DigiPath workstation
Workstation hard drive only	Backing up the DigiPath workstation
DigiPath cabinets and RAID	<ol style="list-style-type: none"> 1. Backing up DigiPath cabinets 2. Backing up the DigiPath workstation
RAID only	Backing up the DigiPath workstation



NOTE: You must have administrative privileges to run the DigiPath Rescue and TapeWare applications.

Backing up DigiPath cabinets

The DigiPath Rescue application is used to backup DigiPath cabinets, including the cabinet's documents and attributes, to a specified directory on the machine's hard drive.



NOTE: You must have administrative privileges to use the DigiPath Rescue application.

When you backup the DigiPath cabinets, you should offline the cabinets before performing the backup. The cabinets should be kept offline until the backup of the cabinets is complete. If the cabinets are not taken offline, there is the potential that data could be deleted before it is backed up to the specified backup directory or tape.

Back up the backup directory to tape to ensure a proper restore.

When backing up cabinets and their documents to the hard drive or to tape, you must ensure that there is sufficient disk space to perform the backup.

1 3...
2

To backup DigiPath cabinets, including their documents and/or attributes:

1. Using Document Library, offline all cabinets you wish to backup.
2. Select [Start: Programs: Xerox DigiPath Production Software: DigiPath Rescue] from the Windows desktop.
3. Log into the DigiPath Rescue application. See Figure 5-1

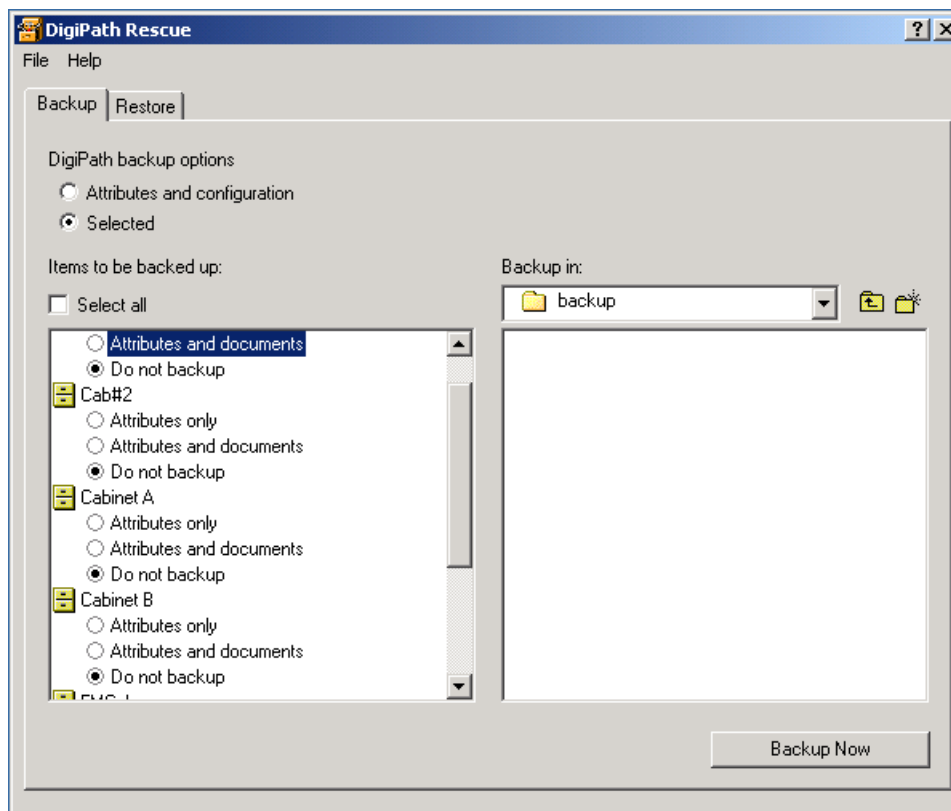


Figure 5-1. DigiPath Rescue

4. From the Backup tab, select one of the following DigiPath Backup options:

- Attributes and configuration — backs up all the cabinets, user information, and registry settings to a defined directory. Advance to step 7.



NOTE: This includes the attribute information for all files in all cabinets, but does not include the files themselves.

- Selected — backs up selected cabinet(s) and their documents and attributes, or their attributes only. Continue with step 5.

5. In the Items to be backed up area, mark the [Select all] check box to select all cabinets.
6. Select one of the following options for each cabinet:
 - Attributes only — backs up attributes only
 - Attributes and documents — backs up attributes and documents
 - Do not backup — does not back up the cabinet
7. In the Backup in drop-down list box, specify the directory in which you want the backup data stored.
8. Select [Backup Now] to start the backup process.
9. Select [Yes] to confirm the backup operation.
10. When the backup process is complete, backup up the backup directory to tape. Continue with the procedure “Backing up the DigiPath workstation” on page 5-17.

Backing up the DigiPath workstation

Backup the DigiPath workstation hard drive or the RAID using the TapeWare backup software.



NOTE: For more information on using the TapeWare application, refer to the TapeWare documentation.

Disconnecting remote users

The backup software skips files that are in use. To guarantee a complete backup, make sure all users are logged off or disconnected from the system and that they remain disconnected from the system until the backup is complete.



1. Notify any users connected to the workstation that they should close any files or applications they are currently using and disconnect from the workstation.
 - a. Select [Start: Programs: Accessories: Command Prompt] from the Windows desktop. The Command Prompt opens.
 - b. At the prompt, type the following command:

net send <destination> <message>

The <destination> is either the name of the connected computer or an asterisk (*), which sends the message to every computer within the current workgroup. The <message> should tell the user, or users, to close any applications or files they have open on the workstation.

- c. Press <Enter> to send the message to the specified destination.
 - d. Close the Command Prompt window.

2. After connected users have notified you that they have disconnected, or after giving the users a reasonable amount of time (10 minutes or so) to save any files and disconnect from the database, disconnect the remote workstation by completing the following:
 - a. Right click on [My Computer] and select [Manage]. The Computer Management console displays.
 - b. Highlight [Shared Folders: Sessions] and select [Action: Disconnect All Sessions].
 - c. Select [Yes] from the confirmation message box that opens.

All connected users are disconnected from the local workstation.

Closing any open applications

Before backing up and restoring the DigiPath 3.0 system, close all open files and exit all open applications on the workstation.



NOTE: Any files that remain opened and locked by applications are not backed up.

Stopping the DigiPath services and applications

The DigiPath services and applications must be stopped before backing up the DigiPath system.



To stop the DigiPath services and applications:

1. Use the batch utility **e:\digipath\XSTOPDGP.BAT** to stop the DigiPath services.
 - a. Select [Start: Run] from the Windows desktop. The Run dialog box opens.
 - b. In the text box, enter **e:\digipath\XSTOPDGP.BAT**
 - c. Select [OK] to run the batch file.
2. Close the following DigiPath applications in the System Tray:
 - a. Right click on the [Network Agent] icon on the Windows task bar and select [Disabled] from the pop-up menu to close the Network Agent System Tray.
 - b. Right click on the [DigiPath Batch System] icon on the Windows task bar and select [Close] from the pop-up menu to close the Batch Tool System Tray.

Performing the backup



1. Insert a blank tape, tape magazine, or data cartridge into the appropriate backup device.



NOTE: For more information on loading a tape magazine into the Sony AIT tape drive, refer to the Sony AIT tape drive documentation.

2. Select TapeWare Administrator on the Windows desktop. The TapeWare Logon dialog box opens.



NOTE: If the TapeWare Administrator icon is not on the Windows desktop, select [Start: Programs: TapeWare: TapeWare Administrator] from the Windows desktop.

3. Log into the TapeWare application.



NOTE: The default username is ADMIN and the password is left blank. See your system administrator for the correct username and password.

4. From the Wizard tab, select the [Backup Specific] option.
5. Enter the name of the backup job and select [Next].

6. Select one of the following as the source of the backup:
 - If backing up the DigiPath backup directory, select the appropriate backup directory.
 - If backing up the workstation hard drive, select the appropriate drive(s).
 - If backing up a RAID device, select the appropriate drive for the RAID.
 - If backing up specific files on the RAID, select the appropriate files on the RAID.
7. Select [Next].
8. Select one of the options listed in Table 5-10 for what device you want to backup to.

Table 5-10.

If backing up the:	Select the backup device:
DigiPath backup directory	TR5 tape drive <i>NOTE: You may backup the DigiPath backup directory on the workstation hard drive to the AIT tape drive providing you have enough space on the tape to backup the RAID and the workstation hard drive.</i>
Workstation hard drive	TR5 tape drive <i>NOTE: You may backup the workstation hard drive to the AIT tape drive providing you have enough space on the tape to backup the RAID and the workstation hard drive.</i>
RAID	AIT tape drive
Specific files on the RAID	AIT tape drive

9. Select [Next].
10. Select one of the following options for the type of backup you want to perform.
 - Full — backs up all selected files
 - Incremental — backs up only those files that have been changed or added since the last backup
 - Differential — backs up only those files that have been changed or added since the last full backup
 - Snapshot — similar to a full backup but leaves the archive flags untouched



NOTE: The first time you perform a backup, select [Full]. For more information on backup types, refer to the TapeWare documentation.

11. Select [Next].
12. Select the [Overwrite all tapes that are accessible] option for how you want to write the data to the backup device and select [Next].
13. Select the [Full verify] option for how you want to verify the backup data and select [Next].
14. Select one of the options for when you want to run the backup job and select [Finish].



NOTE: For more information on which option to select to run the backup job, refer to the TapeWare documentation.

15. When the backup and verification is complete, select [File: Exit] to close TapeWare.
16. Remove the tape from the appropriate backup device, label it, date it, and store it in a secure location.

Restarting the DigiPath applications and services

When the backup or restore process is complete, restart the DigiPath server to restart the DigiPath applications and services.

Restoring the DigiPath system

If the DigiPath system experiences an internal hard drive or RAID system failure, accidental file deletion, or another catastrophic event, the amount of time required to restore the data or system is determined by the backup cycle and strategy you select. If the backup strategy and cycle you select are efficient and effective for your environment, you should be able to restore most, if not all, of the data lost due to hardware failure or accidental deletion.



NOTE: Your Xerox service representative restores the hard drive after replacing or repairing it. You are responsible only for locating the necessary backup tapes and having them available when the Xerox service representative needs them. Do not restore the hard drive yourself, unless instructed to do so.

The DigiPath Rescue application is used to restore DigiPath cabinets, including their documents and/or attributes.

The TapeWare software is used to restore the following:

- the DigiPath workstation/server hard drive to the internal TR5 tape drive
- 100/150 GB RAID's to the external Sony AIT tape drive

Table 5-11 lists the procedures you should perform for restoring your DigiPath system

Table 5-11.

If you are restoring	Perform the following procedures:
DigiPath cabinets (including their documents and/or attributes)	Restoring DigiPath cabinets
DigiPath cabinets and workstation hard drive	<ol style="list-style-type: none">1. Restoring a DigiPath workstation2. Restoring DigiPath cabinets
Workstation hard drive only	Restoring a DigiPath workstation
DigiPath cabinets and RAID	<ol style="list-style-type: none">1. Restoring a DigiPath workstation2. Restoring DigiPath cabinets
RAID only	Restoring a DigiPath workstation

Restoring a DigiPath workstation



Use this procedure to restore the DigiPath workstation hard drive or the RAID, using the TapeWare software.

1. Complete the following procedures:
 - a. “Disconnecting remote users” on page 5-17
 - b. “Closing any open applications” on page 5-18
 - c. “Stopping the DigiPath services and applications” on page 5-19
2. Locate the appropriate tape(s), tape magazine(s), or data cartridge set required to restore.
3. Insert the appropriate tape(s), tape magazine(s), or data cartridge into the appropriate backup device.



NOTE: For more information on loading a tape magazine into the Sony AIT tape drive, refer to the Sony AIT tape drive documentation.

4. Select TapeWare Administrator on the Windows desktop. The TapeWare Logon dialog box opens.



NOTE: If the TapeWare Administrator icon is not on the Windows desktop, select [Start: Programs: TapeWare: TapeWare Administrator] from the Windows desktop.

5. Log into the TapeWare application.



NOTE: The default username is ADMIN and the password is left blank. See your system administrator for the correct username and password.

6. From the Wizard tab, select the [Restore Specific] option.

7. Enter the name of the restore job and select [Next].

8. Select one of the following as the source of the restore and select [Next]:

- If restoring the DigiPath backup directory, select the appropriate backup directory.



NOTE: Once you restore the DigiPath backup directory to the workstation hard drive, you must then restore the directory using DigiPath Rescue.

- If restoring the workstation hard drive, select the appropriate drive(s).
 - If restoring a RAID device, select the appropriate drive for the RAID.
 - If restoring specific files on the RAID, select the appropriate files on the RAID.
9. Select the backup device you want to restore from and select [Next].

10. Select one of the options for when you want to run the restore job and select [Finish].



NOTE: For more information on when to run the restore, refer to the TapeWare documentation.

11. When the restore is complete, verify that the workstation hard drive is restored.
12. Select [File: Exit] to close TapeWare.
13. Restart the DigiPath applications and services by completing the procedure “Restarting the DigiPath applications and services” on page 5-23.
14. If you restored the DigiPath backup directory to the workstation hard drive, you must restore the DigiPath cabinets using DigiPath Rescue. Refer to the procedure “Restoring DigiPath cabinets” on page 5-29

Restoring DigiPath cabinets

The DigiPath Rescue application is used to restore DigiPath cabinets, including their documents and/or attributes.



To restore DigiPath cabinets, their documents and/or attributes:

1. Select [Start: Programs: Xerox DigiPath Production Software: DigiPath Rescue] from the Windows desktop.
2. Log into the DigiPath Rescue application.
3. Select the [Restore] tab.
4. Select one of the following DigiPath Restore options:
 - Attributes and configuration — restores all the cabinets, user information, and registry settings from a defined directory.



NOTE: A full restore is only available if a full backup was completed.

- Selected — restores selected cabinets, their documents and attributes, or their attributes only.
5. In the Restore from drop-down list box, specify the directory in which the backup data is stored.
 6. Select one of the following options:
 - If you are performing a full restore, advance to step 8.
 - If you are restoring a selected cabinet(s), continue with step 7.

7. In the Items to be restored area, mark the [Select all] check box to restore all cabinets. Or, mark the check box next to each cabinet you want to restore to restore individual cabinets.
8. Select [Restore Now] to start the restore process.
9. Select [Yes] to confirm the restore operation.
10. Select [OK] when the restore is complete.
11. Close DigiPath Rescue.
12. Using Document Library, online any cabinets that you restored.

6. System administration

This chapter identifies and describes the procedures needed to administer and support the DigiPath system.

Topics covered in this chapter include:

- security recommendations
- using the Library Administration Tool
- user and group administration
- configuring remote DigiPath servers
- configuring the database and cabinet creation locations
- scheduling document conversion
- defragmenting cabinets
- using the DocuTech Tape Tool
- using WFTPD to FTP objects from DocuTech
- working with a Remote File Server

Security recommendations

The following are security recommendations for keeping the DigiPath system secure:

- DigiPath passwords
 - DigiPath administrator passwords should be changed when the system is initially installed. Do not keep the default password.



NOTE: For more information on changing DigiPath passwords, refer to “Managing user accounts” on page 6-7.

- DigiPath administrator and user passwords should be changed on a routine basis. It is recommended that you change passwords every 30 - 42 days.
- Do not use common names or words in DigiPath passwords. It is best to have some numerical or punctuation characters in the password.



NOTE: For more information on DigiPath passwords, refer to “Managing user accounts” on page 6-7.

- Disable any protocols not needed in Windows 2000, such as Netware, NetBeui, etc.



NOTE: For more information on disabling Windows 2000 protocols, refer to your Windows 2000 Documentation or to the Windows 2000 online Help system.

- Check Microsoft’s website
<http://www.microsoft.com/technet/security/bestprac.asp>, for additional suggestions on system security.

Using the Library Administration Tool

The Library Administration Tool provides several tabs used to administer and support the DigiPath Document Library applications. See Figure 6-1.

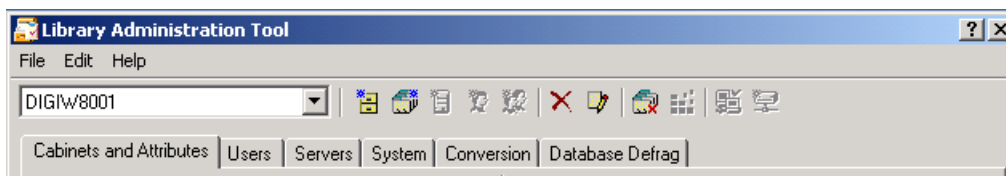


Figure 6-1. Library Administration Tool tabs

Table 6-1 lists and describes the Library Administration Tool tabs.

Table 6-1. Library Administration Tool tabs

Tab	Description
Cabinets and Attributes	Allows you to create, edit, and delete both cabinets and attribute set files, and attribute groups, as well as purge cabinets stored on removable media that is lost, or is no longer needed
Users	Allows you to create, edit, and delete DigiPath users and groups
Servers	Allows you to add and remove remote server connections in a multi-server environment
System	Allows you to set and modify user ability to create cabinets on local and remote drives
Conversion	Allows you to schedule document conversion of all Document Library cabinets on a per server basis
Database Defrag	Allows you to defragment cabinets



NOTE: Only DigiPath administrators can create users and modify cabinet attribute sets.

The following section provides procedures for logging into the Library Administration Tool application and managing multiple servers.

Logging into the Library Administration Tool

1 3...
2

To log into the Library Administration Tool:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into the Library Administration Tool. The Library Administration Tool application opens. See Figure 6-2.

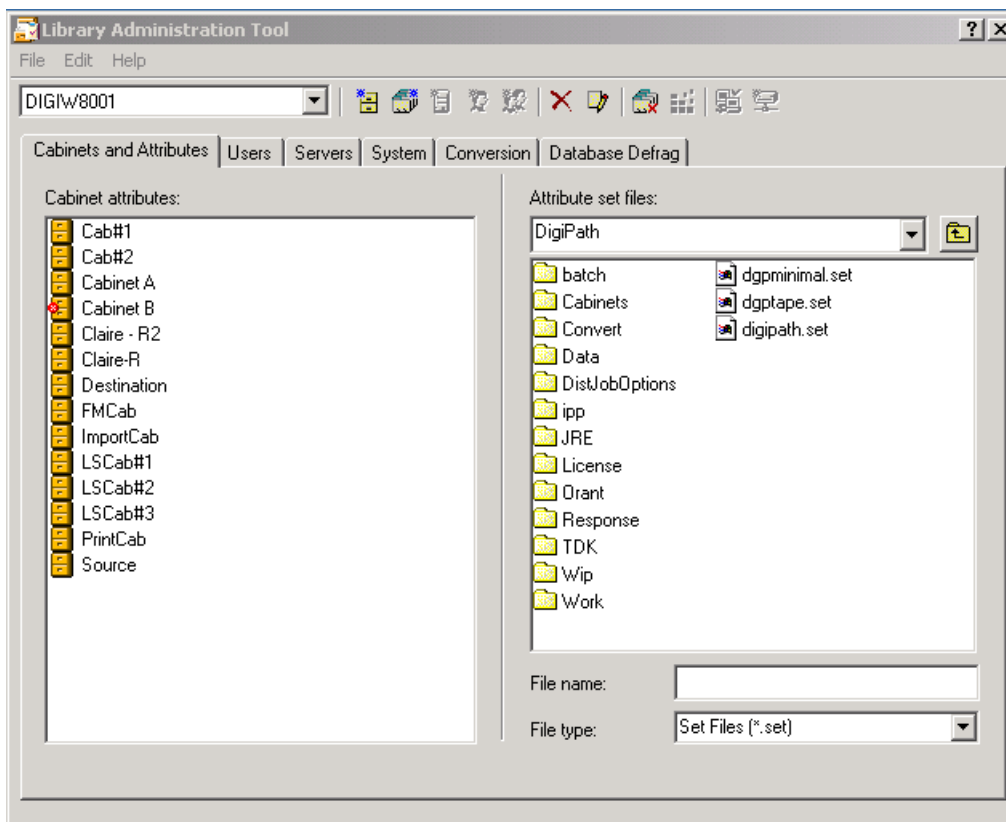


Figure 6-2. Library Administration Tool application

3. Select [File: Exit] to close the Library Administration Tool.

Managing multiple servers

DigiPath 3.0 supports a multi-server environment that allows a system administrator to:

- configure a set of servers in the DigiPath environment
- determine on which DigiPath server a user account shall exist
- create user accounts and assign access rights to servers so that users can log into any available server on which they have a valid account

Once the server connections are configured in each instance of Library Administration Tool, an administrator can bring up one instance of the Library Administration Tool, configure it to connect to different DigiPath servers (other than the local system), and manage user accounts for all connected DigiPath servers from this Library Administration Tool.

For more information on configuring remote servers, refer to “Configuring remote DigiPath servers” on page 6-17.



To manage multiple servers:

1. Log into the Library Administration Tool.
2. In the DigiPath server drop-down list, select the ALL SERVERS option to manage all servers.

User and group administration

The Users tab in the Library Administration Tool is used to create DigiPath user accounts and groups for accessing Document Library applications.



NOTE: Windows users and groups are created using the Windows User Manager. Refer to your Windows 2000 documentation for more information on Windows users and groups.

The following user and group limitations apply:

- The total number of user accounts that can exist on a Document Library system is limited to 50, including the system accounts. If you exceed this limit, an error message displays.
- The total number of groups that can exist on a Document Library system is limited to 10, including the Administrator and Everyone groups. If you exceed this limit, an error message displays.

Managing user accounts

Use the Users tab in the Library Administration Tool to set and modify user access to Document Library applications. Access to Document Library applications is restricted to those with user accounts.

Adding a user account

User accounts are login accounts that allow users to access Document Library applications. Without a user account, a user cannot access Document Library applications.

A user account specifies the login name and password for a user.



To add a new user account:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into the Library Administration Tool.
3. If you have multiple servers, specify the server in which you want to add the user.
4. Select the [Users] tab.
5. Select the [New User] toolbar button. The New User dialog box opens.

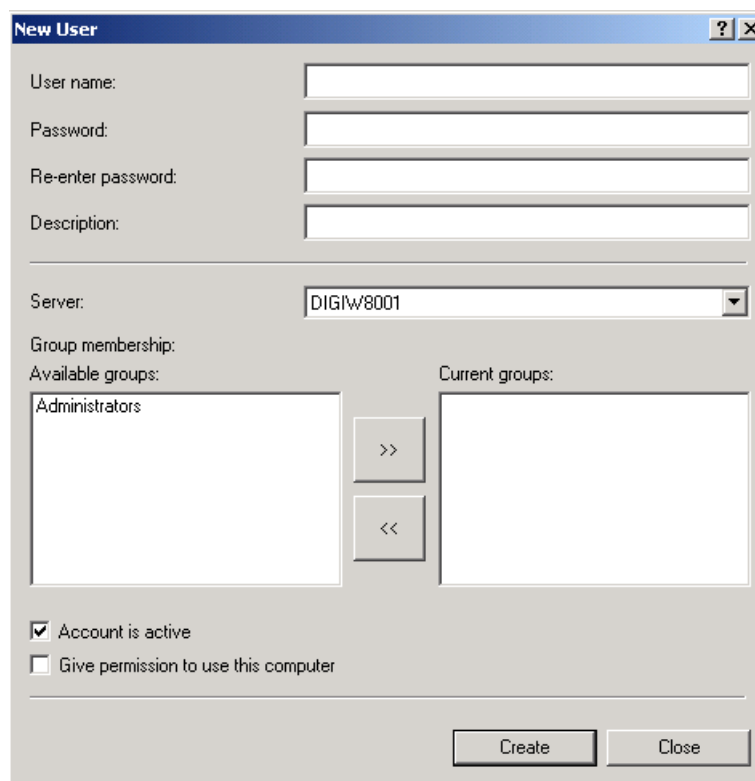
The image shows a 'New User' dialog box with a blue title bar. It contains several input fields: 'User name:', 'Password:', 'Re-enter password:', and 'Description:'. Below these is a 'Server:' dropdown menu showing 'DIGIW8001'. Under 'Group membership:', there are two list boxes: 'Available groups:' containing 'Administrators' and 'Current groups:'. Between them are '>>' and '<<' buttons. At the bottom, there are two checkboxes: 'Account is active' (checked) and 'Give permission to use this computer' (unchecked). 'Create' and 'Close' buttons are at the bottom right.

Figure 6-3. New User dialog box

6. Enter the user name in the User name text box.



NOTE: A user name cannot be identical to any other user or group name on the workstation. A user name cannot consist solely of periods (.) and spaces and cannot include leading or trailing spaces. It can contain up to 20 characters, either uppercase or lowercase.

7. Enter a password in the Password text box up to 14 characters long.



NOTE: Passwords are case sensitive and must contain a minimum of 6 characters.

8. Re-enter the password in the Re-enter password text box.

9. Enter a description for the user account in the Description text box. This field is optional.
10. In the Server drop-down list box, select the server you want to create the user on.
11. Select the Group membership for the user.
 - To add users to a group, highlight the group from the Available groups list and select [>>] to add the users to the Current groups list.
 - To remove the users from a group, highlight the group from the Current groups list and select [<<] to move the group to the Available groups list.
12. Mark the Account is active check box to activate the user account.



NOTE: To disable the user account, leave the Account is active check box blank.

13. Mark the Give permission to use this computer check box to create a Windows local user account for the user.
14. Select [Create]. The new user account appears in the Users list.



NOTE: If adding more than one user account, repeat steps 6 through 14.

15. Select [Close].
16. Select [File: Exit] to close the Library Administration Tool.

Editing the properties of a user account

1 3...
2

To edit the properties of an existing user account:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into the Library Administration Tool.
3. If you have multiple servers, specify the server on which the user you want to edit is located.
4. Select the [Users] tab.
5. Highlight the user account you wish to edit in the Users list.
6. Select the [Edit] toolbar button. The Edit User dialog box opens. See Figure 6-4.

The 'Edit User' dialog box is shown with the following details:

- User name:** dbarnum
- Password:** [Masked]
- Re-enter password:** [Masked]
- Description:** DL admin account
- Server:** DIGIW8001 (selected from a dropdown)
- Group membership:**
 - Available groups:** (Empty list)
 - Current groups:** Administrators
- Checkboxes:**
 - ☒ Account is active
 - ☒ Give permission to use this computer
- Buttons:** OK, Cancel

Figure 6-4. Edit User dialog box

7. Enter the necessary changes to the user account.
 - To activate an inactive user account and allow the user to log into Document Library applications, mark the Account is active check box.
 - To disable an active user account, clear the Account is active check box for the user. The user account remains in the Users list, but the user is not able to log into the Document Library applications.

For a description of each field in the Edit User dialog box, refer to “Adding a user account” on page 6-7.

8. Select [OK] to save the changes and close the dialog box.
9. Select [File: Exit] to close the Library Administration Tool.

Deleting a user account

A user account can be deleted. After deleting the user account, the user is no longer able to log into the Document Library applications.



CAUTION

A deleted user account cannot be recovered. You cannot delete the built-in Administrator and Guest accounts.



To delete an existing user account:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into the Library Administration Tool.
3. If you have multiple servers, specify the server on which the user you wish to delete is located.
4. Select the [Users] tab.
5. Highlight the user account you want to delete from the Users list.
6. Select the [Delete] toolbar button. A warning message opens.
7. Select [Yes] to delete the user account.
8. Select [File: Exit] to close the Library Administration Tool.



NOTE: If the DigiPath DL user is also a local user and you delete the DigiPath DL user in Library Administration Tool, you must also delete the local user in Windows 2000. For information on deleting users in Windows 2000, refer to your Windows 2000 documentation.

Managing groups

Use the Users tab in Library Administration Tool to manage groups. Groups define a group of users. When creating a new cabinet, you can assign read, write, and administrator rights to groups instead of having to assign rights to individual users. When there are many users who need to access a specific cabinet, it is quicker to assign user access rights to that cabinet if the users are all members of the same group.

Adding a group

1 3...
2

To add a group:

1. Select: [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into the Library Administration Tool.
3. Select the [Users] tab.
4. Select the [New Group] toolbar button. The New Group dialog box opens.

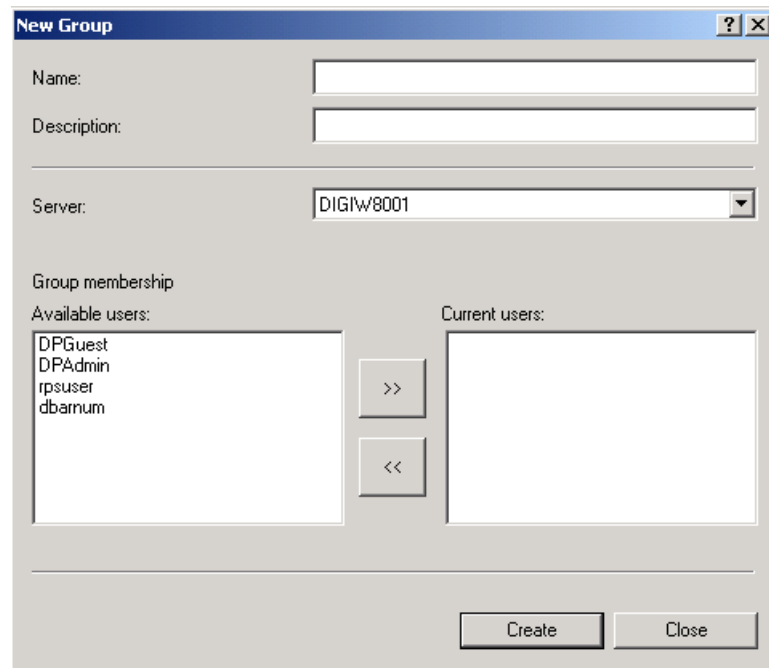


Figure 6-5. New Group dialog box

5. Enter a group name in the Name text box.



NOTE: A group name cannot be identical to any other group or user name on the server. It can contain up to 32 uppercase and lowercase characters, but cannot contain the backslash character (\).

6. Enter a description for the group in the Description text box. This field is optional.
7. If you have multiple servers, specify the server on which you want to add the group.
8. Select the users you want to include in the group in the Group membership area.
 - To add users to the group, highlight the users from the Available users list and select [>>] to add the users to the Current users list.
 - To remove the users from the group, highlight the users from the Current users list and select [<<] to move the users to the Available user list.
9. Select [Create].



NOTE: If adding more than one group, repeat steps 5 through 9.

10. Select [Close]. The new group account displays in the Group list.
11. Select [File: Exit] to close the Library Administration Tool.

Editing the properties of a group



To edit the properties of an existing group:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into the Library Administration Tool.
3. Select the [Users] tab.
4. If you have multiple servers, specify the server on which the group you wish to edit is located.
5. Highlight the group name from the Groups list.
6. Select the [Edit] toolbar button. The Edit Group dialog box opens.



NOTE: You can double-click on a group name to open the Edit Group dialog box.

7. Enter the necessary changes to the group.
 - To add users to the group, highlight the users from the Available users list and select [>>] to add the users to the Current users list.
 - To remove the users from the group, highlight the users from the Current users list and select [<<] to move the users to the Available user list.

For a description of each field in the Edit Group dialog box, see the procedure “Adding a group” on page 6-13.

8. Select [OK] to save the changes and close the dialog box.
9. Select [File: Exit] to close the Library Administration Tool.

Deleting a group

A group can be deleted.

When a group is deleted, the user accounts that were members of the group are not deleted.



CAUTION

A deleted group cannot be recovered. You cannot delete the built-in Administrator and Everyone groups.



To delete an existing group:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into the Library Administration Tool.
3. Select the [Users] tab.
4. If you have multiple servers, specify the server on which the group you wish to delete is located.
5. Highlight the group you want to delete from the Groups list.
6. Select the [Delete] toolbar button. A confirmation message displays.
7. Select [Yes] to delete the selected group and close the message box.
8. Select [File: Exit] to close the Library Administration Tool.

Configuring remote DigiPath servers

In DigiPath multiple server environments, you can have one or more Document Library server connections.

When configuring connections between DigiPath Document Library remote servers, there are several conditions and procedures necessary to enable access to objects across multiple servers. The conditions that must be met and the procedures that must be completed include the following:

- For each remote DigiPath server, the Library Administration Tool must be used to configure the remote connection to all remote DigiPath servers.



NOTE: Once these remote DigiPath server connections are established for all remote servers, you can manage all remote servers using one instance of the Library Administration Tool; this is accomplished by selecting ALL SERVERS from the Server drop-down list when logging into the Library Administration Tool.

- To use Document Library or Library Search to access mounted cabinets on a remote server, you must mount and online the cabinets using the Document Library application on the remote server on which the cabinets reside.
- The Remote Print Service must be running on the server to allow production printing from client workstations.



NOTE: The procedures to verify and start the Remote Print Service are located in Chapter 9, Production printing administration.

Once all remote server connections are established, users can locally and remotely copy, move, and print objects within the cabinets to which they have access.

Configuring remote DigiPath servers

The Servers tab in the Library Administration Tool provides you with the ability to connect to DigiPath Document Library servers.

The following administrative tasks should be performed before establishing remote server connections:

- Verify that the xdl_admin and xdluser accounts have the same password on all remote servers.
- Create the same user account and password on each remote server using the Library Administration Tool.

Adding a remote DigiPath server



To add a remote DigiPath server:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into the Library Administration Tool.
3. Select the [Servers] tab.
4. If you know the name of the server, enter the server name in the Server name text box, or, select the server from the Network list.



NOTE: If you use the server name, the DigiPath server must be able to resolve the machine name via a host file. For more information on resolving names via a host file, refer to your Windows 2000 documentation.

5. Select the [New Server] toolbar button. The remote server should appear in the Current Server list.

A status indicator with a green check mark next to the server name indicates that you have established a good connection to the remote server. A red X next to the server name indicates that you have not established a good connection to the remote server.



NOTE: The system polls the network approximately every ten seconds to verify the connection.

The Current servers list displays all DigiPath servers and displays the following information for each remote server:

- Name — displays the user defined name (or IP Address) for the remote server
- Status — indicates whether the connection to the remote server is enabled or disabled

6. Select [File: Exit] to close the Library Administration Tool.

Re-establishing a remote DigiPath server connection

When access to a remote DigiPath server is denied, it is probably because the connection to the remoter server was lost.



To re-establish a connection to a remote server:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into the Library Administration Tool.
3. Select the [Servers] tab.
4. Highlight the server name from the Current servers list.



NOTE: If the connection is lost, a red X appears next to the server name.

5. Select the [Verify Connection] toolbar button to re-establish the connection to the server.



NOTE: When the icon to the left of the server name changes to a green check mark, the connection has been re-established. If the icon remains a red X, a connection could not be established.

6. Select [File: Exit] to close the Library Administration Tool.

Enabling or disabling a remote DigiPath server connection

1 3...
2

To enable or disable a connection to a remote DigiPath server:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into the Library Administration Tool.
3. Select the [Servers] tab.
4. Click in the Status area of the remote server you wish to disable or enable. A Status drop-down list box appears. See Figure 6-6.

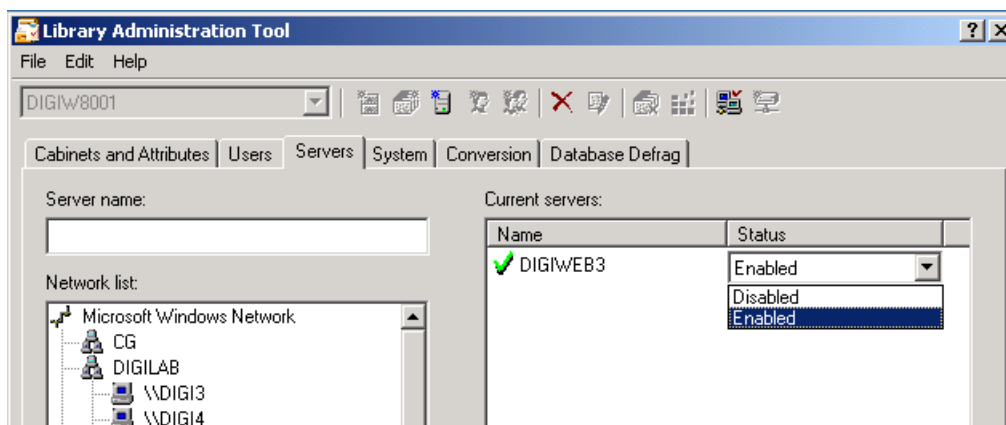


Figure 6-6. Status drop down list box

5. Select one of the following options:
 - Enabled — enables the connection to the remote server
 - Disabled — disables the connection to the remote server
6. Select [File: Exit] to close the Library Administration Tool.

Removing a remote DigiPath server



To remove a remote DigiPath server:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into the Library Administration Tool.
3. Select the [Servers] tab.
4. Highlight the remote server you wish to remove from the Current servers list.
5. Select the [Delete] toolbar button.
6. Select [Yes] to close the confirmation message box and remove the selected remote server.
7. Select [File: Exit] to close the Library Administration Tool.
8. Log into the Library Administration Tool of the remote server you deleted and delete the server you used to connect to the remote server.

Connecting to a multiple DL servers



To connect to multiple DL servers:

1. Log into Document Library as a user and select the remote server you want to connect to.
2. Open a second instance of Document Library, log in as a user, and select another remote server you want to connect.

You can now drag and drop documents, folders, or cabinets in between the Document Library applications open on the two servers. For more information on dragging and dropping files and cabinets in Document Library, refer to the User Guides section of the online help.

Configuring a DSM client to connect to a DL server



To configure a DSM client workstation to connect to a DL server workstation:

1. Add the DSM client workstation to the Servers tab in the DL server workstation LAT.



NOTE: For more information on adding the DSM client workstation to the DL server, refer to “Adding a remote DigiPath server” on page 6-18.

2. From the DSM client workstation, open DSM and select [File: Document Library]. The Login dialog box opens.
 - a. Enter the appropriate User name, Password, and DigiPath DL server.
 - b. Select [OK]. The Document Library for the DL server opens.

Configuring the DigiPath database and cabinet creation location

By default, local Document Library users have the ability to create cabinets on local drives. Using the System tab in Library Administration Tool, you can also give local users the ability to create cabinets on network drives.

Use the System tab to configure the following two Document Library application settings:

- Database location — Where the local DigiPath database is stored
- Cabinet location — Local and network drives on which users can create cabinets

The following sections provide detailed instructions for configuring the DigiPath database and cabinet location.

Specifying the location of the local database

Information about cabinets is stored on a local server in a database. The database stores the information such as the cabinet name, description, attributes, attribute sets, location, and documents. Use the System tab to specify the local drive on which the cabinet database is stored.



CAUTION

Once you specify the location of the local database and create a cabinet, do not change to location of the database.



To specify the local drive on which the cabinet database is stored:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into the Library Administration Tool.

3. Select the [System] tab. See Figure 6-7.

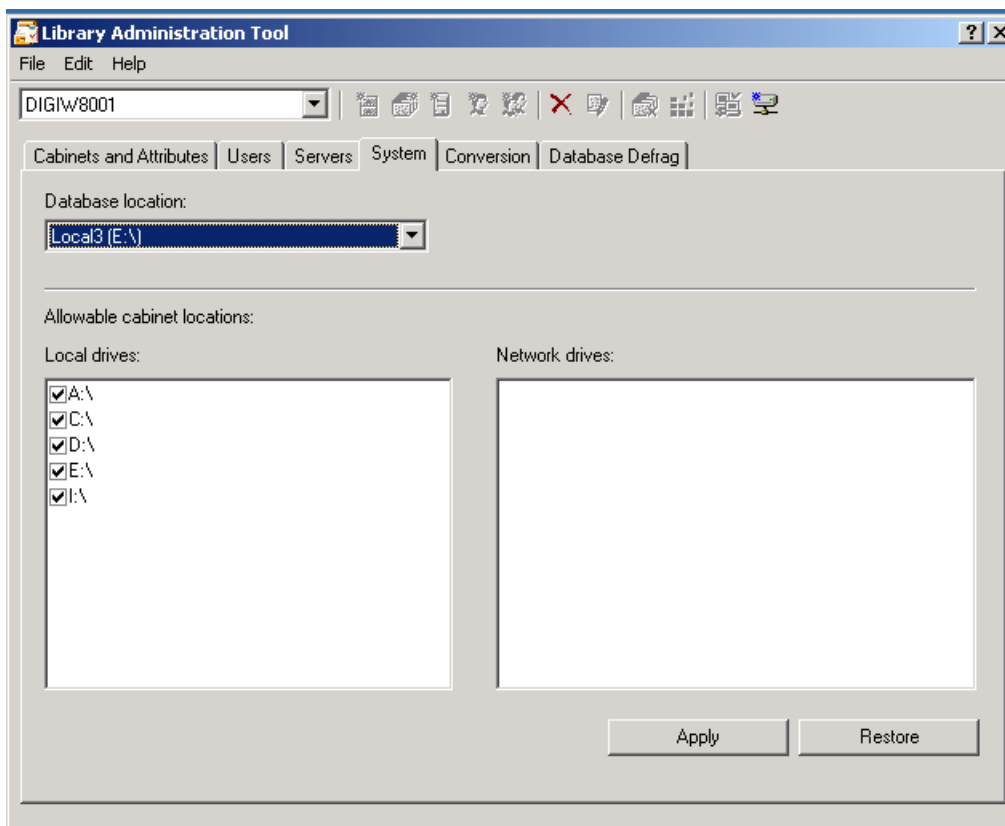


Figure 6-7. System tab

4. In the Database location drop-down list box, select the desired location for the local database.
5. Select [Apply] to save your changes.
6. Select [File: Exit] to close Library Administration Tool.

Specifying the cabinet location

A user's ability to create cabinets on local and network drives is enabled on the System tab of Library Administration Tool. By default, users have the ability to create cabinets on all local drives. Use the System tab to set up and modify cabinet creation locations.



To specify on which drive local users can create cabinets:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into the Library Administration Tool.
3. Select the [System] tab.

The following sections provide detailed instructions for specifying the local drives and adding network drives on which you want users to create cabinets.

Specifying the local drives



To specify on which drive local users can create cabinets:

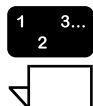
1. In the Local drives list, mark the check box next to each drive you want to allow users to create cabinets on.



NOTE: Clear the check box next to each drive on which you do not want users to be able to create cabinets.

2. Select [Apply] to apply the changes.
3. Select [File: Exit] to close the Library Administration Tool.

Adding network drives



To add a network drive on which users can create cabinets:

NOTE: In order to create a cabinet on a remote file server, the remote file server must have the XDL_Admin user account and the directory and path must be shared. For more information on remote file servers, refer to “Setting up a remote file server” on page 6-44.

1. Select the [New Network Drive] toolbar button. The Add Network Drives dialog box opens.
2. Select the [Path name] radio button and enter the path to the network machine. Or, select the [Network list] button to navigate to and select the network drive.
3. Select [OK] to add the Network Drive to the Network Drive list.
4. Select [Apply] to save your changes.
5. Select [File: Exit] to close the Library Administration Tool.

Deleting network drives



To delete a network drive:

1. Highlight the drive in which you want to delete from the Network drives list.
2. Select the [Delete] toolbar button.
3. Select [File: Exit] to close the Library Administration Tool.

Using document conversion

The Conversion tab in the Library Administration Tool allows you to schedule document conversion for all Document Library cabinets, on a per server basis.

- RDO documents can be converted to PDF and/or JPG (JPEG)
- PostScript and TIFF documents can be converted to only JPG



NOTE: Individual documents can be manually converted using Batch Tool or Document Library. For more information on converting individual documents using Document Library or Batch Tool, refer to the User Guide section of the DigiPath online help.

Document conversion error log

If you encounter a problem during a scheduled document conversion service, the service skips the object causing the error and continues with the next object. The error is written to a text file named XDLConvertError.log for all file conversions. The log file is located in the e:\digipath\convert directory.



NOTE: You can also use this file to determine if documents converted successfully.

Scheduling document conversion

Use the following procedure to schedule Document Conversion on each DigiPath Document Library server.



WARNING

It is possible to open an RDO that is being converted by the scheduled background conversion service. It is recommended that you run the conversion service when users would not access the file.

Using the Conversion tab in Library Administration Tool application, you can specify a time period and priority for the Document Conversion Service. Depending on the size of the document and the number of images it contains, it can take several minutes to nearly an hour to convert a document. Therefore, it is recommended that you convert the documents in advance to prevent long waiting periods for users.



To schedule how and when documents are converted:

1. Select [Start: Programs: DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into Library Administration Tool.
3. Select the local or remote DigiPath server on which the cabinet you wish to schedule document conversion for are located.

4. Select the [Conversion] tab. See Figure 6-8.

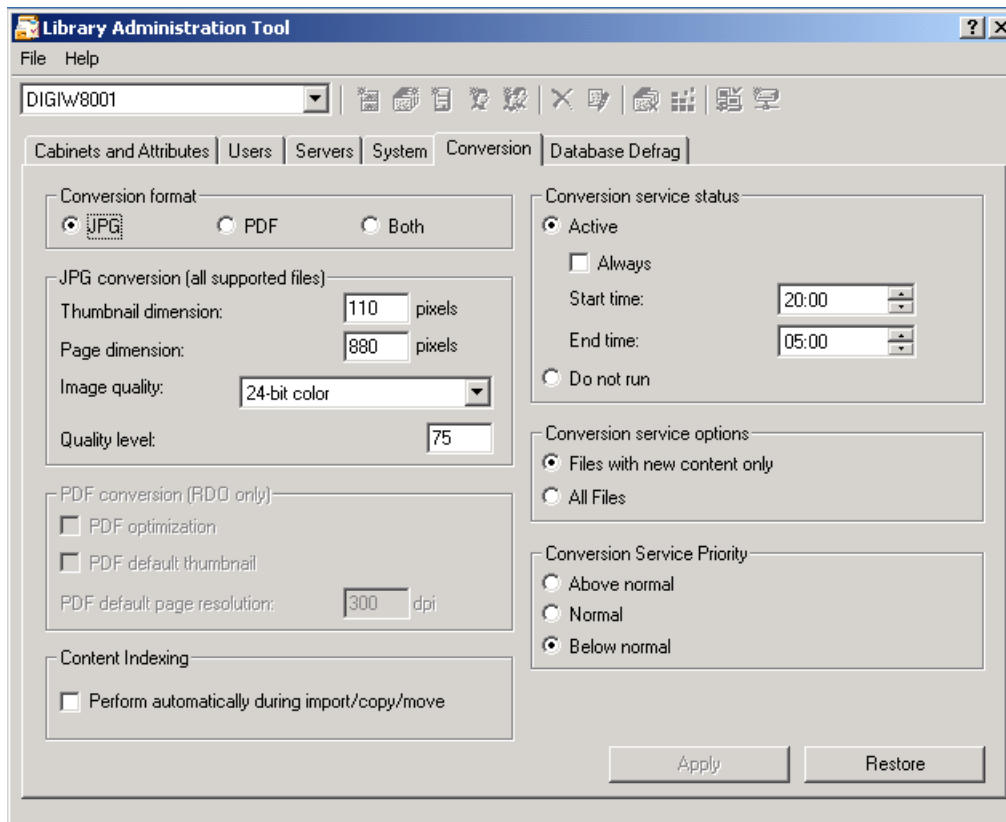


Figure 6-8. Conversion tab

5. Select one of the options in Table 6-2 to set the conversion format.

Table 6-2. RDO default conversion format

Options	Description
JPG	Specifies conversion of RDO, PostScript, and TIFF documents in a cabinet to JPG format
PDF	Specifies conversion of RDO documents in a cabinet to PDF format
Both	Specifies conversion of RDOs to both PDF and JPG format

6. Select one of the following options in Table 6-3 to specify the JPG conversion settings.



NOTE: JPG conversion supports all files.

Table 6-3. JPG conversion options

Options	Description
Thumbnail dimension	Specifies the default thumbnail resolution for JPG conversion
Page dimension	Specifies the default page resolution for JPG conversion
Image quality	Specifies the view quality of the image
Quality level	Specifies the quality factor for enhancing the view quality

7. Select one of the following options in Table 6-4 to specify the PDF conversion settings.



NOTE: (For RDO documents only.)

Table 6-4. PDF Conversion options

Options	Description
PDF optimization	Allows you to enable or disable PDF optimization
PDF default thumbnail	If enabled, thumbnails for PDF documents can be viewed in the Web Viewing and Submission application <i>NOTE: This option requires greater storage capacity.</i>
PDF default page resolution	Allows you to specify the default page resolution for documents converted to PDF

8. Clear the Perform automatically during import/copy/move check box.



NOTE: Content indexing of documents should be performed when the system is not being fully utilized. i.e. during off-hours.

9. To specify the Document Conversion service status:
 - a. Select the Active radio button to activate the conversion service and do the following:
 - Mark the Always check box if you want to always convert documents.
 - In the Start time fields, enter a time when the conversion process should start.
 - In the End time fields, enter a time for when the conversion process should end.
 - b. Select the Do not run radio button if you do not want to run the conversion process.
10. Select one of the options in Table 6-5 to set the Conversion service options.

Table 6-5. Conversion service options

Options	Description
Files with new content only	Specifies that only those objects that are new to a cabinet (or set of cabinets) since the last conversion will be converted
All files	Specifies that all cabinet objects will be converted

11. Select one of the options in Table 6-6 to set the Conversion service priority options.

Table 6-6. Conversion service priority options

Options	Description
Above normal	Specifies that the Document conversion process takes priority over other processing activities
Normal	Specifies that the Document conversion process has equal priority with other processing activities
Below normal	Specifies that the Document conversion process has lower priority with other processing activities

12. Select [Apply] to save the conversion settings.
13. Select [File: Exit] to close the Library Administration Tool.

Defragmenting cabinets

The Database Defrag tab in the Library Administration Tool is used to remove fragmentation in cabinets and improve system performance.

Fragmentation occurs when files are deleted from a disk and new files are added. Sometimes, files are written to different portions of a disk, depending on the available space. This fragmentation of files slows system performance.



NOTE: It is recommended that you defragment the cabinet(s) approximately once a month. If you add, change, or delete a large number of objects or a large amount of attribute data, you should defragment the cabinet(s) more frequently than once a month.



CAUTION

You should notify all workstations connected to the DigiPath Server before beginning defragmentation. There is a possibility of corrupting the cabinet(s) if a workstation is accessing data on a server while defragmenting.

1 3...
2

To defragment the local cabinet(s) on your workstation:

1. Select [Start: Programs: DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into Library Administration Tool.
3. Select the [Database Defrag] tab. See Figure 6-9.

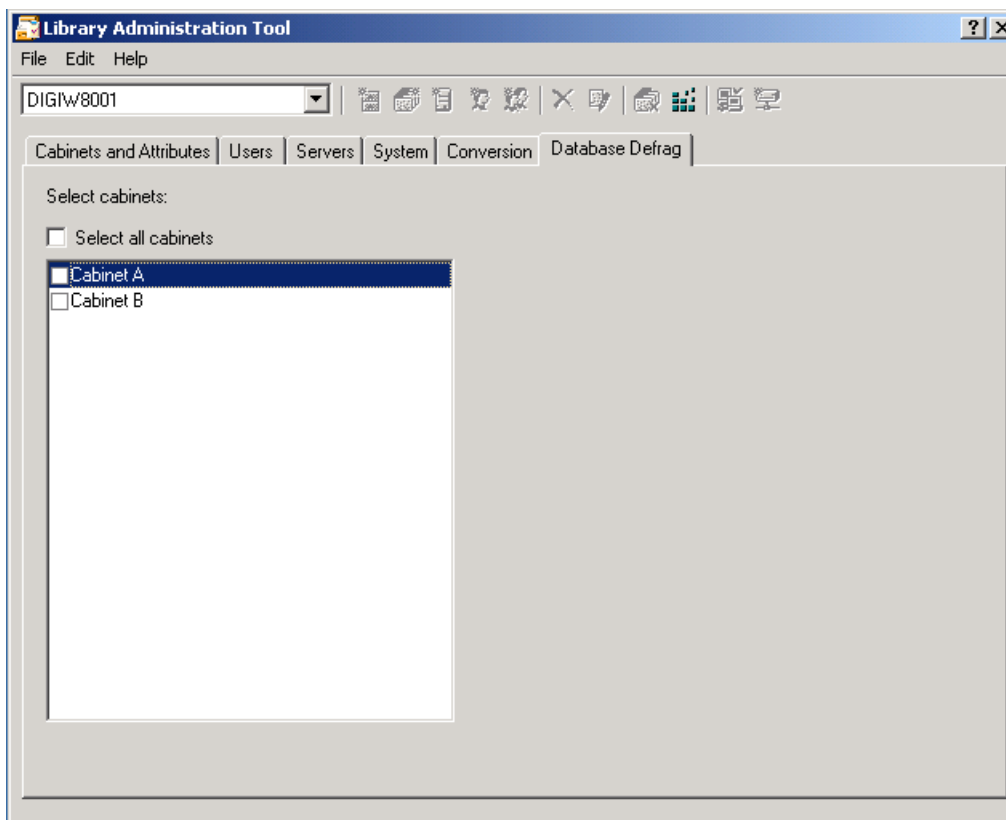


Figure 6-9. Database Defragment tab

4. Mark the check box next to the cabinet(s) you want to defragment in the Select Cabinet(s) list. Or, mark the [Select all cabinets] check box to select all listed cabinets.
5. Select the [Defrag] toolbar button to begin the defragmentation process.

A process indicator appears while the cabinet(s) is being defragmented.



NOTE: The amount of time this process takes depends on the amount of fragmented information in the cabinet(s).

6. Select [File: Exit] to close Library Administration Tool.

Using the DocuTech Tape Tool

The DocuTech Tape Tool is a utility that works with Document Library to manipulate 8mm DES or DTOFS tapes that store DocuJob objects. DocuTech Tape Tool provides a way to view, remove, or copy DocuJob objects to Document Library. You can drag and drop DocuJob objects from DocuTech Tape Tool into cabinets in Document Library.

The DocuTech Tape Tool is used to:

- Import a DocuJob object from tape to a specified cabinet on your DigiPath workstation



NOTE: Objects from the DocuTech Tape Tool must be imported into a cabinet in Document Library in which the attribute set file is derived from the dgptape.set file.

- Content index a DocuJob object in the specified DigiPath cabinet so that you can search the object using Library Search



NOTE: To index a DocuJob object in a DigiPath cabinet, the DocuJob object must be dragged and dropped from the tape into a DigiPath cabinet that contains a set file derived from the dgptape.set file. A DigiPath cabinet must be created with the tape name, using the dgptape.set attributes allowing you to import any .djo object into the cabinet.

- Submit a DocuJob object to the DocuJob Converter for printing



NOTE: This feature is enabled only if the DocuJob Converter is set up.

For further information on DocuJob Converter, see Chapter 9, Production printing administration.

- As objects are copied from tape to Document Library, the .djo file extension is appended to the file name.

By storing DocuJob objects in a cabinet, you can:

- Use Document Library to assign attribute values to the DocuJob object
- Use Library Search to locate DocuJob objects based on a set of specified attribute values
- Use DocuJob Converter to convert DocuJob objects into a source format for Document Scan and Makeready



NOTE: When cabinet objects are copied to tape, the DocuTech Tape Tool copies the object, its attributes, and its associated job information.



NOTE: Tapes must be initialized in the Individual Job Manager (IJM) format used by the DocuTech On-line Tape Storage or DocuTech Extended Storage.



NOTE: DocuJob objects residing on a networked DocuTech printer may be transferred to Document Library via File Transfer Protocol.



NOTE: Objects stored on the tapes may contain characters that are invalid in the Windows 2000 environment. Object names containing invalid characters may be renamed when copied from the tape to Document Library.

Table 6-7 lists the default tape attributes for DocuTech Tape Tool objects.

Table 6-7. Default Tape Attributes

Attribute	Description	Attribute Type
Archive Date	The date the object was stored to tape	Date Time
Job Name	Name of the object	Integer
Job Size	The size of the job in megabytes	Integer
Job Type	The internal value for the job type used by DocuTech	Long Integer
Mesa job Name	The original name of the file after it was converted to a compatible UNIX file name	String
Number of Files	The number of data files contained in the job	Integer
Store Date	The date of the file when it was stored on the DocuTech or Windows 2000 system	Date Time



NOTE: *The DocuTech Tape Tool will not copy objects into any cabinet that has not been derived from the dgptape.set file.*

Custom attributes for DocuTech Tape Tool are stored in a file called dgptape.set. This is an attribute set file that can be opened and customized using Library Administration Tool. For more information on using attribute sets, refer to “Using attribute sets” on page 8-11 of this manual.

Using WFTPDPro to FTP objects from DocuTech

WFTPDPro is an optional, third-party, software application that allows File Transfer Protocol (FTP) capability from a DocuTech to a DigiPath workstation or server.

During WFTPD setup and configuration, a local directory is defined that will accept all objects sent from a DocuTech. Once the object is accepted on the DigiPath workstation, it displays a .djo (DocuJob) extension. The following Document Library features are then available for the object:

- Copy, Move, Delete, Rename
- Submit to Print, only if the DocuJob Converter is set up

Some characters transferred from the DocuTech may not be acceptable in a Windows 2000 environment. File names that contain invalid characters are renamed when they are copied to Document Library.



NOTE: Do not use spaces and other non-DocuTech characters in the directory names that will serve as paths for FTP. They are not accepted during file drawer configuration at the DocuTech.

Working with a Remote File Server

A remote file server allows the use of non-DigiPath workstations or servers for object storage, with database capability. With a remote file server, users can import remote objects and export local directory objects to the created remote file server cabinet.

Once a remote file server cabinet is created, objects can be copied and moved between the local and remote file server cabinet.

The following operating systems are supported for remote file server:

- Microsoft Windows 2000 Server and Professional
- Microsoft Windows NT Server and Workstation 4.0
- Solaris 2.5 (UNIX)
- Novell NetWare 4.1

The following conditions apply when connecting to a remote file server:

- Access to the remote file server objects is only allowed through Document Library.



NOTE: Local drive objects can be imported into the remote file server cabinet.

- Cabinets on a single remote file server can only be managed by the same DigiPath host server.
- Other DigiPath workstations must be set up as clients to the host database server to access the remote file server objects.
- There may be only one database host server associated with a remote file server.
- Importing objects on a remote file server cabinet is different than importing objects on a local workstation.
 - Creating cabinet into the removable media attached to a remote file server is not supported by the DigiPath software.
 - Objects stored on the remote cabinet are only accessible through the host database server and its' clients.

Complete the following section to configure the remote file server on the DigiPath workstation.

Setting up a remote file server



Complete the following steps at the remote file server:

1. Using Computer Management, create an XDL_ADMIN account.



NOTE: The password for the XDL_ADMIN account must be the same password for the XDL_ADMIN account on the DigiPath host server.

2. Share the folder on the remote file server.
 - a. Using Windows Explorer, right click on the folder and select [Properties]. Share the folder, but do not use XDL Cabinets as the share name.
 - b. Select the [Sharing] tab.
 - c. Mark the Share this folder radio button.



NOTE: Make sure the folder name does not contain the word "XDL Cabinets" in the name.

- d. Select [Permissions].
- e. Assign full control for the folder to the XDL_Admin.
- f. Add the Administrators group and give them full control of the folder.
- g. Select [OK] to apply the changes.

3. Select one of the following options, if the remote file server is a:

- Novell system — map the remote file server to your DigiPath workstation.
- UNIX system — verify that Hummingbird is installed on your DigiPath server and that you are mapped to the UNIX drive.



NOTE: For more information on Hummingbird, refer to Chapter 3, Windows 2000 and network configuration.

- Windows system — make sure you shared the folder, as described in Step 2.

Connecting to a remote file server

Use the System tab in the Library Administration Tool at the DigiPath host server to connect to the remote file server.



To connect to a remote file server:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop and log into Library Administration Tool.
2. Select the [System] tab.
3. Select the [New Network Drive] toolbar button. The Add Network Drives dialog box opens.
4. Enter the path name for the remote file server you wish to connect to in the [Path name] text box. Or, select the remote file server you wish to connect to from the Network list.
5. Select [OK].
6. Select [Apply].
7. Continue with the procedure “Creating a cabinet” on page 6-47.

Creating a cabinet

Create a cabinet on the remote file server from the DigiPath server using Library Administration Tool. The newly created cabinet will be the remote file server cabinet in which users import and export objects into.

1 3...
2

To create a cabinet for use with the remote file server:

1. From Library Administration Tool, select the [Cabinets and Attributes] tab.
2. Create a new cabinet for the remote file server and specify the following:
 - Select the remote file server as the [Location] of the cabinet.
 - Assign appropriate user access rights.

For more information on creating cabinets using the Library Administration Tool, refer to Chapter 7, Managing cabinets.

Once a remote file server cabinet is created:

- Objects can be copied and moved between the local drive and the remote file server cabinet.
- Local objects can be imported into the remote file server cabinet.

Performance considerations

Performance of a remote file server depends on the network, protocol, and operating system for the server. Some performance degradation may occur on DigiPath remote servers that are accessing the remote file server through the remote file servers' host server.

7. Managing cabinets

This chapter identifies and describes the procedures needed to manage cabinets.

Topics covered in this chapter include:

- working with cabinets
- creating cabinets using Library Administration Tool
- editing cabinet properties and attributes
- deleting a cabinet
- purging the contents of a cabinet
- copying and moving cabinets

Working with cabinets

A cabinet is a storage space with a set of attributes that describe the objects stored in the cabinet. Attributes are applied to cabinets when cabinets are created. They are applied in sets. When you place an object into a cabinet, the attributes of the cabinet apply to the object.

For more information on attributes, refer to Chapter 10 Defining attribute sets of this guide.

There are two ways to create cabinets in DigiPath.

- You can create cabinets directly from the Document Library application by using an existing set file or the default set file to define the attributes for the cabinet, or by using an existing cabinet to create another cabinet.

For more information on creating cabinets from the Document Library application, refer to the User Guide section of the online help system.

- You can also use Library Administration Tool to create a cabinet and select the attributes for the cabinet. You can apply the default attribute set file to a new cabinet or use an existing cabinet to create another cabinet.

The Cabinet and Attributes tab in Library Administration Tool allows you to manage cabinets, including creating a cabinet; editing the properties and attributes of a cabinet; deleting a cabinet; purging the contents of a cabinet; copying cabinets, and moving cabinets.



NOTE: *The ability to create cabinets on various drive locations is enabled in the System tab. If you are unable to create a cabinet, set the cabinet creation locations in the System tab. For more information, refer to Chapter 6, System administration.*

The following sections provide detailed instructions for working with cabinets.

Creating cabinets using the Library Administration Tool

When you create a cabinet, the access rights you define are critical. If you do not assign read permission to users for the objects in a cabinet, those users will not be able to view the cabinet in Document Library.



CAUTION

When creating cabinets, do not unshare the XDLCabinets directory on the drive where the cabinets are located. Unsharing the XDLCabinets directory prevents users from viewing and accessing documents in those cabinets.



CAUTION

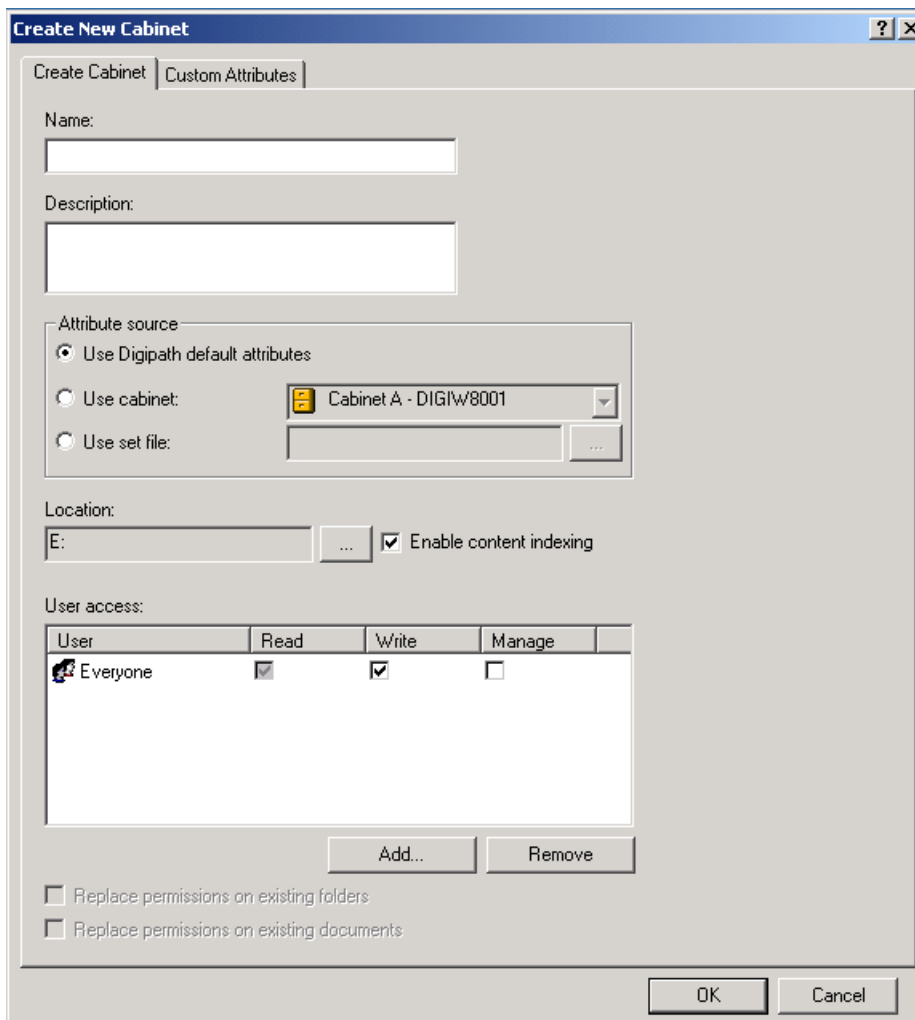
When creating cabinets, you cannot use the same cabinet name as an existing cabinet on the same server, even if the cabinets are on different drives.



To create a new cabinet:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into Library Administration Tool.
3. Select the [Cabinets and Attributes] tab.

4. Select the [New Cabinet] toolbar button. The Create New Cabinet dialog box opens. See Figure 7-1.



The 'Create New Cabinet' dialog box has two tabs: 'Create Cabinet' (selected) and 'Custom Attributes'. It contains the following fields and controls:

- Name:** A required text box.
- Description:** An optional text box.
- Attribute source:** A group box containing three radio buttons:
 - ☒ Use Digipath default attributes
 - ☐ Use cabinet: A dropdown menu showing 'Cabinet A - DIGIw8001'.
 - ☐ Use set file: A text box with a browse button (...).
- Location:** A text box showing 'E:' with a browse button (...).
- ☒ Enable content indexing
- User access:** A table with columns: User, Read, Write, Manage.

User	Read	Write	Manage
Everyone	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
- Buttons:** 'Add...' and 'Remove' buttons below the user access table.
- ☐ Replace permissions on existing folders
- ☐ Replace permissions on existing documents
- OK** and **Cancel** buttons at the bottom right.

Figure 7-1. Create New Cabinet dialog box

5. Enter the name of the new cabinet in the Name text box. This is a required field.



NOTE: If you do not enter a name, a message displays requesting you to enter a cabinet name.

6. Enter a description of the cabinet in the Description text box. This field is not required.

7. Select one of the Attribute Source options described in Table 7-1 to determine the attribute set for the new cabinet.

Table 7-1. Attribute Source options

Option	Description
Use DigiPath default attributes	<p>Select this option to use the default attribute set provided with DigiPath to describe the objects in the new cabinet</p> <p><i>NOTE: The DigiPath default attribute set file (digipath.set) is located in the default DigiPath directory setup during installation.</i></p> <p><i>NOTE: Do not use the attribute set file dgppminimal.set located in the e:\digipath directory when assigning an attribute set file to a cabinet or creating a new set file.</i></p>
Use cabinet	Select this option to use the attribute set from an existing cabinet to describe the objects in the new cabinet
Use set file	<p>Select this option to use an existing attribute set file to describe the objects in the new cabinet.</p> <p>For more information on using set files, refer to Chapter 8, Defining Attribute sets.</p>

8. To select the drive on which the new cabinet will be stored in the Location field:
- Select the [Location Browse] button. The Choose Cabinet Location dialog box opens.
 - Select the drive on which the new cabinet will be stored.
 - Select [OK].
9. Mark the Enable content indexing check box if you want Document Library to index the text of the documents stored within the new cabinet.



NOTE: If you enable the content indexing option, searches run more slowly. Disabling the content indexing option decreases the amount of time it takes for search results to display.

10. In the User access area, set the access rights for each user and/or group for the new cabinet.



NOTE: The user list in the User access area contains a complete list of the user accounts and groups that have access to the cabinet.

- a. Add or remove users/groups in the User access area by selecting [Add] or [Remove].
 - b. Specify the access rights for each user/group.
11. If you wish to specify custom attributes, edit the attributes for the cabinet.
 - a. Select the [Custom Attributes] tab.
 - b. View the attributes currently assigned to the cabinet by selecting either the [Attribute view] or the [Group view] radio buttons.



NOTE: The Attribute view displays the attributes in a list. The Group view displays the attribute groups.

- c. Modify the attributes as desired.

For more information on modifying cabinet attributes, refer to Chapter 8, Defining attribute sets of this manual.
12. Select [OK] to create the new cabinet. The new cabinet appears in the Cabinet attributes list.
 13. Select [File: Exit] to close Library Administration Tool.

Editing cabinet properties and attributes

You can also edit the cabinet properties in Document Library. However, you can only modify a cabinet's attributes in Library Administration Tool.

For more information on editing the properties of a cabinet using Document Library, refer to the User Guide section of the online help.



NOTE: If you need to add an attribute to a cabinet after it is created, add a new attribute to its attribute group.

Once an attribute is deleted, all values assigned to that attribute (across documents) are also deleted. If you choose to re-create that attribute in the future, you will also need to add values to that attribute for all affected documents.



To edit the properties and attributes of a cabinet:

1. Select: [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into Library Administration Tool.
3. Select the [Cabinets and Attributes] tab.
4. Highlight the cabinet from the Cabinet attributes list.
5. Select the [Edit] toolbar button. The Edit Properties dialog box opens.

6. To edit the properties of the cabinet:
 - a. Enter a new name for the cabinet in the Name text box, if desired.
 - b. Enter a new description for the cabinet in the Description text box, if desired.
 - c. Enable or disable Content Indexing, if desired.
 - d. Modify access rights to the cabinet for each of the users, if desired.
 - e. Mark the [Replace permissions on existing folders] option to replace the existing permissions on folders, if desired.
 - f. Mark the [Replace permissions on existing documents] to replace the existing permissions on documents, if desired.
7. To edit the attributes of the cabinet:
 - a. Select the [Custom Attributes] tab.
 - b. View the attributes currently assigned to the cabinet by selecting either the [Attribute view] or the [Group view] radio button.
 - c. Enter the desired changes to the attributes of the cabinet.
 - d. Select [Apply] to apply the changes.
 - e. Select [Close].
8. Select [File: Exit] to close Library Administration Tool.

Deleting a cabinet



CAUTION

Once a cabinet is deleted, it cannot be recovered.

Cabinets can be deleted using the Library Administration Tool or Document Library.

For more information on deleting a cabinet using Document Library, refer to the User Guide section of the online help.

When you delete a cabinet:

- all folders and files within the cabinet are deleted
- all attributes for the cabinet are deleted

To delete an existing cabinet:



1. Select: [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into Library Administration Tool.
3. Select the [Cabinets and Attributes] tab.
4. Highlight the cabinet you want to delete from the Cabinet attributes list.
5. Select the [Delete] toolbar button. A confirmation message appears asking if you are sure you want to delete the selected cabinet.
6. Select [Yes] to delete the cabinet.
7. Select [File: Exit] to close Library Administration Tool.

Purging the contents of a cabinet

This operation can be performed using only Library Administration Tool.

Occasionally, the physical media on which a cabinet is stored becomes damaged or is misplaced. If this cabinet is offline, the only way to remove the attribute information from the database is to purge the cabinet.



CAUTION

Purging a cabinet deletes all attribute information from the cabinet and its objects. Once the cabinet is purged, there is no way to recover the deleted information. Only System Administrators can purge cabinets within Library Administration Tool.



To purge the contents of a cabinet:

1. Select: [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into Library Administration Tool.
3. Select the [Cabinets and Attributes] tab.
4. Highlight the desired cabinet to purge from the Cabinet attributes list.
5. Select the [Purge Cabinet] toolbar button. A confirmation message appears asking if you are sure you want to purge the selected cabinet.
6. Select [Yes] to purge the cabinet.
7. Select [File: Exit] to close Library Administration Tool.

Copying and moving cabinets

Copying and moving cabinets within a server

When copying and moving cabinets within a server, the cabinet name must be unique per server.



NOTE: If you are copying or moving a cabinet within a server that has the same name as an existing cabinet on the server, you must rename the cabinet before copying or moving the cabinet.

Copying and moving cabinet between servers

When copying and moving cabinets between servers, the following apply:

- When copying or moving a cabinet from one server to another, requires a user to login to each DL window using the same user login and password.
- When copying and moving cabinets between servers, you must open Document Library on each server on which you want to copy or move cabinets to and from.

8. Defining attribute sets

This chapter describes defining attribute sets to manage and maintain DigiPath cabinets using the Library Administration Tool.

Topics covered in this chapter include:

- the importance of defining attributes
- considerations for defining attributes
- the importance of backing up before defining attributes
- identifying the various attribute types
- identifying the default attributes
- using attribute set files
- using attributes
- using user attribute groups
- using objects across cabinets

Why define attributes?

Attributes are categories of information assigned to a cabinet and all its objects. You can add descriptive information (an attribute value) to a file's attribute that will make it easier to find that file again in the future.

Attributes make it easier to manage and maintain a large database of documents. Using Library Search, you can search and select documents based on their attributes. Instead of having to remember file names, you can find and select documents based on such things as their document title or author.

Using the Cabinet and Attribute tab, in Library Administration Tool application, you can create new attributes and attribute sets, and modify or remove existing attributes and attribute sets.

Some of the reasons you may want to define the attributes of a cabinet include the following:

- Creating additional attributes gives you information you need to effectively search a cabinet for documents.
- By defining the tabulates of a cabinet, you can provide attributes that are unique to your cabinet and that help you manage your cabinet.
- When you create attributes, you can organize and group them to make updating and backup procedures more efficient.

Considerations for defining attributes

In general, the best time to define your attributes is when you install the DigiPath system, since no data is stored into the cabinet(s); however, this is not the only time you can define the attributes of cabinet(s). If someone discovers a new piece of information that would allow DigiPath users to find documents or objects in a cabinet(s) more easily, you can create an attribute for storing that information at any time. Then, you can add the attribute values to objects already in the cabinet(s) and to any future objects imported into the cabinet(s).



CAUTION

It is strongly recommended that you perform a full backup of the entire DigiPath system (system and database) before you define the attributes for your cabinet(s). Defining the attributes of the cabinet(s) may result in the loss of data and you should have that data backed up.

When defining the attributes of a cabinet, or of several cabinets, the following information should be considered:

- If you have DigiPath remote server configured, verify that the remote servers are not connected to the cabinet before you edit the attributes set. Editing the attributes of a cabinet while another server is accessing, or attempting to access the cabinet could result in data corruption. Close all Document Library applications running on the DigiPath servers to close all server connections.
- If you have more than one cabinet containing the same kinds of objects, you should define the attributes for each cabinet the same way. By doing so, you avoid confusing the user when they perform a search for documents in the cabinets they have access to. For example, if you can search one cabinet for documents with a specific publisher, you would expect that you could perform the same search on any other available cabinet(s).
- When moving or copying objects between two cabinets with different attribute sets, a mapping dialogue displays. This dialog box prompts the user for the appropriate mapping information for each attribute that does not match. For example if there is an Author field in cabinet1, but not in cabinet2, the dialog prompts you for direction of the information in the Author field.

- When importing objects contained in DigiPath Tape Tool, an attribute map displays if the database is customized differently than the tape object's default attributes.
- When you delete an attribute, all information pertaining to the deleted attribute is removed from the cabinet unless you replace it with, and map it to, an attribute of the same or similar type. This could result in the loss of a great deal of information and affect the ability of a user to locate documents in the cabinets.
- You should create only those custom attributes that the user is likely to use and delete those attributes that take up unnecessary space in the cabinet.

The following sections give more detail about the available types of attributes and the attributes included with your DigiPath system.

Why should I backup before defining attributes?

If your system is configured with server connections, it is important to backup, or copy, the cabinet(s) before defining the attributes. If server machines are able to connect to the cabinet while defining attributes for the cabinet, the cabinet could become corrupt. A copy of the cabinet in another location allows you to restore the cabinet back to its original state, should problems occur.

For more information on backing up the Digipath cabinets, refer to Chapter 5, Back up and restore.

Identifying the various attribute types

All attributes have a type, or format. This type specifies the valid values for the attribute. When you create or modify an attribute, you must specify its type. Table 8-1 lists the various attribute types and gives a description of the values each type can accept. For each type, the table also lists an attribute that uses the specified type and gives a sample, valid attribute value on the specified type.

Table 8-1. Available attribute types

Attribute Type	Value Description	An Attribute Using This Type	Sample of Valid Attribute Value
Boolean	The value must be True/Yes, indicated by a marked check box, or False/No, indicated by a cleared check box.	Is Online	Marked check box (True/Yes)
Date	The value must be a date matching the format specified by the Regional Settings in the Control Panel.	Publication Date	05/04/96
Date Time	The value must be a date and time regardless of the format specified by the Regional Settings in the Control Panel. For example, you may enter the date as August 1999 or 08/09/99.	Register Date Time	01/02/94 12:34:56AM
Double	The value must be a real number ranging from -9.9999E99 to 9.9999E99 and in the format 9.9999E99.	None	-1.3964e98 or 1.3964e+98
Integer	The value must be a whole number ranging from -32768 to 32767.	Number of Pages	+28809
Long Integer	The value must be a whole number ranging from -2147483647 to 2147483647.	None	-2059372440
Long String	The value can be a sequence of up to 4096 characters, including spaces.	Abstract	The article lists and examines differences between...
String	The value can be a sequence of up to 254 characters, including spaces.	Publisher	C2 Publishing
String Set	The value can be a group of strings with each string containing up to 251 characters, including spaces.	Authors	Gail Smith Denise Barnum Margaret Lohrding

Identifying the default attributes

Table 8-2 lists the default DigiPath System and Custom attributes that can be assigned to a new cabinet when it is created. The default DigiPath attribute set file (digipath.set) is located in the default DigiPath directory specified at installation.

Table 8-2. DigiPath default attribute set file

Attribute Group	Description
System	Includes information used by the system to identify the location and status of the cabinet. System attributes cannot be modified.
Custom	Contains a default set of custom attributes and values to associate with the cabinet. You can modify, delete, or add to the default attribute set.

Table 8-3 lists the system attributes contained in the DigiPath default attributes set file. The system attributes cannot be modified.

Table 8-3. System attributes

Attribute Name	Description	Attribute Type	Required?	User can modify?
Internal catalog id	The identification number DigiPath assigned to the object when it was first imported into Document Library	String (64)	Yes	No
URL	The Web address of the object or document	String	Yes	No
Description	The description of the object	String	Yes	No
Name	The name of the object	String	Yes	No
Object type	The type of object	Integer	Yes	No
File Modified	The last modification date of any of the content elements in the document	Date Time	Yes	No
File Size	The total size of all the content files that comprise the document	Long Integer	Yes	No
Page Count	The page count of the object	Integer	Yes	No
Date	The date the object was created	Date Time	Yes	No

Table 8-4 lists the default custom attributes contained in the DigiPath attributes set file. The values for any of the custom attributes can be modified. You can also delete any of the default custom attributes or create new custom attributes using Library Administration Tool.



NOTE: The information in Table 8-4 is accurate only if the DigiPath default Custom attributes have not been edited or deleted from your DigiPath database.

Table 8-4. Default custom attributes

Attribute Name	Description	Attribute Type	Required?	User can modify?
Abstract	A summary of the contents of the object	Long String	No	Yes
Authors	The person, people, or group responsible for the content of the object	String	No	Yes
Customers	The list of customers associated with the object	String	No	Yes
Dates used	A list of dates when the object was opened	String	No	Yes
Edition	The edition of the publication	String	No	Yes
External catalog id	The identification number you assign to the object to link it with other databases	String (64)	No	Yes
Keywords	A list of words to indicate the content of the object	String	No	Yes
Published date	The date when the object was first published	Date	No	Yes
Publisher	The name of the original publisher of the object	String	No	Yes
Subtitle	A secondary title for the object	String	No	Yes
Title	An identifying name for the object (can be different from the file name)	String	No	Yes
Volume	The publication volume where the object is contained (not related to Volume Label)	String	No	Yes

Using attribute sets

Use the Cabinet and Attribute tab in the Library Administration Tool to create new attribute sets. Once you create an attribute set, you can apply the attribute set to new cabinets created in Document Library or in Library Administration Tool.

Sets of attributes are applied to a cabinet when the cabinet is created. All files imported to that cabinet will have the same set of attributes applied to them. Attribute sets allow you to apply the same attribute group to several cabinets.

After importing a file into a cabinet, you can assign values to each of its attributes. The values you specify are used to search for the file at a later date.

The following sections provide detailed procedures for creating, editing, and deleting attribute sets.

Creating an attribute set

Create an attribute set by adding, deleting, or modifying attributes and attribute groups.

1 3...
2

To create an attribute set file to be applied to a cabinet:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.



NOTE: You must be a DigiPath administrator to access the Library Administration Tool.

2. Log into Library Administration Tool.
3. Select the [Cabinet and Attributes] tab.
4. Select the [New Attribute Set] toolbar button. The Custom Attributes dialog box opens. See Figure 8-1.

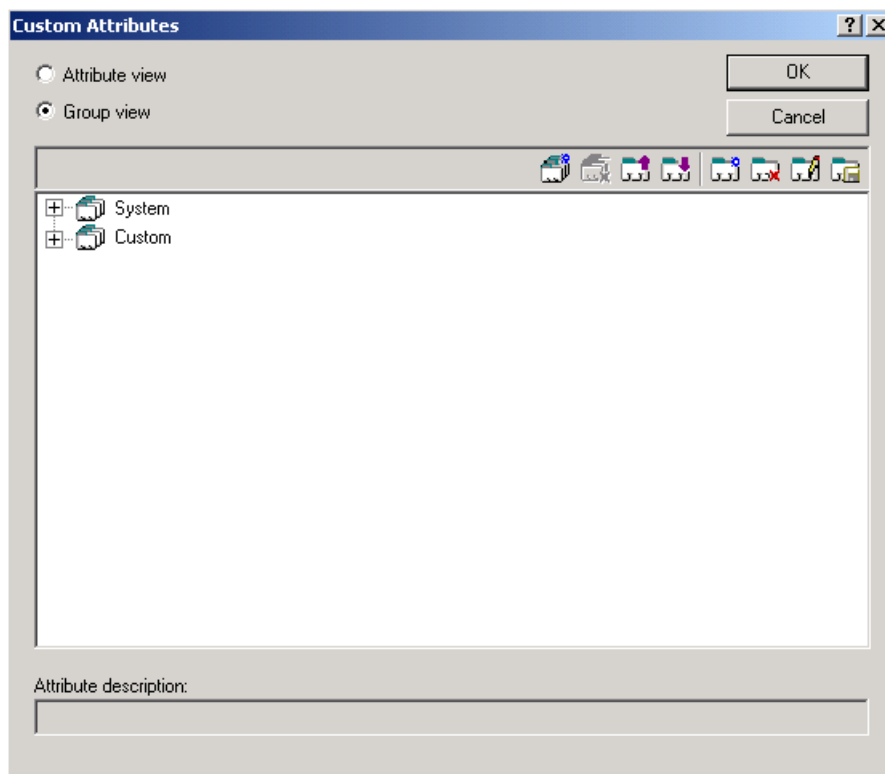


Figure 8-1. Custom Attributes dialog box

5. Define the attributes, adding or modifying them as necessary.

- Add a new attribute group
- Add a new attribute to a group
- Modify an existing attribute
- Modify an existing attribute group
- Delete an attribute from a group
- Delete an existing attribute group

For more information on adding or modifying attributes, refer to “Adding an attribute” on page 8-17.

6. Select [OK]. The Save As dialog box opens.

7. Navigate to the folder where you want to save the attribute set file.

8. Enter the name of the set file in the File name text box.

9. Select [Save] to save the set file.

The new attribute set file appears in the Attributes set file list with a.set file extension.

You can now use this attribute set file when creating cabinets. For more information, refer to “Creating cabinets using the Library Administration Tool” on page 7-3.

10. Select [File: Exit] to close Library Administration Tool.

Editing an existing attributes set



To edit an existing attributes set:

1. From Library Administration Tool, select the [Cabinet and Attributes] tab.
2. Select the attribute set from the Attributes set files list.



NOTE: You can use the Windows File System drop-down menu to select the file you want. Use the.set File Type.

3. Select the [Edit] toolbar button. The Custom Attributes dialog box opens.
4. Define the custom attributes. Adding or modifying them as necessary.

For more information on adding or modifying attributes, refer to “Adding an attribute” on page 8-17.
5. Select [OK] to save the changes. The Save As dialog box opens.
6. Select [Save] to save the set file. A confirmation message box opens.
7. Select [Yes] if you want to replace the existing set file.
8. Select [File: Exit] to close Library Administration Tool.

Deleting an attribute set



To delete an existing attribute set:

1. From Library Administration Tool, select the [Cabinet and Attributes] tab.
2. Highlight the attribute set you wish to delete in the Attributes set files list.
3. Select the [Delete] toolbar button.
4. Select [Yes] to confirm deleting the attribute set file.
5. Select [File: Exit] to close Library Administration Tool.

Applying an attribute set to a cabinet

Attributes are applied to cabinets when cabinets are created. Once you have created your attribute sets to apply to cabinets, you can then create the cabinets and apply the attribute sets to them.

You have three choices for applying attributes:

- Use DigiPath defaults — applies the default DigiPath attribute set to the cabinet
- Use cabinet — applies the attribute set of another cabinet to the new cabinet
- Use attribute set — allows you to choose an attribute set file to apply to the new cabinet



NOTE: Do not use the attribute set file `dgpminimal.set` located in the `e:\digipath` directory when applying an attribute set file to a cabinet.

For more information on applying an attribute set to a cabinet, refer to Chapter 7, Managing cabinets.

Using attributes

The Cabinet and Attribute tab in the Library Administration Tool is used to create new attributes, edit attributes, and delete attributes.

Table 8-5 lists and describes the two views available for viewing attributes in the Custom Attributes dialog box.

Table 8-5. Types of attribute views

View	Description
Attribute	Displays a list of all attributes
Group	Displays a list of all attribute groups

The following sections provide detailed instructions for using attributes.

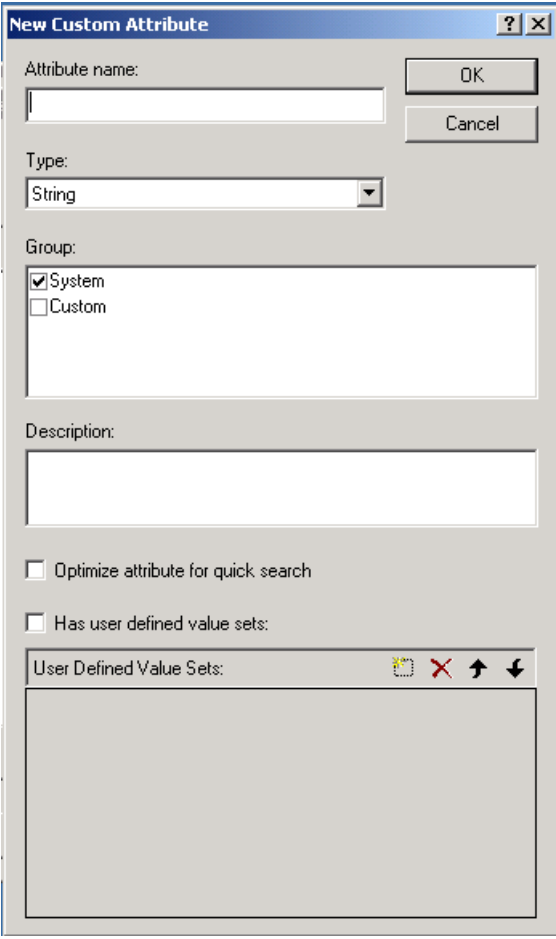
Adding an attribute



To add a new attribute to a cabinet:

1. Select [Start: Programs: Xerox DigiPath Production Software: Library Administration Tool] from the Windows desktop.
2. Log into Library Administration Tool.
3. Select the [Cabinets and Attributes] tab.
4. Select the cabinet you wish to add an attribute to from the Cabinet attributes list.
5. Select the [Edit] toolbar button. The Custom Attributes dialog box opens.
6. Select the [Custom Attributes] tab.
7. Select the [Attribute view] radio button to display a list of all attributes for the selected attributes set file.

8. Select the [New Attribute] toolbar button. The New Custom Attribute dialog box opens. See Figure 8-2.



The image shows a Windows-style dialog box titled "New Custom Attribute". It contains the following fields and controls:

- Attribute name:** A text input field with an empty space.
- OK** and **Cancel** buttons.
- Type:** A dropdown menu currently showing "String".
- Group:** Two radio buttons, with "System" selected and "Custom" unselected.
- Description:** A large text area.
- ☐ **Optimize attribute for quick search**
- ☐ **Has user defined value sets:**
- User Defined Value Sets:** A list box containing no items, with icons for adding, deleting, and moving items.

Figure 8-2. New Custom Attribute dialog box

9. Set the attribute properties.

- a. Enter the name of the attribute in the Attribute name text box.



NOTE: The title can contain up to 50 characters. Duplicate and empty titles are not accepted.

- b. Select the attribute type from the Type drop-down list.



NOTE: This field cannot be empty. See Table 8-1 for a description of the available values.

- c. Mark the check box next to the attribute group(s) in the Group list to which you want the new attribute to be included.

For more information on Groups, refer to “Using attribute groups” on page 8-24.

- d. Enter a description of the attribute in the Description text box. (optional)

- e. Mark the Optimize attribute for quick search check box to optimize file search capabilities using this new attribute as search criterion.



NOTE: You can index an attribute of any type except Long String. Index an attribute only if it will be frequently used for searching the database.

- f. Mark the Has user defined value sets check box to define values for the following attribute types: Double, Integer, Long Integer, Long String, String, String Set.



NOTE: You can define a fixed set of values for the attribute only if the attribute type is Double, Integer, Long Integer, String, or String Set.

10. In the User Defined Value Sets area, specify the acceptable values for the new attribute, if appropriate.
 - a. Select the [Add] toolbar button.
 - b. Enter the first value for the set.
 - c. Select [Enter].

The value is added to the User Defined Value Sets list.
 - d. Repeat steps a through c to add all necessary values.
11. Select [OK].
12. Select [OK] to save the changes.
13. Select [File: Exit] to close Library Administration Tool.

Editing an attribute



NOTE: System attributes cannot be edited. Only custom attributes can be edited.

After you have created a custom attribute, you can then edit the attribute, if desired. These attributes are associated with cabinets in Document Library.



To edit a custom attribute:

1. From Library Administration Tool, select the [Cabinets and Attributes] tab.
2. Select the cabinet from the Cabinet attributes list.



NOTE: You can use the Windows File System drop-down menu to select the attributes set file, or type in the name of the attribute set file. Use the File Type drop-down menu to select the file type you want.

3. Select the [Edit] toolbar button. The Custom Attributes dialog box opens.
4. Select the [Custom Attributes] tab.
5. Select the [Attribute view] radio button to display a list of all attributes for the selected attributes set file.
6. Right click on the attribute and select the [Edit Attribute] option. The Edit Custom Attribute dialog box opens.

7. Edit the attribute as desired.

- a. Change the Attribute Name, if desired.



NOTE: The title can contain up to 50 characters. Duplicate and empty titles are not accepted.

- b. Mark the box next to the attribute group(s) in which you want the attribute to be included.

For more information on Attribute Groups, refer to “Creating an attribute group” on page 8-25.

- c. Change the description, if desired.

- d. If you want to optimize file search capabilities, mark the Optimize attribute for quick search check box.



NOTE: You can index an attribute of any type except Long String. Index an attribute only if it is used frequently for searching the database.

- e. If the assigned values for this attribute are to be from a fixed set of values, make sure the Has user defined value sets check box is marked. Then, make any necessary changes to the values in the User Defined Value Sets list.

- To add a new value to the set, select the [Add] toolbar button.
- To remove a value from the set, highlight the value in the list and select the [Delete] toolbar button.
- To modify an existing value in the set, double-click on the value.
- To move the values up or down in the list box, use the [Move Up] and [Move Down] toolbar buttons.

8. When all changes are complete, select [OK].

9. Select [OK].

10. Select [File: Exit] to close Library Administration Tool.

Deleting an attribute



NOTE: You cannot delete a system attribute. Only custom attributes can be deleted.



To delete an attribute:

1. From Library Administration Tool, select the [Cabinets and Attributes] tab.
2. Select the cabinet you wish to delete from the Cabinet attributes list.



NOTE: You can use the Windows File System pull-down menu to select the attributes set file or type in the name of the attribute set file. Use the File Type drop-down menu to select the file type you want.

3. Select the [Edit] toolbar button.
4. Select the [Custom Attributes] tab.
5. Select the [Attribute view] radio button. The Custom Attributes dialog box opens.
6. Highlight the attribute you want to delete.
7. Select the [Delete Attribute] toolbar button. A confirmation message box opens.
8. Select [Yes] to close the message box and delete the selected attribute.



NOTE: Once an attribute is deleted, any values assigned to that attribute (across documents) are also deleted. If you choose to recreate that attribute in the future, you need to use Document Library to add values to that attribute for all affected documents.

9. Select [OK].
10. Select [File: Exit] to close the Library Administration Tool.

Using attribute groups

In addition to the existing System and Custom groups, you can also create additional groups for organizing attributes. The System group cannot be deleted or renamed. The Custom group can be deleted, but first, you must either move all the attributes within the group to another group or delete each custom attribute individually before deleting the group.

The Library Administration Tool is used to define attribute groups, including creating attribute groups, deleting attribute groups, adding attributes to groups, and removing attributes from groups.

The following sections provide detailed instructions for using attribute groups.

Creating an attribute group



To create an attribute group:

1. From the Library Administration Tool, select the [Cabinets and Attributes] tab.
2. Select the cabinet from the Cabinet attributes list.
3. Select the [Edit] toolbar button. The Custom Attributes dialog box opens.
4. Select the [Custom Attributes] tab.
5. Select the [Group view] radio button to display the attribute groups.
6. Select the [New Group] toolbar button. A new group appears in the group list.
7. In the Group Title text box, type a name for the new group.



NOTE: The name can contain up to 64 characters. You cannot use "Custom" or "System" as the name for the new group.

8. Add the appropriate attributes to the group.

For more information on adding an attribute, refer to "Adding an attribute" on page 8-17.



NOTE: You must add an attribute to the newly created group or the group is deleted when you save the attribute set file.

9. Select [OK].
10. Select [File: Exit] to close Library Administration Tool.

Deleting an attribute group

If you have created an attribute group and you no longer want the group, you can delete it.



NOTE: You cannot delete the Custom or System attribute groups.



To delete an attribute group:

1. From the Library Administration Tool, select the [Cabinets and Attributes] tab.
2. Select the cabinet from the Cabinet attributes list.
3. Select the [Edit] toolbar button. The Custom Attributes dialog box opens.
4. Select the [Custom Attributes] tab.
5. Select the [Group view] radio button to display the attribute groups.
6. Highlight the attribute group you want to delete.
7. Select the [Delete Group] toolbar button. A warning message box displays.



NOTE: Deleting a group results in purging all attributes within the group. Move any attributes that you do not want to delete into another group.

8. Select [Yes].
9. Select [OK].
10. Select [File: Exit] to close Library Administration Tool.

Renaming an attribute group



To rename an attribute group:

1. From Library Administration Tool, select [Cabinets and Attributes] tab.
2. Select the cabinet from the Cabinet attributes list.
3. Select the [Edit] toolbar button.
4. Select the [Custom Attributes] tab.
5. Select the [Group view] radio button to display the attribute groups.
6. Highlight and click on the attribute group name to enter an edit mode.
7. Type the new name for the group in the text box.
8. Select [OK].
9. Select [File: Exit] to close Library Administration Tool.

Adding an attribute to a group



To add an attribute to a group:

1. From Library Administration Tool, select the [Cabinets and Attributes] tab.
2. Select the cabinet from the Cabinet attributes list.
3. Select the [Edit] toolbar button. The Custom Attributes dialog box opens.
4. Select the [Custom Attributes] tab.
5. Select the [Group view] radio button to display the attribute groups.
6. Select the [+] next to the Group attribute icon(s) to display the list of attributes in each group.
7. Highlight the attribute you want to add to a group.
8. Use the [Move Up] toolbar button and the [Move Down] toolbar button to reorganize the attributes. Use these buttons to move an attribute to the attribute group you want to add the attribute to.
9. When complete, select [OK].
10. Select [File: Exit] to close Library Administration Tool.

Removing an attribute from a group

If you have a group that you have added attributes to, you can remove attributes from that group at any time.



NOTE: You cannot remove an attribute from the System group.

To remove an attribute from a group:

1. From Library Administration Tool, select the [Cabinets and Attributes] tab.
2. Select the cabinet from the Cabinet attributes list.
3. Select the [Edit] icon button on the Windows File System Toolbar. The Custom Attributes dialog box opens.
4. Select the [Custom Attributes] tab.
5. Select the [Group view] radio button to display the attribute groups.
6. Select the [+] next to the Group attribute icon(s) to display the list of attributes in each group.
7. Highlight the custom attribute(s) you want to remove from the group.
8. Select the [Delete Attribute] toolbar button. A confirmation message box opens.
9. Select [Yes] to close the message box and to remove the selected attribute(s) from the group.
10. Select [OK].
11. Select [File: Exit] to close Library Administration Tool.

Using objects across cabinets

If you copy or move an object from one cabinet to a cabinet with different attributes, the Incompatible Attributes — Define Mapping dialog box displays. See Figure 8-3.

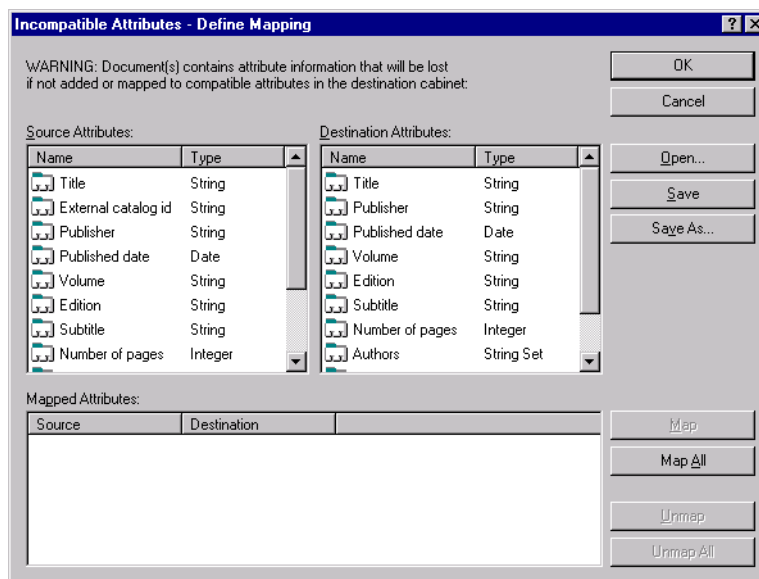


Figure 8-3. Incompatible Attributes - Define Mapping dialog box

This dialog box prompts you to map attributes in the source cabinet to the attributes in the destination cabinet. For example, if there is an Author attribute in Cabinet1 (source cabinet) but not in Cabinet2 (destination cabinet), the Incompatible — Define Mapping dialog box prompts you to decide what to do with the Author attribute value assigned to the object.

Table 8-6 lists and describes the three main list boxes of the Incompatible Attributes — Define Mapping dialog box.

Table 8-6. Define Mapping dialog box list boxes

List box	Description
Source attributes	Displays the attributes assigned to the source cabinet
Destination attributes	Displays the attributes assigned to the destination cabinet
Mapped attributes	Displays all custom attributes that you wish to map

Table 8-7 lists the functions you can perform in the Incompatible Attributes — Define Mapping dialog box.

Table 8-7. Incompatible Attributes — Define Mapping dialog box

Function	Description
Open	Opens the Open dialog box, allowing you to open an existing custom catalog mapping (ccm) file
Save	Displays the Save as dialog box, allowing you to save the attribute mappings to the selected custom catalog mapping (ccm) file
Save As	Displays the Save as dialog box, allowing you to save the current attribute mappings to a custom catalog mapping (ccm) file
Map	Creates a mapping between a source attribute and a compatible destination attribute
Map All	Automatically creates a mapping between all attribute pairs with the same name and compatible types
Unmap	Removes the mapping between a pair of attributes
Unmap All	Automatically removes all mappings between all attribute pairs

Copying or moving objects across cabinets



CAUTION

If the attribute information of a document in the source cabinet is not added or mapped to compatible attributes in the destination cabinet, the attribute information of the object will be lost.



To copy or move an object to a cabinet with different attributes than the source cabinet:

1. Open Document Library.
2. Copy or move an object from the one cabinet to another. The Incompatible Attributes — Define Mapping dialog box opens.



NOTE: The attributes of the two cabinets must be different to receive the Incompatible Attributes — Define Mapping dialog box.



NOTE: A move operation must be performed by selecting [Edit: Copy/Move to...]. Dragging an object from one cabinet to another automatically performs a copy operation and can not be used to move an object.

3. To map all the custom attributes, select [Map All]. The attributes are removed from the corresponding list boxes, mapped, and displayed in the Mapped Attributes list box.



NOTE: You must map all the source attributes to compatible destination attributes. If you have any unmapped attributes remaining in the Source Attributes list box, they will be lost when the mappings are applied.

4. To map individual custom attributes:
 - a. From the Source Attributes list box, highlight the attribute you wish to map.
 - b. From the Destination Attributes list box, highlight a compatible attribute.
 - c. Select [Map]. The attributes are removed from the corresponding list boxes, mapped, and displayed in the Mapped Attributes list box.



NOTE: The attribute in the Source Attributes list box must have the same or compatible type as the attribute in the Destination list box. If they do not have compatible types, the [Map] button does not become active.



NOTE: Two attributes are compatible if the data from the old attribute may be mapped to the data for the new attribute with no loss of accuracy. For example, Strings are compatible with Long Strings, and Integers are compatible with Long Integers and with Doubles. The converse is not true.

5. To unmap all the custom attributes, select [Unmap All]. The attributes are removed from the Mapped Attributes list box and placed in the Source Attributes and Destination Attributes list boxes.
6. To remove the mappings between one pair of attributes:
 - a. From the Mapped Attributes list box, highlight the mapped attribute pair you want to remove.
 - b. Select [Unmap]. The attribute pair is removed from the Mapped Attributes list box and placed in the Source Attributes and Destination Attributes list boxes.
7. When you have completed mapping the attributes, select [OK] to apply the attribute mappings and complete the copy or move process.

Using a custom catalog map file

When you create the mappings for your attributes, you have the option of saving the mappings to a custom catalog map (ccm) file. By doing this, you can then use the map file to apply the custom attribute mappings to another object or several objects, rather than having to map the custom attributes for each individual object.



NOTE: To use a ccm file for a copy/move procedure, the source file you are copying/moving a file from must have the same attribute set as the source file used to create the ccm file. Likewise, the destination file you are copying/moving a file to must have the same attribute set as the destination file used to create the ccm file.

If you already have created a custom catalog map file, you can open that file from the Incompatible Attributes — Define Mapping dialog box and then use or modify the mappings for your current attribute changes. Once you are finished, you can save the new or modified mappings to the file.

Saving a custom catalog map file

If you want to apply the same attribute mappings to several objects within a cabinet, you should save the mappings to a custom catalog map (ccm) file. By doing so, you can easily create identical attribute mappings for several objects within a cabinet.



To save the new mapping information to a custom catalog map (ccm) file:

1. Select one of the following options:
 - If you are saving changes to an existing custom catalog map file, select [Save] from the Incompatible Attributes — Define Mapping dialog box. The new or changed mappings are saved to the current file.
 - If you are saving the new or changed mappings to a new custom catalog (ccm) map file:
 - a. Select [Save As] from the Incompatible Attributes — Define Mapping dialog box. the Save As dialog box opens.
 - b. Select the drive and directory to which you want to save the file.
 - c. In the File name text box, type the name for the file. The file will have a .ccm file extension.
 - d. Select [Save]. The new or changed mappings are saved to the specified file.
2. Select [OK] to proceed with the operation.

Opening a custom catalog map file



To open an existing custom catalog map (ccm) file:

1. Open Document Library.
2. Copy or move an object from the source cabinet to the destination cabinet. The Incompatible Attributes — Define Mapping dialog box opens.



NOTE: The attributes of the object in the source cabinet must be different than the attributes of the destination cabinet to receive the Incompatible Attributes — Define Mapping dialog box.

3. Select [Open]. The Open dialog box opens and displays all custom map files existing in the current directory.



NOTE: If the custom catalog map file you want to open is not in the current directory, change to the appropriate directory.

4. Highlight the desired custom catalog map file.
5. Select [Open]. The Open dialog box closes.



NOTE: If a message box opens stating that the mapping file is incompatible with the attributes, the ccm file can not be used for the copy/move operation. Click [OK] in the message box and attempt the attribute mapping procedure with a compatible ccm file or by manually mapping the attributes.

6. Make the appropriate attribute mapping changes if necessary.
7. Select [OK] to proceed with the operation.

9. Production printing administration

This chapter provides information and procedures for setting up and maintaining DigiPath production printing.

Topics covered in this chapter include:

- understanding DigiPath production printing
- setting up production printers
- specifying the DocuJob Converter directory
- configuring Network Agents
- setting up the Remote Print Service (RPS)
- setting up a virtual printer for the CreoScitex
- using Print Manager options
- resolving production printing problems



NOTE: This chapter covers only topics specific to production printing with DigiPath. Refer to your print server and production printer documentation for detailed information regarding those Xerox products.

Understanding DigiPath production printing

The following sections give a basic overview of how production printing works with DigiPath and some of the things that need to be considered when setting up production printers for use with DigiPath. DigiPath supports production printing using two network types: TCP/IP and IPX/SPX.

The most commonly used network protocol is TCP/IP. This protocol is used for communication between the DigiPath workstation and production print servers.

The IPX/SPX network protocol is used for communication between the DigiPath workstation and production print servers that use Novell NetWare as their network operating system.

DigiPath support three basic types of production printing:

- Printing locally from the DigiPath workstation
- Printing remotely on another DigiPath workstation using the Remote Printing Service (RPS)
- Printing to a print server via a modem connection using the Remote Access Service (RAS)

The procedures in this chapter discuss the first two types of production printing. For more information about setting up a remote access server and configuring RAS, refer to your Windows 2000 documentation.



NOTE: To set up and configure network printers and local printers, refer to your printer documentation.

Production printing via TCP/IP (UNIX)

To print to a TCP/IP production printer, a valid user account must be available on the print server. Two kinds of accounts are available on a TCP/IP print server. One account does not require the user to log into the server and the other requires the user to log in when submitting a print job.

To allow a user to print without logging onto the server, you must create an account with the user name **xdoduser** and a password of **xdodppp**. Once this account is created, the print server is available to any user that knows the name of the server and print queue. No security check is provided by the server.

To provide some degree of security, a login can be required from the user before a job is submitted to a print server. You can either create a local account for the user on the print server with the same account information as the DigiPath workstation, or the user can use a network information service (NIS) account. Either way, the user will be prompted for an account name and password when submitting a print job to a particular print server.

Production printing via IPX/SPX (Novell NetWare)

To print to a Novell Netware production printer, the user account on the DigiPath workstation and the print server must match exactly. This means they must have the same user name and password or the print server will not accept the job submission. A user must also belong to the group Everyone.

Unlike a TCP/IP production printer, a NetWare production printer does not allow open printing to the server. To print to a NetWare production printer, a user must have a valid and matching user account on the server and have a mapped drive to the server.

Setting up production printers

The Printer Administration application allows you to:

- configure and manage production printers available to DigiPath Production Software
- specify the directory for jobs to be submitted from DocuTech Tape Tool to DocuJob Converter
- set up Network Agent to retrieve jobs from the Decomp save location on a DocuSP enabled printer, use incoming and outgoing hot folders for IQI enhancement and PDF preflight; and submit jobs from a Document Centre to a DigiPath workstation

The Printer Settings dialog box in Printer Administration allows you to:

- add, modify, and, remove production printers
- set a production printer as the default printer
- specify print and finishing options using the Job Setup dialog



NOTE: For a list of production printers supported by DigiPath 3.0, refer to the Xerox DigiPath Production Software Customer Software Requirements Document, Version 3.0.

The following sections provide detailed instructions for setting up production printers.

Adding a production printer

Perform this procedure to connect a production printer to the DigiPath system.

1 3...
2

To add a production printer:

1. Select [Start: Programs: Xerox DigiPath Production Software: Printer Administration] from the Windows desktop. The Printer Administration dialog box opens.
2. Mark the [Production Printers] radio button and select [OK]. The Printer Settings dialog box opens.
3. Select [Add Printer]. The Add Printer dialog box opens. See Figure 9-1.

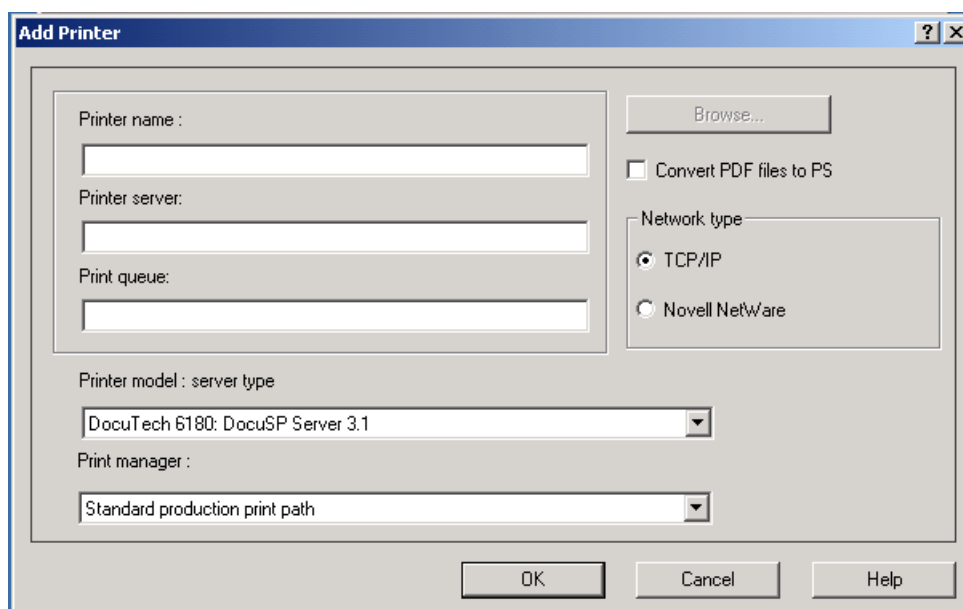


Figure 9-1. Add Printer dialog box

4. Mark the [Convert PDF files to PS] check box if you want to automatically convert PDF files to PostScript files when sent to print.



NOTE: The [Convert PDF files to PS] check box is only available for printers that connect to a DocuSP server. This option is not visible for all other printers.

5. Select one of the following options:
 - To add a TCP/IP networked production printer, advance to Step 6.
 - To add a novell NetWare networked production printer, advance to Step 7.
6. To add a TCP/IP networked production printer, complete the following steps:
 - a. Under Network Type, select [TCP/IP].
 - b. In the Printer name text box, enter a descriptive name for the printer.
 - c. In the Printer server text box, enter the host name or IP address of the print server.
 - d. In the Print queue text box, enter the name of the desired queue on the print server.
 - e. From the Printer model: server type drop-down list box, select the appropriate printer and server option.
 - f. From the Print manager drop-down list box, select the appropriate print manager.
 - g. Select [OK] to add the printer.
 - h. Advance to step 8.

7. If you are adding a Novell NetWare networked production printer, complete the following steps:
 - a. Under Network Type, select [Novell NetWare]. The [Browse] button is enabled.
 - b. In the Printer name text box, enter a descriptive name for the printer.
 - c. Select the [Browse] button to select the printer server from the Shared Printers list box.
 - d. Select [OK] to add the printer.
8. Select [Close] to close the Printer Settings dialog box.
9. Select [Cancel] to exit Printer Administration.



NOTE: If no queues display, the current Windows 2000 user account does not exist on the Novell NetWare server. To access a list of printer queues, double-click the [Network Neighborhood] icon on the desktop, locate the print server, and connect to it with a valid Novell NetWare user account and password.

Modifying a production printer



To modify the settings of a production printer:

1. Select [Start: Programs: Xerox DigiPath Production Software: Printer Administration] from the Windows desktop. The Printer Administration dialog box opens.
2. Mark the [Production Printers] radio button and select [OK]. The Printer Settings dialog box opens.
3. Select the printer you wish to edit from the Printers drop-down list.
4. Select [Edit Printer]. The Edit Printer dialog box opens.
5. Edit the printer settings.
6. Select [OK]. A confirmation message box appears.
7. Select one of the following options:
 - Select [OK] if you modified any printer setting other than the printer name.
 - Select [Yes] if you modified the printer name.
8. Select [Close] to exit the Printer Settings dialog box.
9. Select [Cancel] to exit Printer Administration.

Setting the default production printer



To set the default production printer:

1. Select [Start: Programs: Xerox DigiPath Production Software: Printer Administration] from the Windows desktop. The Printer Administration dialog box opens.
2. Mark the [Production Printers] radio button and select [OK]. The Printer Settings dialog box opens.
3. Select the production printer you wish to set as the default printer from the Printers drop-down list box.
4. Select [Set Default Printer].
5. Select [Close] to exit the Printer Settings dialog box.
6. Select [Cancel] to exit Printer Administration.

Removing a production printer

The following procedure describes how to remove production printers so they are no longer available for use with the DigiPath applications.



NOTE: This procedure is valid for both Novell NetWare (IPX/SPX) and UNIX (TCP/IP) production printers.



To remove an existing production printer:

1. Select [Start: Programs: Xerox DigiPath Production Software: Printer Administration] from the Windows desktop. The Printer Administration dialog box opens.
2. Select the [Production Printer] radio button.
3. Select [OK]. The Printer Settings dialog box opens.
4. Select the production printer you wish to remove from the Printers drop-down list box.
5. Select [Delete Printer]. A confirmation message box appears.
6. Select [OK] to delete the selected printer.
7. Select [Close] to exit the Printer Settings dialog box.
8. Select [Cancel] to close the Printer Administration dialog box.



NOTE: To remove the access to the print server for a particular Windows 2000 user, you must do either of the following:

- *For a Novell NetWare server, delete the matching user account from the NetWare server account database.*
- *For a UNIX server, delete the user account from the UNIX server account database. In addition, or as an alternative, delete the default **xdoduser** account.*

Displaying Job Setup

The Job Setup dialog box is used for specifying print and finishing options and is used to:



NOTE: Only features supported by the selected printer are available in the Job Setup dialog box.

- reset to the default job ticket value
- save the job ticket (.xpf file extension)
- open an existing job ticket file



To display the Job Setup:

1. Select [Start: Programs: Xerox DigiPath Production Software: Printer Administration] from the Windows desktop. The Printer Administration dialog box opens.
2. Select the [Production Printer] radio button.
3. Select [OK]. The Printer Settings dialog box opens.
4. Select the production printer you wish to display the job setup features for from the Printers drop-down list box.
5. Select [Job Setup]. The Job Setup dialog box for the specified printer opens.
6. Make the desired changes and save the job ticket.

For more information on Job Setup, refer to the User Guide section of the online Help system.
7. Select [OK] to close the Job Setup dialog box.
8. Select [Close] to exit the Printer Settings dialog box.
9. Select [Cancel] to close the Printer Administration dialog box.

Specifying the DocuJob Converter directory

The Xerox DocuJob Converter (XDJC) converts documents created or ripped on a DocuTech 135 (These jobs use a unique proprietary format referred to as DocuJobs.) into a series of TIFF files, PostScript files, or RDO files. These jobs are then stored in a specific directory on the XDJC. The DigiPath DocuJob Converter can then be used to mount the system and directory to make the jobs available to the DigiPath system through a local drive letter.



NOTE: This option requires that the Hummingbird NFS software be installed and that the directory has been created on the XDJC.

The following steps document the procedure to configure access to the XDJC on the DigiPath system.



To configure the DJC directory on the DigiPath system:

1. Select [Start: Programs: Xerox Digipath Production Software: Printer Administration] from the Windows desktop. The Printer Administration dialog box opens.
2. Mark the [DocuJob Converter Directory] radio button and select [OK]. The DocuJob Converter Input dialog box opens.

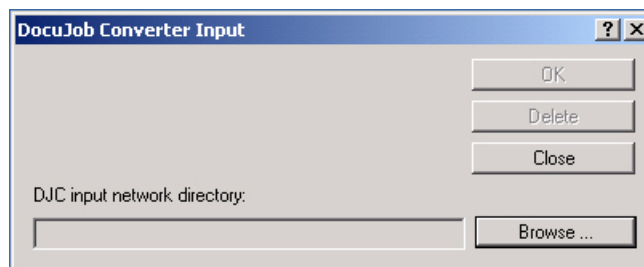


Figure 9-2. DocuJob Converter Input dialog box

3. Select [Browse]. The Browse dialog box opens.
4. Select the drive letter from the Drives drop-down list to be used for mounting the XDJC system. If the desired drive is not available, use the [Network...] button to map the network drive.
5. From the Directories window, browse to the folder to be used for the DJC input network directory.
6. Select [OK].
7. Select [Close] to close the DocuJob Converter Input dialog box.

The files on the XDJC should now be available through the network location assigned.



NOTE: Refer to the Xerox DocuJob Converter User Guide for more information and instructions regarding the configuration and use of Xerox DocuJob Converter.

Configuring Network Agent

Network Agent is used to automatically retrieve and save jobs to a user specified Network Jobs folder (which could be a Windows directory, on a mounted drive, or a cabinet). It then copies the job to your specified Network Agent directory and deletes the job from the input directory. The Network Agent job log notifies you when a job is retrieved and saved. You can view the retrieved files by selecting the Network Job icon from the Window task bar.

Network Agent can retrieve jobs from:

- **DocuTech Decomp Service** — Detects jobs saved in the Decomp directory on the DocuSP system and automatically converts the documents in each folder to RDOs.
- **IQI Enhance** — Converts a printer's diffused image to a higher quality halftone image. This option is available for the DocuPrint 350/500/700/1000.
- **Document Centre** — Allows you to submit jobs from a Document Centre to a DigiPath workstation with or without optimizing image quality.
- **PDF Location** — Network Agent can accept PDF files. On receiving a PDF file it can Preflight the PDF to a specific Network Agent queue. Preflight is a third party process for validating a PDF to ensure the PDF is properly formed and syntactically correct.



NOTE: If an error occurs during preflight, an error log is created.

Network Agent allows you to build an RDO from PDF.

Network Agent jobs can be saved to either the:

- Windows file system
- Cabinet system

This section contains the procedures for configuring Network Agent for use with DigiPath applications.

Retrieving print jobs from a DocuSP controller

Print jobs sent to a save queue on a DocuSP controller can be retrieved by a DigiPath system. The DocuSP save queue stores the ripped jobs in a directory. The DigiPath system will then check for jobs stored in this directory and retrieve them to a specified location on the DigiPath system. After the jobs have been retrieved, the jobs are then deleted from the DocuSP controller. This service is performed by using the DocuTech Decomp Service within Network Agent.



NOTE: Verify that the appropriate security settings required have been enabled. A script for tightening security has been made available for all DocuSP controllers. If the script was allowed to install all security features, the DigiPath software will not be able to use Network Agent to retrieve print jobs. The Network Agent uses the FTP protocol and NFS protocol. These protocols must be enabled to accommodate the requirements of the DigiPath Network Agent software.

Network Agent requires that a Decomp queue be set up at the DocuSP system and that Network Agent be configured to monitor the Decomp queue.

The following sections provide detailed instructions for configuring a network agent with the DocuTech Decomp Service.

Creating a network agent save queue



To create a Network Agent save queue, complete the following steps on the DocuSP print controller:

1. Open a terminal window.
 - In DocuSP 2.x, right-click on the desktop and select [Programs: Terminal].
 - In DocuSP 3.x, right-click on the desktop and select [Tools: Terminal].
2. Complete the following steps to open the Admin Tool application:
 - a. At the Command Prompt, enter **su**.
 - b. When prompted, enter the root password.
 - c. At the Command Prompt, enter **admintool &**.
 - d. From the Admin Tool menu bar, select [Browse: Users].
3. If the user that is added already exists, that user account must be deleted before performing the next steps.



NOTE: If the account already exists, the directory will not be created.

4. Complete the following steps to add the necessary user account to the DocuSP controller:
 - a. From the menu bar, select [Edit: Add]. The Add User dialog box displays.
 - b. In the User Name text box, create a new user.
 - c. In the User ID text box, enter a unique numeric ID for the user.



NOTE: The system will assign a unique numeric ID if it has not been defined by the administrator.

- d. In the Primary Groups text box, enter **xrxgrp**.
- e. In the Comment text box, enter a description for the user.
- f. From the Login Shell drop-down list box, select [C].
- g. From the Password drop-down list box, select [Normal Password]. The Set User Password text box displays.
- h. In the Password text boxes, type and re-type the password for the user in both boxes and select [OK].
- i. Ensure that the [Create Home Dir] check box is checked.
- j. In the Path text box, enter the local path for the user. Enter **/export/home/<username>**
- k. Select [OK] to add the user to the DocuSP controller.



NOTE: Creating this path as the save location will ensure that the directory will be created with this user as the owner. Ownership of the directory is needed for Network Agent to work properly if the Security scripts have been enabled.

5. From the Admintool menu bar, select [File: Exit].
6. Ensure you are logged into DocuSP Print Services as the System Administrator user.
7. To open the Preferences window and complete the following:
 - a. Perform one of the following:
 - For DocuSP 2.x, select [Options: Preferences] from the DocuSP Print Services menu.
 - For DocuSP 3.x, select [Setup: Preferences] from the DocuSP Print Services menu.
 - b. In the Preferences window, select the [Save] tab.
 - c. From the directory structure list box, select the **[/var/spool]** directory.
 - d. Ensure **/var/spool/** displays in the Selection text box and select [OK].

8. Configure the save queue using the Queue Manager.
 - a. Select the [QM] icon to open the Queue Manager. Invoke the New Queue Manager window using one of the following options:
 - For DocuSP 2.x, select [Queue: New] from the menu.
 - For DocuSP 3.x, select [New Queue] at the bottom right of the window. The New Queue Set Up dialog box displays.
 - b. In the Name text box, enter the name for the Network Agent queue. Enter **<queuename>**.
 - c. Under Job Destination, select [Save]. The Save Location button is enabled.
 - d. Select [Save Location] and perform one of the following options:
 - For DocuSP 2.x, ensure **/var/spool/data/<queuename>** is displayed in the Selection text box.
NOTE: Browse to the appropriate location, if necessary.
 - For DocuSP 3.x, ensure **data/<queuename>** is displayed and select [OK].
 - e. Under Job Destination, mark the check box for [Override].
 - f. Ensure no other Override check boxes in the New Queue Set Up dialog box or under any Extended Options are marked.
 - g. Select [OK]. The Network Agent queue is added to the list of existing queues.



9. Repeat the above steps for each DocuSP server and save queue.
10. Enable job statusing on the DocuSP controller. For more information, refer to the DocuSP documentation.

Enabling job status from the DocuSP controller



NOTE: This procedure is not required on DocuSP version 3.5 and higher. If the DocuSP controller was installed with the DigiPath option selected, the following procedure is not needed. If it is known for sure that it was enabled, follow the procedure to verify the status.

To enable the DocuSP controller to provide status to the DigiPath system, complete the following steps on the DocuSP controller:



1. Open a terminal window and enter **su** to log in as the root user.
2. When prompted, enter the root password.
3. At the command prompt, enter **/usr/openwin/bin/textedit** to open the Text Editor.
4. Select [File: Open] from the menu to open **/opt/XXnps/bin/startGUI** in the Text Editor.
5. Verify that the setting **ENABLE_SERVER=True** exists. If the value is set to "False", change the value to "True".



*NOTE: This entry is case sensitive and must be entered exactly as follows: **ENABLE_SERVER=True***

6. Save the changes and quit the Text Editor.
7. Enter **exit** to log out as root and enter **exit** again to close the Terminal Window.
8. Log in as a trusted user or administrator in the DocuSP Print Services.
9. Select [System: Restart] from the menu bar to restart the DocuSP controller software which will start the status service.

DigiPath workstation configuration

1 3...
2

To configure a network agent for a DigiPath system, complete the following steps on the DigiPath workstation:

1. Select [Start: Programs: Xerox DigiPath Production Software: Printer Administration] from the Windows desktop. The Printer Administration dialog box opens.
2. Select the [Network Agent] radio button.
3. Select [OK]. The Network Agent Setup dialog box opens.
4. Select [Add]. The Add/Edit Network Agent dialog box opens. See Figure 9-3.

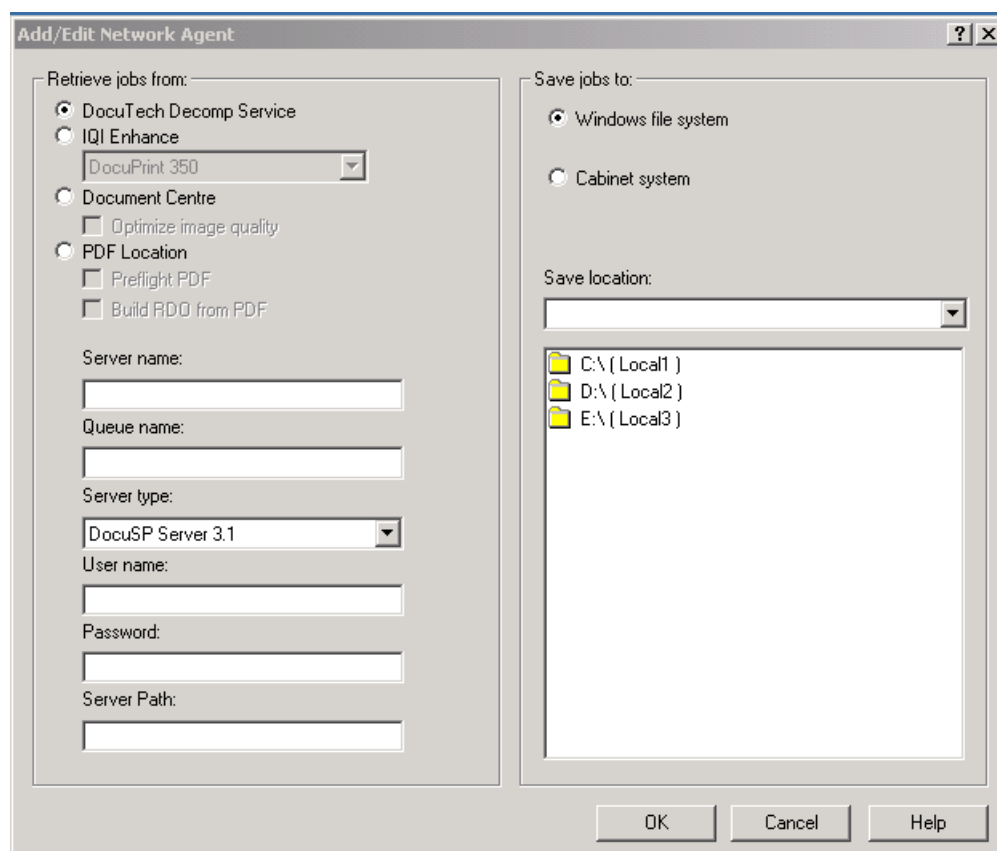


Figure 9-3. Add/Edit Network Agent Setup dialog box

5. Mark the [DocuTech Decomp Service] radio button.
6. In the Server name text box, enter the host name of the DocuSP server. This field is required.
7. In the Queue name text box, enter the name of the Network Agent save queue. This field is required.
8. In the Server type drop-down, select the DocuSP server software version type.
9. In the User name text box, enter the name of the DigiPath user created on the DocuSP. This field is required.
10. In the Password text box, enter the password for the DigiPath user. This field is required.
11. In the Server Path text box, enter ***/var/spool/data/<queue_name>***. This field is required.
12. Under Save jobs to, use the Windows file system or the Cabinet system to specify the directory or cabinet in which you want incoming jobs from the DocuSP stored. This directory or cabinet must be on the DigiPath workstation; if it is not, create the directory using Windows Explorer or create the cabinet using the Library Administration Tool.



NOTE: The proper directory and file sharing must be set up on the Network Agent directory.

13. Select [OK] to add the Network Agent.
14. Select [Done] to close the Network Agent Setup dialog box.
15. Select [Cancel] to close the Printer Administration dialog box.

Enabling the network agent service



To enable the Network Agent service on the DigiPath workstation, complete the following steps:

1. Right click on the [Network Agent] icon on the Windows task bar.
2. Clear the check mark next to the [Disabled] option to enable the Network Agent service.
3. Reboot the DigiPath workstation.

Creating a production printer

Use the Printer Administration application to add the Network Agent production printer queue to the DigiPath workstation.

For more information on adding the network agent print queue to a DigiPath workstation, refer to the procedure “Adding a production printer” on page 9-6.

Enabling the network agent notification message

You must enable the pop-up notification message used to notify users when Network Agent jobs arrive at the workstation. This notification message, along with the existing beep and icon change in the System Tray, is used to identify when a job arrives in the Network Agent queue at the workstation.



To enable the Network Agent message notification at the workstation receiving Network Agent jobs:

1. Right click on the [Network Agent] icon in the lower, right corner of the Windows task bar.
2. Select [Message Notification] to enable the pop-up notification message box to display when a Network Agent job arrives at the workstation.

IQI Enhance

The IQI Enhance option optimizes scanned images to be run on continuous feed printers. This option is only available for the DocuPrint 350/500/700/1000.



At the DigiPath workstation, complete the following steps:

1. If necessary, define a directory (incoming folder) in which you want the scanned files stored. Use DigiPath File Manager to create an incoming folder on the DigiPath workstation local hard drive.

For example, create the **e:\digipath\iqi_enhance** on your DigiPath workstation as the directory you wish to store the scanned files.



NOTE: Remember the location and name of this directory. The directory name is case sensitive.

2. Select [Start: Programs: Xerox DigiPath Production Software: Printer Administration] from the Windows desktop. The Printer Administration dialog box opens.
3. Select the [Network Agent] radio button.
4. Select [OK]. The Network Agent Setup dialog box opens.
5. Select [Add] to add a new network agent IQI Enhance queue for the Document Centre. The Add/Edit Network Agent dialog box opens. See Figure 9-4.

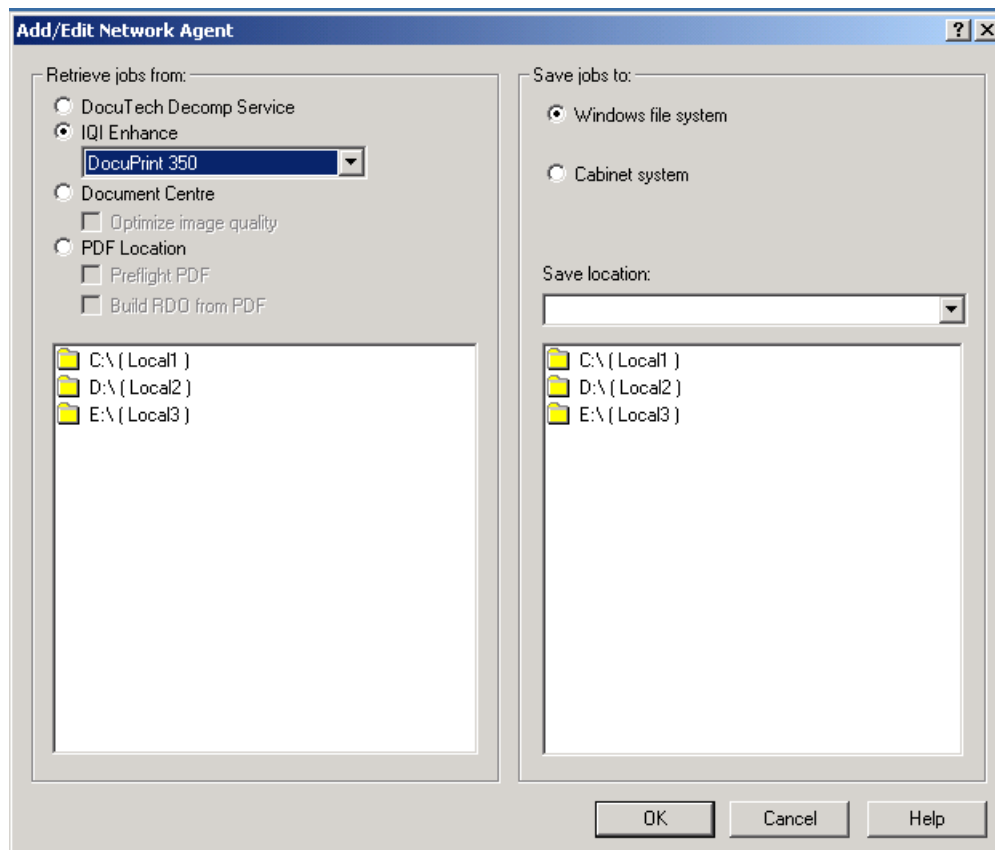


Figure 9-4. Add/Edit Network Agent dialog box

6. Select the [IQI Enhance] radio button and select the appropriate DocuPrint printer from the drop-down list box.
7. Select the directory (incoming folder) in which the user places the files to be enhanced.
8. Use the Windows File System or the Cabinet System to specify the directory or cabinet (outgoing folder) in which you want the enhanced files stored.



NOTE: When using the Cabinet System, you must enter a user name and password, specify the host name of the system, and enter the location in which you want jobs saved.

9. Select [OK] to close the dialog box.
10. Select [Done] to close the Network Agent Setup dialog box.
11. Select [Cancel] to close the Printer Administration dialog box.

Setting up the Document Centre

Before a Document Centre can be used to submit jobs to the DigiPath workstation, both the Document Centre and the DigiPath workstation must be configured to direct the output from the Document Centre to the DigiPath workstation.

The following sections provide detailed instructions for setting up the Document Centre.

Configuring the WFTPD Pro software



NOTE: WFTPD Pro must be installed on the DigiPath workstation to which documents will be sent from the Document Centre. If WFTPD Pro software is not installed on the DigiPath workstation, contact your Xerox representative.

The following sections provide detailed instructions for configuring the FTP server and creating a Document Centre user for use with the FTP server.

Configuring the FTP server



Complete the following steps to configure the WFTPD server:

1. Select [Start: Settings: Control Panel].
2. Double click on the [WFTPD FTP Server] icon.
3. Under Servers, select [New Server]. The Create Server dialog box opens.
4. In the Name this Server text box, enter the server name.
5. In the Listen at Address text box, remove the default value and enter the IP address of the computer.
6. Select [OK].
7. Highlight the server you just created and select [Configure...].
8. With the Security tab selected, complete the following steps:
 - a. Ensure the [Enable Security] and [Allow users to write to files.] check boxes are marked.
 - b. Make the following setting changes:
 - Maximum User Count = **10**
 - Idle Timeout (seconds) = **300**

9. Select the Logging tab and complete the following steps:
 - a. Enter **e:\digipath\wftpd.ftp** for the log file location.
 - b. Mark the [Enable Logging] check box.
 - c. Under [Log These Items], mark the check boxes for the following items and ensure all other check boxes are cleared:
 - Gets
 - Puts
 - Commands
 - Warnings
 - Logins
10. Under the Advanced tab, ensure that the [Do not connect to low(<1K) Port Numbers] check box is marked.
11. Select [OK] to close the Configure Server dialog box.
12. In the WFTPD Main Control dialog box, highlight the server and select [Go].
13. To ensure that the service is running:
 - a. Right click on [My Computer] and select [Manage].
 - b. Select [Services and Applications].
 - c. Double click on [Services].
 - d. From the list of services, scroll down to the WFTPD Pro service and ensure the Startup type is set to Automatic.
 - e. Select the [X] in the upper right corner to close the Services dialog box.
 - f. Select [Close(Esc)] to exit the WFTPD Pro utility.

Creating the Document Centre user for the FTP server



To create the Document Centre user for the FTP server, complete the following steps:

1. If the WFTPD Main Control dialog box is not already open, double-click the [WFTPD FTP Server] icon in the Control Panel.
2. Select the FTP server and select [Configure].
3. Select the [Users] tab and select [Create User]. The Create New User dialog box opens.
4. In the New User text box, type the case-sensitive value for the Document Centre user and select [OK].
5. When the Set User Password dialog box opens, type and retype the password for the Document Centre user.
6. Select [OK] to close the Set User Password dialog box.



NOTE: Do not mark the [User is a Xerox DocuTech] option.

7. In the Home Directory text box, type the directory in which the user will place the xsm files submitted by the Document Centre.



NOTE: The directory for the Document Centre file must already exist; WFTPD Pro will not automatically create it if it does not exist. If the directory does not exist, use Windows Explorer to create it now.

8. Under Rights for user, complete the following steps:
 - a. In the Directory text box, type the directory in which the Document Centre stores the converted RDO files.
 - b. Ensure all four rights check boxes are marked.
9. Select [OK] to close the Configure Server dialog box.
10. Select [Close] to exit the WFTPD Main Control dialog box.

Creating a Document Centre template

There are three places where you can create a Document Centre template:

- at the Document Centre Control Panel
- on the web, by accessing the Document Centre IP address
- using the Centware software

When creating a template at the Document Centre for files that will be scanned to the DigiPath workstation, use the following settings:

- Set the scanning resolution at 600 dpi, or as high as the resolution will go
- Set the “Document Filing Policy” to “New Auto Generate”
- Set the “Output Image Format” to “TIFF”
- Never set the “Output Image Format” to “TIFF Multi-Page”

The template that you create for scanned files sent to the DigiPath workstation is in no way distinguished from other templates. It is, therefore, important to create a name for the DigiPath template that distinguishes it from the other Document Centre templates.

For more information on creating a Document Centre template, refer to your Document Centre documentation.

Configuring the Document Centre directory



At the DigiPath workstation, complete the following steps:

1. If necessary, define a directory in which you want the converted RDO files stored. Use DigiPath File Manager to create a “Document Centre download directory” on the DigiPath workstation local hard drive.

For example, create the directory **e:\digipath\doccentre** to store converted RDO files.



NOTE: Remember the location and name of this directory. The directory name is case sensitive.

2. Select [Start: Programs: Xerox DigiPath Production Software: Printer Administration] from the Windows desktop. The Printer Administration dialog box opens.
3. Select the [Network Agent] radio button.
4. Select [OK]. The Network Agent Setup dialog box opens.
5. Select [Add] to add a new network agent queue for the Document Centre. The Add/Edit Network Agent dialog box opens. See Figure 9-5.

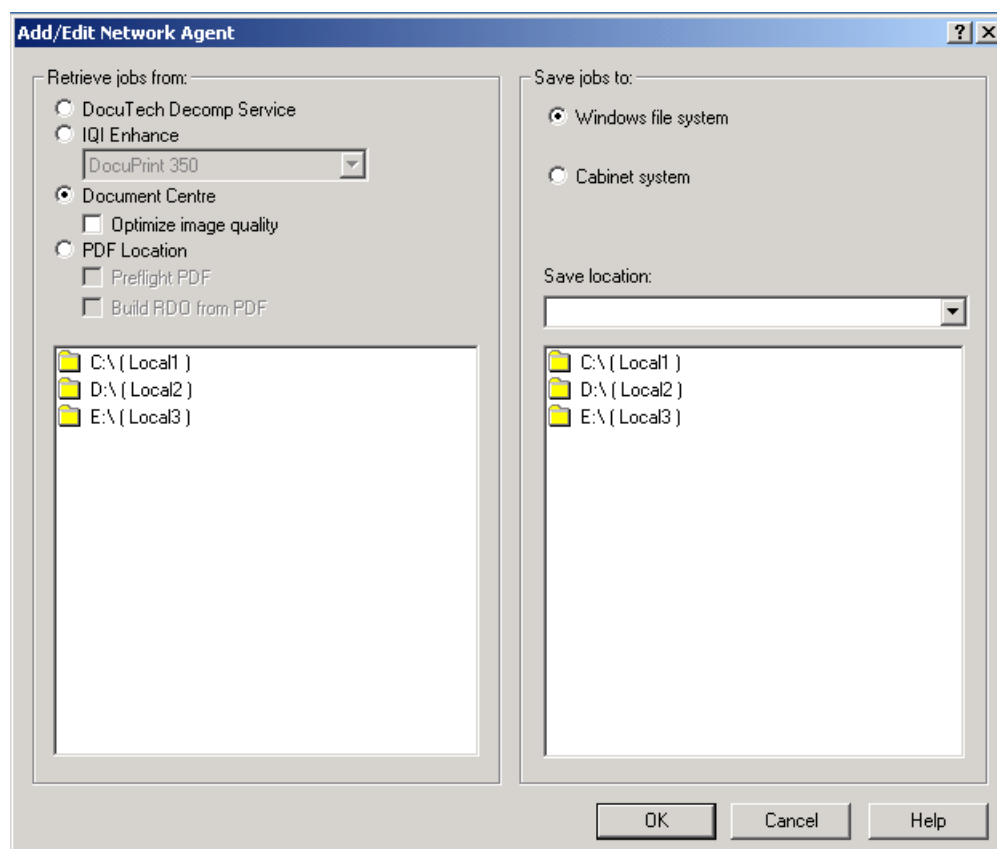


Figure 9-5. Add/Edit Network Agent dialog box

6. Select the [Document Centre] radio button.

7. Mark the [Optimize image quality] check box to enable optimizing image quality for the images scanned at the Document Centre.

When integrating image quality on a Document Centre, the following information should be remembered:

- Any document that has already gone through the image quality conversion process does not have to be re-converted if it is to be printed on a Document Centre printer.
- Documents that are scanned on a Document Centre scanner do not have to be converted for image quality to print to a Document Centre printer.

8. Select the directory in which the user will place the files for the Document Centre.
9. Use the Windows File System or the Cabinet System to specify the directory or cabinet in which you want the converted RDO files to be stored.



NOTE: When using the Cabinet System, you must enter a user name and password, specify the local or remote server, and enter the location in which you want the jobs to be saved.

10. Select [OK] to close the dialog box.
11. Select [Done] to close the Network Agent Setup dialog box.
12. Select [Cancel] to close the Printer Administration dialog box.



Enabling the network agent service

To enable the Network Agent service on the DigiPath workstation, complete the following steps:

1. Select the [Network Agent] icon on the Windows task bar using the right-mouse button.
2. Clear the check mark next to the [Disabled] option to enable the Network Agent service.
3. Reboot the DigiPath workstation.

Adding the Document Centre printer to the DigiPath workstations

Use the Printer Administration application to add the Document Centre printer to all the DigiPath workstations that will be accessing the Document Centre.

When setting up the Document Centre print queue, specify the following options:

- Print Server - enter the name or IP address of the destination printer
- Print Queue - enter **lp**

For more information on adding the Document Centre print queue to the DigiPath workstation, refer to “Setting up production printers” on page 9-5.

PDF Location

The PDF Location option allows you to define an incoming and outgoing directory in which a user can place PDF files they want to preflight or create RDO files from.



NOTE: Preflight verifies that a PDF file will print without errors before the PDF file is submitted to print. Preflight also creates an RDO file from a PDF file.



At the DigiPath workstation, complete the following steps:

1. If necessary, define a directory (incoming folder) in which you want the PDF files stored. Use DigiPath File Manager to create an incoming folder on the DigiPath workstation local hard drive.

For example, create the directory **e:\digipath\pdf_incoming** to store PDF files in.



NOTE: Remember the location and name of this directory. The directory name is case sensitive.

2. Select [Start: Programs: Xerox DigiPath Production Software: Printer Administration] from the Windows desktop. The Printer Administration dialog box opens.
3. Select the [Network Agent] radio button.
4. Select [OK]. The Network Agent Setup dialog box opens.
5. Select [Add]. The Add/Edit Network Agent dialog box opens. See Figure 9-6.

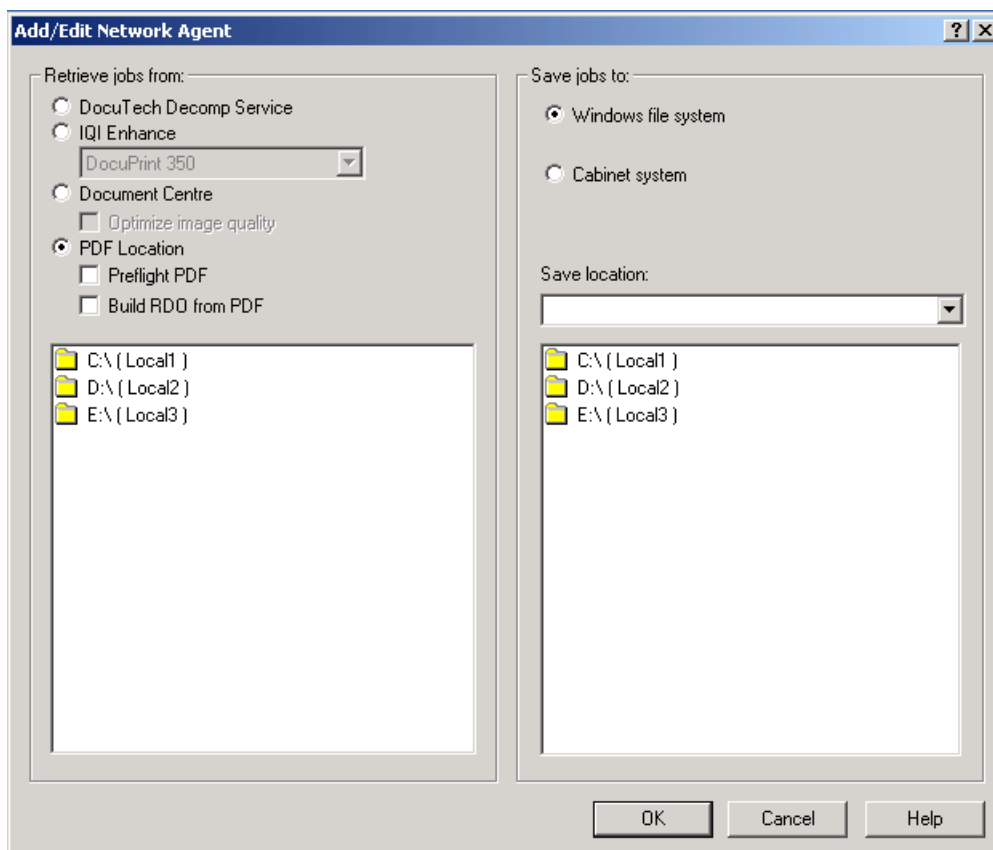


Figure 9-6. Add/Edit Network Agent dialog box

6. Select the [PDF Location] radio button.
7. Select one, or both, of the following options:
 - Preflight PDF — verifies that the PDF file will print without errors before sending to a print shop



NOTE: If an error occurs during the preflight operation, an error log is created in the outgoing directory.

- Build RDO from PDF — creates an RDO from the PDF

8. Select the directory in which the user places the PDF files they wish to preflight or create RDOs from.
9. Use the Windows File System or the Cabinet System to specify the directory, or cabinet, to which you want the preflight PDF files and/or the new RDO files stored.



NOTE: When using the Cabinet System, you must enter a user name and password, specify the local or remote system, and enter the location in which you want jobs saved.

10. Select [OK] to close the dialog box.
11. Select [Done] to close the Network Agent Setup dialog box.
12. Select [Cancel] to close the Printer Administration dialog box.

Setting up the Remote Print Service (RPS)

To production print remotely from a DigiPath workstation, you must set up the Remote Print Service on both the remote and local systems.

1 3...
2

To set up the Remote Print Service:

1. Select [Start: Settings: Control Panel] from the Windows desktop.
2. Double-click on the [Administrative Tools] icon.
3. Double-click on the [Services] icon. The Services console opens.
4. Scroll through the Services list box and highlight [Remote Print Service].
5. If the Remote Print Service has been started, stop the service by selecting [Action: Stop].
6. Select [Action: Properties]. The Remote Print Service Properties dialog box opens.
7. Select the [Log On] tab.
8. Under Log on as, select the [This account] radio button.
9. Select [Browse]. The Select User dialog box opens.

10. From the list of users, highlight the user account you want to use. Do not select the Administrator account.



NOTE: Remote printing works correctly if the user account has security privileges for the directory where the document is being printed. The system administrator must ensure the user account can access the desired directory and file before a job is submitted remotely.

11. Select [OK].
12. In the Password text box, enter the password for the selected user account and then enter the password again in the Confirm password text box.
13. Select [Apply].
14. Select [OK] to close the Remote Print Services Properties dialog.
15. In the Services dialog box, highlight the Remote Print Service and select [Action: Start] to start the Remote Print Service.
16. Close the Services console.
17. Close the Administrative Tools dialog box.

Setting up a virtual printer for the CreoScitex

DigiPath supports printing to the DocuColor 2045/2060 with a Creo CSX2000 digital front end.



1. At the Creo DFE, set up a virtual printer:
 - a. On the CreoScitex CSX2000, select [Tools: Administration].
 - b. Expand [Resource Manager].
 - c. Double click [Virtual Printers]. A Virtual Printers window opens.
 - d. Select the [Add a New Virtual Printer] icon.
 - e. In the [Add New Virtual Printer] dialog box, enter a new virtual printer name.
 - f. Select the [Based On] field.
 - g. Browse and select an existing virtual printer or, leave as Default if no other printers exist.
 - h. Select the [Edit] tab. The Parameters window opens.
 - i. Select the [Print Quality] tab.
 - j. Select [Image Quality].



- k. Select [High] and then select [OK].

NOTE: Selecting [High] improves image quality. However, it also causes a significant increase to the processing time.

- l. From the [Add a New Virtual Printer] window, select [Save].
 - m. Close the Virtual Printers window.
 - n. Close the Administration window.
2. Add the production printer in DigiPath with Printer Administration by setting the following:
 - Use the virtual printer created above as the print queue name.
 - Select a value of DocuColor 2045: Creo or DocuColor 2060: Creo in the Print model: Server type field.

Print job manager options

This section describes using the Extended Connectivity Print Job Manager as a print job manager.

Extended Connectivity Print Job Management (EC-PJM)

The Extended Connectivity Print Job Manager (EC-PJM) is an alternative print job manager available for the production print path. It is used with networked DocuTech, DocuPrint NPS, DocuColor 40, and Network Server Plus production printers. For a list of supported production printers and servers, refer to the *Xerox DigiPath Production Software Customer Software Requirements Document, Version 3.0*.

EC-PJM does not support the following print paths:

- Docucolor 2045/2060 EFI & Creo
- All Document Centre print paths
- Generic PostScript printer

The following DigiPath applications support EC-PJM as a print manager option:

- Document Library
- Document Scan and Makeready
- Quick Print



NOTE: Job status information is not available for jobs submitted through EC-PJM.

Resolving production printing problems

This section describes resolving TCP/IP and Novell Network printing problems, viewing the event viewer to troubleshoot printing problems, and cleaning up print file problems.

Resolving TCP/IP problems

If you or a user encounter problems when printing from a DigiPath workstation to a TCP/IP server, some things to check include the following:

- Make sure the user is using a valid login for the print server.
- Make sure the default user name and password (xdoduser/xdodppp) exist on the server.
- Make sure the printer added in the Printer Settings dialog box has a selected printer type and server type that matches the TCP/IP print server.
- Make sure the print queue exists on the TCP/IP server and is enabled.
- If you or a user are having problems printing remotely, make sure you have properly set up the Remote Print Service and that it is using a valid user account for the print server.
- Make sure the server name and IP address are entered correctly in the host and lmhost files on the Windows file system.
- Make sure the DigiPath host name and IP address have been added to the host file of the print server.

Resolving Novell NetWare problems

If you or a user are having problems when printing from a DigiPath workstation to a Novell NetWare server, some things to check include the following:

- Make sure the user name and password used on the workstation exist and match a valid user name and password on the NetWare server.
- Make sure the user account on the NetWare server is a member of the Everyone group.
- Make sure the user is connected to the NetWare print server and that a mapped drive exists for the server.
- Make sure the printer added in the Printer Settings dialog box has a selected printer type and server type that matches the NetWare print server.
- Make sure the print queue exists on the NetWare server and is enabled.
- If you or a user are having problems printing remotely, make sure you have properly set up the Remote Print Service and that it is using a valid user name and password for the NetWare print server.

Viewing the Event Viewer

The Event Viewer log captures all printing type faults. Refer to this log when experiencing problems printing.

To view the event log, select [Start: Settings: Control Panel: Administrative Tools: Event Viewer] from the Windows desktop. For more information on using the Event Viewer, refer to Chapter 3, Windows 2000 and network configurations.



NOTE: Refer to your Windows 2000 documentation for additional information on reading and interpreting the event log.

Cleaning up print file problems

Occasionally, DigiPath job files submitted to DocuTech Network Server, Network Server PLUS, or DocuSP servers may not be deleted from the server queue directory after they are finished printing. If such files are not removed, the queue directory could reach maximum capacity and no longer accept incoming print jobs. Documentation for all three servers contains procedures for manually cleaning up the server queues if this situation occurs. For each of the server types, refer to the following documentation:

- For DocuTech Network Server, refer to the *Network Server Problem Solving Guide*.
- For Network Server PLUS, refer to either the letter included with Patch #4 (for version 2.0, part number 701P91548) or the job file cleanup packet (for version 2.1, part number 701P93727).
- For DocuSP, refer to the section regarding undeclared faults in the *Xerox Document Services Platform Series Problem Solving Guide*.

A. Data Migration

To migrate from a DigiPath 2.x Document Library system to a DigiPath 3.0 Document Library system, refer to the *Xerox DigiPath Production Software Upgrade/Migration Guide, Version 3.0*.

B. Quick Print

This appendix provides information for using DOS command lines to automate job submission with Quick Print.

You can write and run a batch (a list of DOS commands) to print multiple jobs in Quick Print without the user interface display or user interaction. Quick Print prints the specified file(s) with the specified copy count to the specified printer and exits. All other job ticket attributes are default values (default values can be whatever job ticket values are in the RDO document).

This is how the initiating program accesses Quick Print via the command line:

domgr "<path name/file name>"/b "<printer name>"<copy count>

If an invalid file name is entered, an error displays. You can re-enter the command line with a valid file name. If an invalid printer name is entered, no error messages display, but the Printer Settings window displays for you to select an existing printer or to add the desired printer. In these cases, user interaction is required.

If an invalid copy count is specified, Quick Print prints the specified file with copy count of 1 (default value) to the specified printer and exits.

C. Configuring the Adaptec SCSI adapters

This appendix contains the procedure for configuring the Adaptec SCSI adapters.

The Adaptec SCSI adapters have their own configuration utility called *SCSISelect* that is loaded on the DigiPath system during installation. This utility allows you to view or change the Adaptec SCSI adapter settings without opening the computer or handling the adapter.



CAUTION

During installation, the SCSI adapters are configured to work properly with your DigiPath Production Software system components. It is recommended that you do not change the configuration settings unless instructed to do so by a Xerox service or customer support representative.

To start the *SCSISelect* utility, press <Ctrl>+<A> when prompted during the boot process. If you have more than one SCSI device connected, you must select the desired device when the software prompts you. The first menu displayed provides you with two main options: Configure/View Host Adapter Settings and SCSI Disk Utilities. When you are finished using the utility, you can exit *SCSISelect* by pressing <Esc> until a message prompts you to exit.

For more information regarding the options available in the *SCSISelect* utility and how to use them, refer to the *Adaptec AHA-2940Ultra / 2940Ultra Wide PCI-to-UltraSCSI Host Adapter with SCSISelect User's Guide*.

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